+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 04/23/2026

Sign up

AWS Development Training

3 days (21 hours)

Overview

Developing on AWS enables the creation of applications in a reproducible manner on high-performance cloud environments without relying on a root daemon. By mastering the SDKs and the AWS CLI, developers benefit from a highly scalable infrastructure, ideal for packaging software pipelines and securing multi-user executions. Earning the Developer Associate certification officially validates your expertise in cluster deployment and the management of cloud-native services

This training aims to make your development workflows portable: creating function images, running on ephemeral compute nodes, and fine-tuning data dependencies. You will learn to choose between different service models (serverless, containers, storage) and build your own continuous deployment recipes to optimize performance and costs. Like all our sessions, this course is based on the latest stable version of the technology and its new features.

The approach is 100% hands-on and centers on guided workshops, real-time build demos, and troubleshooting common errors related to permissions, configurations, or networking. You'll work on real-world scenarios to develop the skills needed for debugging and application optimization. Deliverables include ready-to-use definition files, a best-practices checklist, and sample commands for integrating AWS into your daily scripts.

Like all our training courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Master the SDKs and AWS CLI to create cloud applications.
- Implement authentication, authorization, and security best practices.
- Use S3 and DynamoDB and manage data scalability.

- Create Lambda functions and workflows, and integrate SNS, SQS, and API Gateway.
- Deploy via Elastic Beanstalk/CloudFormation, monitor, and optimize performance and costs.
- Be prepared for the official AWS Certified Developer – Associate exam

Target Audience

- Software developers
- Solution architects
- IT professionals

Prerequisites

- Knowledge of software development and AWS core services
- Programming experience in one of the following languages:
  - Python
  - .Net
  - Java

Technical requirements

- A modern code editor (VS Code recommended) with the AWS Toolkit extension
- AWS CLI and AWS SAM CLI installed and configured
- An active personal AWS account to manage resources (eligible for the Free Tier)
- An installed programming runtime (Python 3.x, Java 11/17, or .NET 6/8)

Curriculum for our AWS Certified Developer – Associate

[Day 1 - Morning]

Development Environment and Application Security

- Developer Tools: Advanced AWS CLI Configuration and Interaction with SDKs
- Managing execution roles and using the STS service for temporary access
- Shared Responsibility Model: Distinguishing Between Code Security and Infrastructure Security
- Managing Environment Variables and Configuration Profiles
- Hands-on Workshop: Setting up a local environment and testing secure API calls via SDK.

[Day 1 - Afternoon]

Serverless and Observability

- AWS Lambda in Depth: Lifecycle, Dependency Management, Versions, and Aliases
- Performance and Costs: Memory optimization, cold starts, and execution in a VPC environment
- Application tracing: Integrating AWS X-Ray to diagnose latency and errors
- Using destinations and DLQs for asynchronous error handling
- Hands-on Workshop: Developing and Deploying a Lambda Function with Active Monitoring.

[Day 2 - Morning]

Event-Driven Architectures and APIs

- API Gateway: Creating REST/HTTP endpoints, throttling, and JWT authorizers
- Using SQS (queues) and SNS (notifications)
- Event-Driven Design: Workflow orchestration with EventBridge and schema management
- Implementing retry policies for resilience
- Hands-on workshop: Building an asynchronous backend using API Gateway and SQS.

[Day 2 - Afternoon]

Data Persistence and Access Patterns

- DynamoDB (NoSQL): Single-table design, index management (GSI/LSI), and transactions
- S3 optimization
- Data recovery management via DynamoDB Streams
- Introduction to application caching with ElastiCache
- Hands-on workshop: Creating a CRUD application with DynamoDB and secure file management on S3.

[Day 3 - Morning]

CI/CD and Infrastructure as Code (IaC)

- Deployment with AWS SAM
- Delivery Pipelines: Automation with CodeBuild and CodePipeline
- Deployment strategies: Blue/Green, Canary, and rollback management
- Secret Management with Secrets Manager and SSM Parameter Store
- Hands-on Workshop: Setting up a complete pipeline from commit to production deployment.

[Day 3 - Afternoon]

Resilience, Optimization, and Preparedness DVA-C02

- Integrating KMS into the development lifecycle
- Quota Management: Implementing Retry and Exponential Backoff Strategies

- Quickly reading through scenarios and identifying distractors
- Review of resilience patterns: Circuit Breaker and application timeouts
- Hands-on workshop: Troubleshooting a complex architecture and mini-mock exam.

Target Audience

This training is intended for both individuals and companies, large or small, seeking to train their teams in new advanced IT technologies or to acquire specific business knowledge or modern methodologies.

Placement upon enrollment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and reflection sessions, and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.