

# Advanced Developing on AWS

Course code: AWSADEV

The Advanced Developing on AWS course uses the real-world scenario of taking a legacy, on-premises monolithic application and refactoring it into a serverless microservices architecture. This three-day advanced course covers advanced development topics such as architecting for a cloud-native environment; deconstructing on-premises, legacy applications and repackaging them into cloud-based, cloud-native architectures; and applying the tenets of the Twelve-Factor Application methodology.

## Who is the course for

This course is intended for:

- Experienced software developers who are already familiar with AWS services

## What we teach you

The Advanced Developing on AWS course uses the real-world scenario of taking a legacy, on-premises monolithic application and refactoring it into a serverless microservices architecture. This three-day advanced course covers advanced development topics such as architecting for a cloud-native environment; deconstructing on-premises, legacy applications and repackaging them into cloud-based, cloud-native architectures; and applying the tenets of the Twelve-Factor Application methodology.

In this course, you will learn how to:

- Analyze a monolithic application architecture to determine logical or programmatic break points where the application can be broken up across different AWS services.
- Apply Twelve-Factor Application manifesto concepts and steps while migrating from a monolithic architecture.
- Recommend the appropriate AWS services to develop a microservices based cloud native application.
- Use the AWS API, CLI, and SDKs to monitor and manage AWS services.
- Migrate a monolithic application to a microservices application using the 6 Rs of migration.
- Explain the SysOps and DevOps interdependencies necessary to deploy a microservices application in AWS.

## Required skills

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

- In-depth knowledge of at least one high-level programming language
- Working knowledge of core AWS services and public cloud implementation
- Completion of the Developing on AWS course, and then a minimum of 6 months of application of those concepts in a real world environment.

## Course outline

This course covers the following concepts:

- Interfacing with AWS Services
- Deconstructing a monolithic architecture
- Migrating to the cloud
- Creating an infrastructure
- Declare and isolate dependencies
- Storing configuration in the cloud
- Establish a build, release, run model
- Creating the codebase
- Deploying an application
- Evolution of architecture
- Design patterns
- I/O explosion and preventing it

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- Microservices

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