



Course Content

Course Description:

This three-day course covers advanced development topics such as architecting for a cloud-native environment and deconstructing on-premises legacy applications and repackaging them into cloud-based, cloud-native architectures. It also covers how to apply the tenets of the Twelve-Factor Application methodology

At Course Completion:

After completing this course, student will be able 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 six Rs of migration
- Explain the SysOps and DevOps interdependencies necessary to deploy a microservices application in AWS

Target Student:

This course is intended for:

- Experienced software developers who are already familiar with AWS services

Prerequisites:

We recommend that attendees of this course have:

- In-depth knowledge of at least one high-level programming language
- Working knowledge of core AWS services and public cloud implementation
- Completion of [Developing on AWS](#) in addition to a minimum of six months of applying those concepts in a real-world environment

Topics:

Interfacing with AWS Services

Creating the codebase

Deconstructing a monolithic architecture

Deploying an application

Migrating to the cloud

Evolution of architecture

Creating an infrastructure

Design patterns

Declare and isolate dependencies

I/O explosion and preventing it

Storing configuration in the cloud

Microservices

Establish a build, release, run model