AWS-DEVOPS

DevOps Engineering on AWS

24 horas | Cloud Application Developer | AWS

INTRODUÇÃO

DevOps Engineering on AWS teaches you how to use the combination of DevOps cultural philosophies, practices, and tools to increase your organization’s ability to develop, deliver, and maintain applications and services at high velocity on AWS. This course covers Continuous Integration (CI), Continuous Delivery (CD), infrastructure as code, microservices, monitoring and logging, and communication and collaboration. Hands-on labs give you experience building and deploying AWS CloudFormation templates and CI/CD pipelines that build and deploy applications on Amazon Elastic Compute Cloud (Amazon EC2), serverless applications, and container-based applications. Labs for multi-pipeline workflows and pipelines that deploy to multiple environments are also included.

OBJETIVO DO CURSO

In this course, you will:

- Use DevOps best practices to develop, deliver, and maintain applications and services at high velocity on AWS.
- List the advantages, roles and responsibilities of small autonomous DevOps teams.
- Design and implement an infrastructure on AWS that supports DevOps development projects.
- Leverage AWS Cloud9 to write, run and debug your code.
- Deploy various environments with AWS CloudFormation.
- Host secure, highly scalable, and private Git repositories with AWS CodeCommit.
- Integrate Git repositories into CI/CD pipelines.
- Automate build, test, and packaging code with AWS CodeBuild.
- Securely store and leverage Docker images and integrate them into your CI/CD pipelines.
- Build CI/CD pipelines to deploy applications on Amazon EC2, serverless applications, and container-based applications.
- Implement common deployment strategies such as “all at once,” “rolling,” and “blue/green”.
- Integrate testing and security into CI/CD pipelines.
- Monitor applications and environments using AWS tools and technologies.

PÚBLICO-ALVO

This course is intended for:

- DevOps engineers
- DevOps architects
- Operations engineers
- System administrators
- Developers

PRÉ-REQUISITOS

We recommend that attendees of this course have:

- Previous attendance at the Systems Operations on AWS or Developing on AWS courses
- Working knowledge of one or more high-level programing languages, such as C#, Java, PHP, Ruby, Python
- Intermediate knowledge of administering Linux or Windows systems at the command-line level
- Two or more years of experience provisioning, operating, and managing AWS environments

CONTEÚDO PROGRAMÁTICO

Course outline

Day 1
- Module 0: Course overview
- Module 1: Introduction to DevOps
- Module 2: Infrastructure Automation
- Module 3: AWS Toolkits
- Module 4: Continuous integration and continuous delivery (CI/CD) with development tools

Day 2
- Module 4: Continuous integration and continuous delivery (CI/CD) with development tools
- Module 5: Introduction to Microservices
- Module 6: DevOps and containers
- Module 7: DevOps and serverless computing
- Module 8: Deployment strategies
- Module 9: Automated testing

Day 3
- Module 10: Security automation
- Module 11: Configuration management
- Module 12: Observability
- Module 13: Reference architecture (Optional module)
- Module 14: Course summary