

## Introduction to Amazon Web Services

### Course Summary

#### Description

Our Introduction to Amazon Web Services training provides an overview of the most commonly used Amazon Web Service resources such as EC2 servers, load balancers, and auto scaling groups and databases. We will provide an overview of meeting technical objectives using AWS including: cost objectives, performance and scaling, availability, and security.

This introductory course is comprised of two introduction modules, and up to three optional modules as chosen by attendees

#### Objectives

By the end of this course, students will have:

- A fundamental understanding of how to achieve performance, scaling, availability and security objectives when running applications on AWS
- Hands-on experience creating and managing AWS resources
- An understanding of how to calculate the cost of running various services on AWS

#### Topics

- Introductory Modules:
  - AWS Introduction: Learn everything you need to run an application on AWS. Specifically, we will introduce a number of Amazon services, describe a typical application architecture and describe Amazon's regions and availability zones.
  - EC2: We will build, secure and manage a simple web server on AWS.
- Optional Modules (choose up to 3):
  - Auto Scaling: build a highly available and scalable server infrastructure using AWS. Objective is to build a web server infrastructure that can scale up to meet millions of requests.
  - Cloudformation: automate the building of application infrastructure on Amazon. Objective is to build an entire fleet of auto scaling web servers in under 10 minutes.
  - Cloudfront: use AWS' Content Delivery Network to distribute content with low latency.
  - DynamoDB: an introduction to Amazon's NoSQL offering.
  - IAM: delegate and control management of AWS resources. Objective is to be able to provision users for all administrators and developers within an organization with only the required permissions.
  - RDS: setup and configure a managed SQL service on AWS.
  - S3: store data and serve content via the web on AWS.
  - SQS: an introduction to AWS' queuing service

#### Audience

This course is ideal for anyone who is interested in deploying or administering an application on AWS.

#### Prerequisites

To take this course, you should:

- Have some familiarity with application development or system administration
- Have a laptop running one of the following: OS X 10.9 or newer, Windows 7 or Linux

#### Duration

Three days