

DevOps on Amazon AWS

Course Summary

Description

Amazon Web Services (AWS) is the leading cloud platform. It offers an unprecedented environment in which developers can implement world-class and world-scalable applications. Additionally, when done right, a cloud-based application usually offers about 50% cost saving when compared to self-hosting. However, in order to achieve this, one needs to be well-versed in the services that AWS offers, and in the best practices of using them. This course is intended for software developers and administrators, or devops. It deals with architecting and maintaining an AWS based solution. It consists of 50% lectures and 50% implementation labs in the Amazon environment.

Audience

This course is designed for Software developers.

Topics

- What is DevOps today
- AWS Overview
- Infrastructure as Code
- Deployment
- Deployment with OpsWorks
- Microservices and Containers
- Deployment best practices
- Performance tuning with AWS tools

Prerequisite

- Familiarity With Programming In At Least One Language
- Be Able To Navigate Linux Command Line
- Basic Knowledge Of Command Line Linux Editors (Vi / Nano)

Duration

Three Days

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Course Outline

- I. *What is DevOps today*
- II. *AWS Overview*
 - A. Regions and AZs
 - B. Foundational Services
 - C. AWS Command Line Tools (AWS CLI), install and use
- III. *Infrastructure as Code*
 - A. Security
 - B. CloudFormation
 - C. Continuous integration
 - D. Continuous delivery
 - E. Configuration management
 - F. Policy as code (PCI-DSS, HIPAA)
- IV. *Deployment*
 - A. CodeDeploy
 - B. ElasticBeanstalk
- V. *Deployment with OpsWorks*
- VI. *Microservices and Containers*
 - A. AWS Lambda
 - B. Containers and Docker
 - C. Amazon Elastic Container Services (ECS)
 - D. Amazon Elastic Kubernetes Services (EKS)
- VII. *Deployment best practices*
- VIII. *Performance tuning with AWS tools*