



**CLOUD BINARY**

Learn by Doing

**COURSE NAME : AWS DEVOPS**

## COURSE CURRICULUM

**Mode : Classroom & Online**

**Duration : 3 Months**

**Schedule: Monday - Saturday**

### Key Features Of Cloud Binary :

- Real Time Use Case Based Teaching
- Daily 1 Hr Trainer Session
- LMS Access:
  - Daily Notes &
  - Session Recorded Video
- Quiz On Covered Topics
- Use Cases On Covered Topics
- Interview Questions On Covered Topics
- 9 Real Time Sample Projects
- 100% Job Assistance
- Resume Grooming Session
- Naukri & LinkedIn Account Creation & Optimisation.
- Recruitment and Hiring details.



Real Time Instructor Training



Quiz



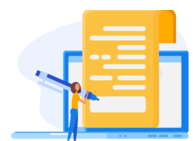
Use Cases



Resume Preparation



Weekly Mock Interviews on Softskills & Technical



9 Real Time Projects

### Getting Started with Operating Systems :

- Unix & Linux History & Distributions
- Basic & Advanced Commands
- Run Levels
- Boot Process
- File System
- File & Directory Management
- Text Editors
- Permissions
- User & Group Management
- Package Management
- Controlling Services & Daemons
- Process Management
- Log Management
- WebServer - Windows IIS, Apache2, Nginx & Httpd
- Application Server - Apache Tomcat
- Database - RDBMS (MySQL)
- Scripting - Basics of Power-shell & Shell

**CLOUD BINARY**  
Learn by Doing

# AWS-Certified-DevOps-Engineer-Professional - DOP-C02



Real Time Instructor Training

## Exam Content Outline:

Domains	Names	% Of Exam
Domain 1:	SDLC Automation	22%
Domain 2:	Configuration Management and IaC	17%
Domain 3:	Resilient Cloud Solutions	15%
Domain 4:	Monitoring and Logging	15%
Domain 5:	Incident and Event Response	14%
Domain 6:	Security and Compliance	17%
TOTAL		100 %



Quiz



Use Cases



Resume Preparation

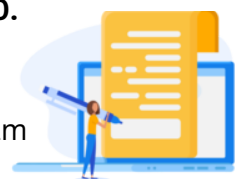
## Exam Overview:

There are two types of questions on the exam:

- **Multiple choice:** Has one correct response and three incorrect responses (distractors)
- **Multiple response:** Has two or more correct responses out of five or more response options
- The exam includes **65** questions
- The exam includes **10** unscored questions that do not affect your score.
- Your results for the exam are reported as a scaled score of **100–1,000**.
- The minimum passing score is **750**.
- **Type:** Professional
- **Delivery method:** Pearson VUE testing center or online proctored exam
- **Number of questions:** 75
- **Time:** 180 minutes
- **Cost:** 300 USD



Weekly Mock  
Interviews on  
Softskills &  
Technical



9 Real Time  
Projects

## AWS Services - Compute

- Amazon EC2 :
  - Images
  - EBS
  - Security Groups
  - Snapshots
  - Creating Golden Images
- Amazon EC2 Auto Scaling
- EC2 Image Builder
- AWS Elastic Beanstalk
- AWS App Runner
- AWS Serverless Application Repository

## AWS Services - Storage

- AWS Backup
- Amazon Elastic Block Store (Amazon EBS)
- AWS Elastic Disaster Recovery (CloudEndure Disaster Recovery)
- Amazon Elastic File System (Amazon EFS)
- Amazon FSx for Lustre
- Amazon FSx for NetApp ONTAP
- Amazon FSx for OpenZFS
- Amazon FSx for Windows File Server
- Amazon S3 & Glacier
- AWS Storage Gateway

## AWS Services - Database

- Amazon Aurora
- Amazon Aurora Serverless v2
- AWS Database Migration Service (AWS DMS)
- Amazon DocumentDB (with MongoDB compatibility)
- Amazon DynamoDB
- Amazon ElastiCache
- Amazon MemoryDB for Redis
- Amazon RDS
- Amazon Redshift

## AWS Services - Networking & Content Delivery

- Amazon API Gateway
- AWS Client VPN
- Amazon CloudFront
- Elastic Load Balancing (ELB)
- AWS PrivateLink
- Amazon Route 53
- AWS Site-to-Site VPN
- AWS Transit Gateway
- Amazon VPC
- Amazon VPC Peering

## AWS Services - Containers

- AWS App2Container
- AWS Copilot
- Amazon Elastic Container Registry (Amazon ECR)
- Amazon Elastic Container Service (Amazon ECS)
- Amazon Elastic Kubernetes Service (Amazon EKS)
- Amazon EKS Distro
- AWS Fargate
- Red Hat OpenShift Service on AWS (ROSA)

## AWS Services - Developer Tools

- AWS CLI
- AWS Cloud Development Kit (AWS CDK)
- AWS CloudShell
- AWS CodeArtifact
- AWS CodeBuild
- AWS CodeCommit
- AWS CodeDeploy
- Amazon CodeGuru
- AWS CodePipeline
- AWS CodeStar
- AWS Command Line Interface (AWS CLI)
- AWS Fault Injection Simulator
- AWS SDKs and Tools
- AWS X-Ray
- End To End Java Project CI/CD Pipeline

## AWS Services - Management & Governance

- AWS Auto Scaling
- AWS CloudFormation
- AWS CloudTrail
- Amazon CloudWatch
- Amazon CloudWatch Logs
- AWS Compute Optimiser
- AWS Config
- AWS Control Tower
- AWS Health
- AWS License Manager
- Amazon Managed Grafana
- Amazon Managed Service for Prometheus
- AWS OpsWorks
- AWS Organisations
- AWS Proton
- AWS Resilience Hub
- AWS Service Catalog
- AWS Systems Manager
- AWS Trusted Advisor

## AWS Services - Security, Identity, and Compliance

- AWS Certificate Manager (ACM)
- AWS CloudHSM
- Amazon Cognito
- Amazon Detective
- AWS Directory Service
- Amazon GuardDuty
- AWS IAM Identity Center (AWS Single Sign-On)
- AWS Identity and Access Management (IAM)
- Amazon Inspector
- AWS Key Management Service (AWS KMS)
- Amazon Macie
- AWS Network Firewall
- AWS Resource Access Manager (AWS RAM)
- AWS Secrets Manager
- AWS Security Hub
- AWS Security Token Service (AWS STS)
- AWS Shield
- AWS WAF

## AWS Services - Analytics

- Amazon Athena
- Amazon EMR
- Amazon Kinesis Data Firehose
- Amazon Kinesis Data Streams
- Amazon OpenSearch Service
- Amazon QuickSight

## AWS Services - Application Integration

- Amazon AppFlow
- Amazon EventBridge (Amazon CloudWatch Events)

## AWS Services - Serverless

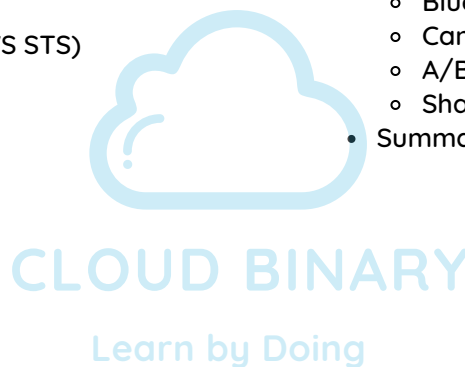
- AWS Lambda
- AWS Serverless Application Model (AWS SAM)
- Amazon Simple Email Service (SES)
- Amazon Simple Notification Service (Amazon SNS)
- Amazon Simple Queue Service (Amazon SQS)
- AWS Step Functions

## Migration Strategies:

- What is Migration?
- Different Types Of Migration Strategies:
  - Rehosting, Replatforming, Repurchasing, Refactoring, Retiring & Retaining
- Summary

## Deployment Strategies:

- What is Deployment?
- Different Types of Deployment Strategies:
  - Recreate
  - Ramped
  - Blue/Green
  - Canary
  - A/B testing
  - Shadow
- Summary



## Software Development Life Cycle : Agile - Scrum

- Getting Started with SDLC
- What is Agile?
- Agile Manifesto(4 Values & 12 Principles)
- What is Scrum?
- Agile Scrum Roles
- Agile Scrum Ceremonies:
  - Sprint Planning
  - Daily Standup
  - Sprint Backlog Refinement
  - Sprint Review
  - Sprint Retrospective
- Product Backlog Grooming
- Agile Scrum Artefacts
- Agile Scrum Board
- Create a Sprint using Jira/Azure Boards:
  - Create Epic
  - Create Story
  - Create a Task
- Summary

## Version Control System / Source Code Management : Git

- Getting Started with VCS//SCM
- What is Git, AWS CodeCommit and GitHub?
- About Version Control System and types
- Git Workflow
- Installing on Windows & Linux
- Getting Started with Git Commands
- Working with Branches
- Merging Branches
- Creating and Committing a Pull Request
- Working with Stash
- Summary

## Continuous Integration using Jenkins

- Overview of Continuous Integration
- Getting Started with Jenkins
- Jenkins Architecture
- Download, Installing and Configuring Jenkins
- Jenkins Management
- Installing Jenkins Plugins
- Creating Jenkins Jobs
- Creating Jenkins Pipeline Jobs

## Continuous Static Code Analysis : SonarQube

- Getting Started with SonarQube
- Integrate SonarQube with Pipeline Jenkins & CodeBuild/CodePipeline
- Integrate SonarQube with GitHub
- Execute Code Quality using SonarQube:
  - Reliability
  - Security
  - Maintainability
  - Security Review
  - Coverage & Duplications
- Summary

## Continuous Binary Code Repository using JFrog

- Getting Started with Continuous Binary Code Repository i.e. JFrog
- JFrog Architecture
- Download, Installing and Configuring JFrog
- Integrate JFrog with VCS/SCM i.e. POM.xml
- Integrate JFrog with Maven
- Creating Jenkins Jobs & Publish artifact to JFrog repository
- Creating Jenkins Pipeline Jobs & Publish artifact to JFrog repository
- Summary

## Continuous Configuration Management: Ansible

- What is Configuration Management?
- Different Types Of Configuration Management Tools?
- What is Ansible?
- History of Ansible
- Important terms used in Ansible
- Ansible Installation in Linux
- Ansible ad-hoc commands
- Ansible Playbooks
- Ansible Roles
- Summary

## Containerisation: Docker

- Getting Started with Containers
- What is container
- List of Container Vendors
- Getting Started with Docker
- Docker Product
- Docker Architecture
- Docker Installation
- Docker Hub
- Docker Images
- Docker Networking
- Docker Compose
- Summary

## Creating Machine Images : Packer

- Getting Started with packer
- Install Packer on Windows & Linux:
  - Build an Image
    - Variables
    - Builders
    - Provisioners
    - Post Provisioners
  - Executing Shell Scripts
    - Shell Script
    - PowerShell Script
  - Executing Ansible PlayBooks
- Summary

## Container Orchestration : Kubernetes

- Getting Started with Cluster Orchestration
- What is Cluster Orchestration or Container Orchestration?
- Different Types of Container Orchestration vendors
- What is Kubernetes?
- Kubernetes Cluster Orchestration Architecture
- Kubernetes Components (Pods, Nodes, Service, Volume & Namespace)
- Create 3 Node Cluster & Deploy a Simple WebServer(Nginx):
- Creating Cluster, Adding Nodes to Cluster, Create Nginx Deployment, Create Nginx Service, Describe Nginx Deployment
- Validate Nginx Deployment
- Access WebSite using Cluster IP and NodeIP
- Summary

## Continuous Infrastructure As A Code:Terraform

- Getting Started with IaC
- Different Vendors Of IaC tools?
- What is Terraform?
- Core Concepts of Terraform
- Variables
- Modules
- State Files
- Create Virtual Machines using Terraform
- Create Create 3 Tier Architecture using Terraform
- Summary

## Continuous Monitoring :

### CloudWatch, New Relic & Nagios

- Getting Started with Observability
- What is Observability/Monitoring?
- Types of Continuous Monitoring: ( Application, Infrastructure, Kubernetes, Log Management, Browser, Mobile, Synthetics & Network Monitoring
- List of Continuous Monitoring Tools
- Configure Jobs:
  - Ping Monitoring in NewRelic
  - Simple Browser Monitoring in NewRelic
  - Scripted Monitoring in NewRelic
  - Getting Started with APM in NewRelic
  - Configure APM in NewRelic
- Configure Infrastructure in NewRelic
- Creating Dashboard in NewRelic
- Summary