

DevOps with Cloud WhatsApp channel for daily updates :
<https://whatsapp.com/channel/0029VbA8U9I9cDDXkHEdGx1d>

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AWS Cloud Bootcamp
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Pre-Requisites
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- 1) AWS Free Tier Account
- 2) Basic Knowledge on Linux

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Course Content
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- 1) What is IT infrastructure
- 2) On-Prem vs Cloud Infrastructure
- 3) AWS Cloud Introduction
- 4) AWS Cloud Services Tour
- 5) AWS Cloud account setup (Free Tier)
- 6) EC2 + Load Balancing + Auto Scaling
- 7) S3 (Console Access + Programmatic)
- 8) RDS (Relational Databases)
- 9) IAM (Users management)
- 10) BeanStack (PAAS)
- 11) AWS Lambdas (Serverless computing)
- 12) Route 53 (DNS mapping)

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Course Details
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Duration : 2 weeks

Class Timings : 8:30 AM to 10:00 AM IST

Daily Soft copy notes

Course Fee : 1999 INR

Backup videos : 499 INR

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What is IT Infrastructure ?

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=> Resources required to run the business

software company : building

power
network
machiness
databases
security
monitoring

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On-Prem infrastructure

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=> purchase and manage all the resource required to run our business. That is called as "On Prem Infrastructure"

=> We have several challenges with on-prem infrastructure

- 1) Lot of money investment
- 2) Lot of time investement
- 3) Availability issues
- 4) Scalability issues (increase or decrease)
- 5) Backup and Restore issues
- 6) Disaster Recovery issues
- 7) Storage issues

=> To overcome the problems of on-prem infrastructure, companies are using cloud infrastructure

Cloud infrastructure : Take IT resources for rent

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What is Cloud Computing ?

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=> Providing IT infrastructure thru internet on demand basis is called as Cloud Computing.

=> Cloud computing works based on 'Pay as you go' model.

Ex: Post paid bill, credit card bill...

=> We have several advantages with cloud computing

- 1) No prior investment
- 2) Pay as you go
- 3) Scalability
- 4) Availability (24*7)
- 5) Security
- 6) Unlimited Storage

7) Backup and Restore

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Cloud Provider
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=> The company which is providing cloud infrastructure then it is called as cloud provider.

Ex :

- 1) Amazon
- 2) Microsoft
- 3) Google
- 4) Salesforce
- 5) Alibaba
- 6) Digital Ocean

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Cloud Service Models
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- 1) IAAS
- 2) PAAS
- 3) SAAS

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What is IaaS
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=> IAAS stands for infrastructure as a service

=> Provider will give infrastructure for us

Ex: Machines, Network, Storage

=> As a customer we need to prepare platform (env) to run our application.

Ex: install required softwares + setup web servers + deploy application.

Ex : EC2, VPC, S3

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What is PaaS
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=> PaaS stands for Platform as a service

=> Provider will give ready made platform to run our application directly.

Ex: Beanstack, Lambdas

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What is SaaS
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=> SaaS stands for software as a service

-> Cloud Provider will give their application to run our business.

Ex : zoom, microsoft teams, jira...

Ex : Salesforce CRM

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What is AWS
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=> AWS stands Amazon Webservices.

=> AWS is a cloud platform managing by amazon company.

=> AWS cloud started in 2006.

=> AWS providing IT infrastructure based on "pay as you go" model.

=> 190+ countries using aws cloud services.

=> AWS providing cloud resources in the world using global infrastructure concept.

=> AWS maintaing global infrastructure by using regions and availabilty zones concept.

Region = Geographical location

A.Z = data center (server room)

Note: In one region multiple AZs will be there.

In India 2 regions they are Mumbai & Hyd

Mumbai (ap-south-1) since 2016 with 3 AZs

Hyd (ap-south-2) since 2022 with 3 AZs

=> AWS having 37 regions and 117 availability zones (as of 28th jun 2025).

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@@ AWS Account Setup : <https://www.youtube.com/watch?v=xi-JDeceLeI>

@@ Making AWS Account Bill Amount Zero : <https://www.youtube.com/watch?v=PvSGOheevL4>

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AWS Services
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=> We have 200+ Services.....

1) EC2 : Elastic Compute Cloud

=> EC2 is used to create Virtuals Machines in AWS Cloud.

2) S3 : Simple Storage Service

=> S3 provides unlimited storage in aws cloud.

3) RDS : Relational Database service

=> RDS is used to setup Relational Databases in the aws cloud (Ex: Oracle, MySql, PostGres..)

4) IAM : Identity and Access Management

- User Accounts
- User groups
- User policies
- Roles

5) Elastic Beanstack : End to end Web app mangement service (PaaS).

6) Route 53 : Domain Mapping Service

=> It is used to map our application URL to domain name.

7) AWS Lambdas : Serverless computing

=> Run your application without thinking about servers.

8) VPC : Virtual Private Cloud.

=> VPC provides isloated network for the resources in the aws cloud.

9) CloudWatch : To monitor resources in the AWS cloud.

10) SNS : Simple Notification service.

11) SES : Simple Email Service

12) ECS : Elastic Container Service (To run docker containers)

13) EKS : Elastic Kubernetes Service (To setup kubernetes cluster)

14) Dynamo DB : It is no-sql database in aws.

15) API Gateway : Acts as Entrypoint for our apis. We can use it for security.