

AWS DevOps Engineer Certification - Professional Level (CT005AC)

Modality: Virtual Classroom

Duration: 5 Days

SATV Value:

CLC:

NATU:

SUBSCRIPTION: Master

About this course:

Students who intend to take the examination can book themselves for it by visiting their AWS Certification Portal.

Lab information:

The practical demonstration exercises experience attained from the Lab can be finished by the learner through the AWSConsole. These AWS accounts are easy to create and students can sign up themselves there by using the Lab Setup option.

Audience:

This course is suitable for a number of professional groups.

- This is suitable for those IT experts who intend to fully use the developer and implementation management tools that are provided by the AWS platform and so, want to gain a thorough learning over it.
- This course can be taken by those IT experts who want to pass the examination of AWS Certified DevOps Engineer Certification – Professional: SAP-C00.
- Those IT experts can also take this course who already have the certification of AWS Certified SysOps Administrator or AWS Certified Developer at the associate level but want to gain more advanced level certifications.

Requirements:

Students must ensure that they have fulfilled these mandatory requirements before taking the course.

- Students must be having some previous experience in working with AWS. (Note: this requirement is extremely mandatory)
- Have gained a practical experience of applied skills in EC2, S3, Auto Scaling, RDS, IAM, VPC, ElatiCache, DynamoDB, Data Pipeline, RedShift, and Elastic Beanstalk

Course Outline:

Day 1

Introduction to DevOps

- Fundamentals of DevOps
- Continuous Integration
- Continuous Build
- Continuous Deployment
- Deployment Strategies

Advance EC2

Advance Auto Scaling

Hands-on Lab: Manage rolling updates with Auto Scaling and CloudFormation

CloudFormation

- Bootstrapping the instances using cfn-init
- Wait Conditions
- Nested Stacks
- Rolling stack updates using Auto Scaling

Hands-on Lab: Manage rolling updates with Auto Scaling and CloudFormation

Day 2

Introduction to RedShift

- RedShift Clusters / Cluster Types
- Data Modeling
- Security & Authorization
- RDS vs RedShift
- Use Cases

Introduction to AWS Lambda

Simple Notification Service

- Introduction
- Delivery Methods

Simple Workflow service

- SWF Domains
- Deciders / Workers
- Workflow Lifecycle
- Use Cases

AWS Elastic Beanstalk

- Introduction
- Applications
- Environments
- Managing Deployments
- Bootstrapping packages on the stack

Hands-on Lab: Installing the application and creating multiple environments

Advance SQS

- Messages Receiving Order
- Distributed Queues
- Dead Letter Queue
- Message Lifecycle
- Integration with SNS

Use Cases of SQS, SWF and SNS

Day 3

IAM

- Cross-Account Access
- Consolidated Billing
- Role based Access Control
- Federation

Hands-on Lab: Web Identity Federation

Code Deploy

- Introduction
- Key Concepts
- Repositories
- Deployment Workflow
- AppSpec Files

Day 4

Continuous Delivery and Integration with AWS Code Pipeline

- Code Pipeline
- Workflow using Code Pipeline
- Integration with other AWS Services

Hands-on Lab: Update the application on Beanstalk using Code Pipeline and Code Deploy

Kinesis

- Introduction
- Kinesis Firehose
- Kinesis vs SQS

Day 5

Advance CloudWatch

- CloudWatch Logs
- CloudWatch log aggregation capabilities

Hands-on Lab: Streaming logs to store in S3 using Kinesis

OpsWorks

- Introduction
- Terminology
- OpsWorks Events
- OpsWorks Permissions
- Rolling Deployments
- Best Practices

Hands-on Lab: Managing deployments using OpsWorks

Architectural Discussion