AWS System Operations

System Operations on AWS is designed to teach those in a Systems Administrator or Developer Operations (DevOps) role how to create automatable and repeatable deployments of networks and systems on the AWS platform. The course covers the specific AWS features and tools related to configuration and deployment, as well as common techniques used throughout the industry for configuring and deploying systems.

Course Objectives:

- Use standard AWS infrastructure features such as Amazon Virtual Private Cloud (VPC), Amazon Elastic Compute Cloud (EC2), Elastic Load Balancing, and Auto Scaling from the command line
- Use AWS CloudFormation and other automation technologies to produce stacks of AWS resources that can be deployed in an automated, repeatable fashion
- Build functioning virtual private networks with Amazon VPC from the ground up using the AWS Management Console
- Deploy Amazon EC2 instances using command line calls and troubleshoot the most common problems with instances
- Monitor the health of Amazon EC2 instances and other AWS services
- Manage user identity, AWS permissions, and security in the cloud
- Manage resource consumption in an AWS account using tools such as Amazon CloudWatch, tagging, and Trusted Advisor
- Select and implement the best strategy for creating reusable Amazon EC2 instances
- Configure a set of Amazon EC2 instances that launch behind a load balancer, with the system scaling up and down in response to demand
- Edit and troubleshoot a basic AWS CloudFormation stack definition

Intended Audience:

- Systems Administrators
- Software Developers, especially those in a Developer Operations (DevOps) role

Topics to be covered:

Class 1

- System Operations on AWS Overview
- Networking in the Cloud
- Computing in the Cloud

Class 2

- Storage and Archiving in the Cloud
- Monitoring in the Cloud

- Managing Resource Consumption in the Cloud

Class 3

- Configuration Management in the Cloud
- Creating Scalable Deployments in the Cloud
- Creating Automated and Repeatable Deployments