

# Cloud-AWS-CD-001 – Fundamentals

## Introduction

Amazon Web Services (AWS) has been in the industry from last 14 years now. It provides various solutions regarding IaaS and PaaS. This course is intended to provide relevant information about different cloud components required to implement in a solution. The overall scope is to learn architecting over AWS. This course should help you learn the features and capabilities of AWS to be able to identify trade-offs and make decisions for designing highly available, scalable, fault tolerant, secured and cost-effective solutions.

## Target Audience

Trainee, Junior Associate

## Duration

Full – 35 Hours

## Prerequisites

Knowledge of any programming language.

## Course Material

### Cloud Fundamentals

- What are clouds made of?
- Cloud Terminology
- Benefits of cloud
- Types of cloud
- Cloud service model

Article	<a href="https://docs.microsoft.com/en-us/learn/modules/principles-cloud-computing/index">https://docs.microsoft.com/en-us/learn/modules/principles-cloud-computing/index</a>	1 hr
Video	<ul style="list-style-type: none"> <li>• <a href="https://www.youtube.com/watch?v=SmlKlnJfO6k">https://www.youtube.com/watch?v=SmlKlnJfO6k</a></li> <li>• <a href="https://www.youtube.com/watch?v=RWgW-CgdIk0">https://www.youtube.com/watch?v=RWgW-CgdIk0</a></li> </ul>	1 hr



## Getting Started with AWS

- AWS Global infrastructure
- Introduction to AWS Cloud
- AWS Core Services

Article	<ul style="list-style-type: none"><li>• <a href="https://docs.aws.amazon.com/whitepapers/latest/aws-overview/global-infrastructure.html">https://docs.aws.amazon.com/whitepapers/latest/aws-overview/global-infrastructure.html</a></li><li>• <a href="https://aws.amazon.com/about-aws/global-infrastructure/">https://aws.amazon.com/about-aws/global-infrastructure/</a></li><li>• <a href="https://aws.amazon.com/about-aws/global-infrastructure/regions_az/">https://aws.amazon.com/about-aws/global-infrastructure/regions_az/</a></li></ul>	2 hr
Video	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=aNgda-qWT6w">https://www.youtube.com/watch?v=aNgda-qWT6w</a></li><li>• <a href="https://www.youtube.com/watch?v=XoijJbxa4MA">https://www.youtube.com/watch?v=XoijJbxa4MA</a></li></ul>	2 hr

## AWS Integrated Services

Article	<ul style="list-style-type: none"><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/cloudformation.html">https://docs.aws.amazon.com/controltower/latest/userguide/cloudformation.html</a></li><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/cloudtrail.html">https://docs.aws.amazon.com/controltower/latest/userguide/cloudtrail.html</a></li><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/cloudwatch.html">https://docs.aws.amazon.com/controltower/latest/userguide/cloudwatch.html</a></li><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/config.html">https://docs.aws.amazon.com/controltower/latest/userguide/config.html</a></li><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/iam.html">https://docs.aws.amazon.com/controltower/latest/userguide/iam.html</a></li><li>• <a href="https://docs.aws.amazon.com/controltower/latest/userguide/lambda.html">https://docs.aws.amazon.com/controltower/latest/userguide/lambda.html</a></li></ul>	3 hr
Video	<a href="https://www.youtube.com/watch?v=_N9PfjhdLx4">https://www.youtube.com/watch?v=_N9PfjhdLx4</a>	2 hr

## AWS Well Architected Framework

Video	<a href="https://www.aws.training/Details/Curriculum?id=42037">https://www.aws.training/Details/Curriculum?id=42037</a>	2 hr
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## AWS Security

Video	<a href="https://www.aws.training/Details/eLearning?id=34259">https://www.aws.training/Details/eLearning?id=34259</a>	3 hr
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## AWS Pricing and Support

Video	<ul style="list-style-type: none"><li>• <a href="https://www.edureka.co/blog/aws-pricing/">https://www.edureka.co/blog/aws-pricing/</a></li><li>• <a href="https://aws.amazon.com/premiumsupport/plans/">https://aws.amazon.com/premiumsupport/plans/</a></li></ul>	1 hr
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## AWS Networking

- VPC
- Subnets, Security groups and NACLs

Video	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=HD8fZnbQgg">https://www.youtube.com/watch?v=HD8fZnbQgg</a></li><li>• <a href="https://www.youtube.com/watch?v=DcvTAYxtoRU">https://www.youtube.com/watch?v=DcvTAYxtoRU</a></li></ul>	2 hr
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## AWS Compute

- Elastic compute cloud (EC2)

Video	<a href="https://www.youtube.com/watch?v=H4d3vU6-eSs">https://www.youtube.com/watch?v=H4d3vU6-eSs</a>	1.5 hr
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## AWS Storage

- S3

Video	<a href="https://www.youtube.com/watch?v=9HsEMyKrlnw">https://www.youtube.com/watch?v=9HsEMyKrlnw</a>	1.5 hr
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## Elasticity and scaling EC2

- Elastic load balancing
- Auto scaling

Video	<a href="https://www.youtube.com/watch?v=-hFAWk6hyZA">https://www.youtube.com/watch?v=-hFAWk6hyZA</a>	2 hr
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## Content delivery and Domain name system (DNS)

- Route 53 and DNS
- CloudFront

Video	<ul style="list-style-type: none"><li>• <a href="https://youtu.be/7VKALUhyg_A">https://youtu.be/7VKALUhyg_A</a></li><li>• <a href="https://youtu.be/e2xLV7pCOLI">https://youtu.be/e2xLV7pCOLI</a></li><li>• <a href="https://youtu.be/D1n5kDTWidQ">https://youtu.be/D1n5kDTWidQ</a></li></ul>	3hr
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	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=sQNONcj0cvc">https://www.youtube.com/watch?v=sQNONcj0cvc</a></li></ul>	
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## Monitoring, Logging and Notification

- CloudWatch
- CloudTrail
- SNS

Video	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=guE3pdbMSgl">https://www.youtube.com/watch?v=guE3pdbMSgl</a></li><li>• <a href="https://www.youtube.com/watch?v=6b_ENVFgCpA">https://www.youtube.com/watch?v=6b_ENVFgCpA</a></li></ul>	2 hr
Article	<ul style="list-style-type: none"><li>• <a href="https://docs.aws.amazon.com/awscloudtrail/latest/userguide/how-cloudtrail-works.html">https://docs.aws.amazon.com/awscloudtrail/latest/userguide/how-cloudtrail-works.html</a></li><li>• <a href="https://aws.amazon.com/blogs/introducing-the-amazon-simple-notification-service/">https://aws.amazon.com/blogs/introducing-the-amazon-simple-notification-service/</a></li></ul>	1 hr

## Database services

- RDS
- DynamoDB
- Elastic Cache
- Redshift

Video	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=lyBs2rhpVnE">https://www.youtube.com/watch?v=lyBs2rhpVnE</a></li><li>• <a href="https://www.youtube.com/watch?v=k0fcbRj_pZE">https://www.youtube.com/watch?v=k0fcbRj_pZE</a></li><li>• <a href="https://www.youtube.com/watch?v=fc5WPKnbam8">https://www.youtube.com/watch?v=fc5WPKnbam8</a></li></ul>	3 hr
Article	<a href="https://cloudacademy.com/blog/amazon-elasticache/">https://cloudacademy.com/blog/amazon-elasticache/</a>	2 hr

## Serverless compute

- Lambda

Video	<ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=NrWHROVO6TI">https://www.youtube.com/watch?v=NrWHROVO6TI</a></li></ul>	1 hr
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