

# AWS – Advanced Developing on Amazon Web Services

## Description

This 3-day course uses the real-world scenario of taking a legacy, on-premises monolithic application and refactoring it into a serverless microservices architecture. This four-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.

## Course Content

### Module 1: Introduction to data lakes

- Describe the value of data lakes
- Compare data lakes and data warehouses
- Describe the components of a data lake
- Recognize common architectures built on data lakes

### Module 2: Data ingestion, cataloging, and preparation

- Describe the relationship between data lake storage and data ingestion
- Describe AWS Glue crawlers and how they are used to create a data catalog
- Identify data formatting, partitioning, and compression for efficient storage and query

### Module 3: Data processing and analytics

- Recognize how data processing applies to a data lake
- Use AWS Glue to process data within a data lake
- Describe how to use Amazon Athena to analyze data in a data lake

### Module 4: Building a data lake with AWS Lake Formation

- Describe the features and benefits of AWS Lake Formation
- Use AWS Lake Formation to create a data lake
- Understand the AWS Lake Formation security model

### Module 5: Additional Lake Formation configurations

- Automate AWS Lake Formation using blueprints and workflows
- Apply security and access controls to AWS Lake Formation
- Match records with AWS Lake Formation FindMatches
- Visualize data with Amazon QuickSight

### Module 6: Architecture and course review

- Post course knowledge check
- Architecture review
- Course review

## Lab / Exercises

- Laboratoires officiels AWS

## Documentation

- Digital courseware included

## Exam

- This course prepares you to the AWS Certified Data Analytics - Specialty exam. If you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you

## Participant profiles

- Data platform engineers
- Solutions architects
- IT professionals

## Prerequisites

- In-depth knowledge of at least one high-level programming language
- Working knowledge of core AWS services and public cloud implementation
- Completed the [Developing on AWS](#) classroom training, and then a minimum of 6 months of application of those concepts in a real world environment

## Objectives

- 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

## Niveau

Avancé

## Virtual Classroom Registration Price (CHF)

2700

## Duration (in Days)

3

## Reference

AWS-203