

Systems Operations on AWS (AWS-SYS-OPS)

Course Summary

Description

In this course, you will learn how to create automatable and repeatable deployments of networks and systems on the AWS platform. We will explore the AWS features and tools related to configuration and deployment and best practices for configuring and deploying systems.

Objectives

After taking this course, students will learn to:

- Use standard AWS infrastructure features such as Amazon Virtual Private Cloud (Amazon VPC), Amazon Elastic Compute Cloud (Amazon EC2), Elastic Load Balancing (ELB), and AWS Auto Scaling from the command line
- Use AWS CloudFormation and other automation technologies to produce stacks of AWS resources
- Build virtual private networks with Amazon VPC
- Deploy Amazon EC2 instances using command line calls and troubleshoot common problems with instances
- Monitor the health of Amazon EC2 instances and other AWS services
- Manage identity, AWS permissions, and security in the AWS Cloud
- Manage resource consumption in an AWS account using tags, Amazon CloudWatch, and AWS Trusted Advisor
- Determine the best strategy for creating reusable Amazon EC2 instances
- Configure a set of Amazon EC2 instances that launch behind a load balancer
- Troubleshoot a basic AWS CloudFormation stack definition

Topics

- Understanding Systems Operations on AWS
- Tooling and Automation
- Computing (Servers)
- Computing (Scaling and Name Resolution)
- Computing (Containers and Serverless)
- Computing (Database Services)
- Networking
- Storage and Archiving
- Monitoring and Security
- Managing Resource Consumption
- Creating Automated and Repeatable Deployments

Audience

This course is intended for Systems administrators and Software developers, especially those in a DevOps role.

Prerequisites

We recommend that attendees of this course have the following prerequisites:

- Attended the AWS Technical Essentials course
- Background in either software development or systems administration
- Some experience with maintaining operating systems at the command line (shell scripting in Linux environments, cmd or PowerShell in Windows)
- Basic knowledge of networking protocols (TCP/IP, HTTP)

Duration

Three Days