



# Developing on AWS

Length: 4 Days  
Delivery Method: Instructor-led (classroom)

## Description

Developing on AWS helps developers understand how to use the AWS SDK to develop secure and scalable cloud applications. The course provides in-depth knowledge about how to interact with AWS using code and covers key concepts, best practices, and troubleshooting tips.

## Objectives

This course teaches you how to:

- Set up the AWS SDK and developer credentials for Java, C#/.Net, Python, and JavaScript.
- Use the AWS SDK to interact with AWS services and develop solutions.
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores.
- Integrate applications and data by using Amazon Kinesis, AWS Lambda, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and Amazon Simple Workflow Service (Amazon SWF).
- Use AWS Identity and Access Management (IAM) for service authentication.
- Use Web Identity Framework and Amazon Cognito for user authentication.
- Use Amazon ElastiCache and Amazon CloudFront to improve application scalability.
- Deploy applications by using AWS Elastic Beanstalk and AWS CloudFormation.





## Intended Audience

This course is intended for:

- Intermediate-level software developers

## Prerequisites

We recommend that attendees of this course have:

- Familiarity with AWS services
- A working knowledge of Java, C#/.Net, or Python



## Course Outline

### Day 1: Technical Essentials

- Introduction and History of AWS
- AWS Foundational Services: EC2, VPC, S3, EBS
- AWS Security, Identity, and Access Management: IAM
- AWS Databases: RDS, DynamoDB
- AWS Management Tools: Auto Scaling, CloudWatch, Elastic Load Balancing, Trusted Advisor

### Day 2: Building the Foundation

- Introduction to Developing on AWS
- Choosing a Data Store
- Developing Storage Solutions with Amazon S3
- Developing Flexible NoSQL Solutions with Amazon DynamoDB

### Day 3: Connecting Applications and Data with Event-Driven Processing

- Working with Events
- Developing Event-Driven Solutions with Amazon Kinesis Streams
- Developing Event-Driven Solutions with Amazon SWF, Amazon SQS, and Amazon SNS
- Developing Event-Driven Solutions with AWS Lambda

### Day 4: Developing and Deploying Secure, Scalable Applications

- Developing Secure Applications
- Caching Information for Scalability
- Monitoring Your Application and AWS Resources with Amazon CloudWatch
- Deploying Applications with AWS Elastic Beanstalk and AWS CloudFormation

