

## DevOps Engineering on AWS

### Overview

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DevOps Engineering on AWS covers the core principles of the DevOps methodology and examines a number of use cases applicable to startup, small-medium business, and enterprise development scenarios.

### Prerequisite Comments

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Prerequisites for this course include: attending the System Operations on AWS course, attending the Developing on AWS course, working knowledge of one or more high-level programming languages (C#, Java, PHP, Ruby, Python, etc.), intermediate knowledge of administering Linux or Windows systems at the command-line level, & working experience with AWS using both the AWS Management Console and the AWS Command Line Interface (AWS CLI)

### Target Audience

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This course is suitable for System Administrators and Software Developers.

### Course Objectives

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Skills learned in this course include:

Design and implement an infrastructure on AWS that supports one or more DevOps development projects

Use AWS CloudFormation and AWS OpsWorks to deploy the infrastructure necessary to create development, test, and production environments for a software development project

Set up Git on AWS and understand the array of options for enabling a Continuous Integration environment on AWS

Implement several common Continuous Deployment use cases using AWS technologies, including blue/green deployment and A/B testing

Distinguish between the array of application deployment technologies available on AWS (including AWS CodeDeploy, AWS OpsWorks, AWS Elastic Beanstalk, and Amazon EC2 Container Service), and decide which technology best fits a given scenario

Fine tune the applications you deliver on AWS for high performance

### Course Outline

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#### 1 - Day 1

What is DevOps?

Infrastructure as Code; Part 1: Design and Security

Infrastructure as Code; Part 2: CloudFormation and Configuration Management

## 2 - Day 2

Continuous Integration in the Cloud  
Continuous Delivery on AWS  
Deploying Applications on AWS; Part 1

## 3 - Day 3

Deploying Applications on AWS, Part  
Putting It All Together  
Performance-Tuning Your Deployments  
Administering and Automating Your Infrastructure

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