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Sign up

AWS Lambda training: FaaS

2 days (14 hours)

Presentation

With our AWS Lambda training course, you'll master [Function as a Service](#) (FaaS) to automate the administration of your infrastructure via the Cloud.

Our course will first teach you the fundamentals of AWS Lambda and FaaS, highlighting its architecture and the different deployment and programming models.

From A to Z, we'll cover the management of Lambda functions, from configuration to troubleshooting and deployment. You'll learn about [synchronous](#) and asynchronous [invocation](#) methods, as well as the AWS CLI.

The program also covers essential aspects such as scaling, monitoring and tuning with AWS X-Ray and Lambda SnapStart.

At the end of our training, you'll benefit from a fully managed infrastructure, so you can concentrate solely on development.

Objectives

- Understand the fundamentals of AWS Lambda and Function as a Service (FaaS)
- Master the configuration and deployment processes for Lambda functions
- Acquire cost management strategies

Target audience

- Web developers
- Software architects
- System administrators

- DevOps

Prerequisites

- A solid understanding of software development concepts
- Knowledge of cloud administration
- Mastery of a programming language

Technical requirements

Have an administrator account on AWS.

AWS Lambda: FaaS training program

INTRODUCTION

- What is AWS Lambda?
- What is Function as a Service (FaaS)?
- Serverless deployment models vs. traditional models
- The benefits of AWS Lambda
- AWS Lambda interface overview
- Runtimes presentation

AWS LAMBDA FUNDAMENTALS

- Architecture and key components
- Programming models
- The runtime environment
- Lambda function deployment processes
- Package formats
- Infrastructure as Code (IaC) for Lambda management
 - Tools (Cloudformation, AWS SAM, AWS CDK)
 - The template
 - Use AWS Application Composer to design a serverless application
- Private network configuration

FUNCTION CONFIGURATION AND DEPLOYMENT

- Configuring Lambda functions
 - Options
 - Environment variables
 - File management

- Function deployment
 - Archives .zip
 - Container images
- Version and alias management for deployment
- Using Lambda function URLs
- Best practices for testing and debugging functions

INVOKING AND MANAGING LAMBDA FUNCTIONS

- Synchronous invocation methods
- Asynchronous invocation methods
- Event source mapping configuration
- Event filtering
- Error management and function status
- AWS CLI for managing functions
- Recursive loop detection

MONITORING AND SCALING

- Monitoring
 - Functions with the AWS console
 - Metric
 - Logs
- IAM on AWS Lambda
- Automatic scaling
- Configuration of reserved/provisioned competition
- Using AWS X-Ray and Lambda SnapStart for performance optimization
- Cost management strategies
- Create personalized alerts

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% Practical, 40% Theory. Training material distributed in

to all participants.

Organization

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

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.