

Developing in an AWS environment

Duration: 3 days

Audience: Professionnel TI

Who is this training for?

Mid-level software developers

Training objectives

- Configure the AWS SDK and credentials for Java, C#/.Net, Python, and JavaScript
- Interact with AWS services and develop solutions using the AWS SDK
- Use AWS Identity and Access Management (IAM) for authentication to the service
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores
- Integrate applications and data using AWS Lambda, Amazon API Gateway, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and AWS Step Functions
- Use Web Identity Framework and Amazon Cognito for user authentication • Use Amazon ElastiCache to improve application scalability
- Use containers in the development process
- Leverage CI/CD pipeline to deploy applications to AWS

Summary

In this course, you will learn how to use the AWS SDK to develop secure and scalable cloud applications. We'll look at how to interact with AWS using code and discuss key concepts, best practices, and troubleshooting tips.

Course outline

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Approach and methodology

Practical and project-oriented approach combining demonstrations, guided workshops and real-life situations. Participants develop applications in AWS by experiencing first-hand the main services and tools of the cloud. They progress through the different stages of an application's lifecycle: design, development, integration, deployment, and testing. The training emphasizes: Learning by doing (labs and concrete exercises) Real-life use cases to contextualize concepts Exploring AWS services and their integration Exchanges and feedback to consolidate what has been learned

Prerequisites

- Programming basics (Python, JavaScript, Java or equivalent)
- Understanding of application development concepts (API, business logic, integration)
- Basic knowledge of cloud environments Networking skills (HTTP, DNS, basic security)
- Familiarity with identity and access management (IAM) concepts

Recommendations

- Hands-on experience in software development (applications, APIs, integration)
- Familiarity with a programming language (Python, JavaScript or Java)
- Understanding of cloud concepts and distributed architectures
- Basic knowledge of AWS services (IAM, EC2, S3, Lambda – asset)
- Notions of networking and security (HTTP, authentication, access)