

AWS Essentials - Technical

Duration: 1 day

Audience: Professionnel TI

Who is this training for?

- Individuals who are responsible for promoting the technical benefits of AWS services to customers
- Individuals who want to learn how to get started with AWS
- SysOps Administrators
- Solutions architects
- Developers

Training objectives

- Describe terminology and concepts related to AWS services
- Navigate the AWS Management Console
- Articulate the key concepts of AWS security measures and AWS identity and access management (IAM)
- Distinguish between several AWS compute services, including Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, Amazon Elastic Container Service (Amazon ECS), and Amazon Elastic Kubernetes Service (Amazon EKS)
- Understand AWS database and storage offerings, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, and Amazon Simple Storage Service (Amazon S3)
- Explore AWS networking services • Access and configure Amazon CloudWatch monitoring features

Summary

AWS Technical Essentials introduces you to essential AWS services and common solutions. The course covers fundamental AWS concepts related to compute, databases, storage, networking, monitoring, and security. You'll get started working on AWS through hands-on experiences. The course covers the concepts needed to improve your understanding of AWS services, so you can make informed decisions about solutions that meet business requirements. Throughout the course,

you'll gain insights on how to build, compare, and apply highly available, fault-tolerant, scalable, and cost-effective cloud solutions.

Course outline

Module 1: Introduction to Amazon Web Services

- Introduction to AWS Cloud
- Security in the AWS Cloud
- Hosting the Employee Directory Application in AWS

Lab Tutorials: Introduction to Identity and Access Management (IAM) on AWS.

Module 2: AWS Compute

- Compute as a Service in AWS
- Introduction to Amazon Elastic Compute Cloud
- Amazon EC2 Instance Lifecycle
- AWS Container Services
- What is Serverless Computing?
- • Introduction to AWS Lambda
- • Choosing the Right Compute Service
- Lab Hands-on: Launch the Employee Directory Application on Amazon EC2.

Module 3: Networking on AWS

- Networking on AWS
- Introduction to Amazon Virtual Private Cloud (Amazon VPC)
- Amazon VPC Routing
- Amazon VPC Security

Lab Tutorials: Create a VPC and Relaunch the Corporate Directory Application in Amazon EC2.

Module 4: AWS Storage

- AWS Storage Types
- Amazon EC2 Instance Storage and Amazon Elastic Block Store (Amazon EBS) Object Storage with Amazon S3
- Choosing the Right Storage Service

Lab Tutorials: Create an Amazon S3 Bucket.

Module 5: Databases

- Explore Databases in AWS
- Amazon's Relational Database Service
- Specific Databases
- Introduction to Amazon DynamoDB
- Choosing the Right AWS Database Service

Lab Hands-on: Implementing and Managing Amazon DynamoDB.

Module 6: Monitoring, Optimization, and Serverless

- Monitoring
- Optimization
- Alternative Architecture of a Serverless Employee Directory Application
- Hands-on Lab: Configuring High Availability for Your Application.

Module 7: Course Summary

Approach and methodology

The training is based on a progressive and practical approach, combining theoretical presentations, live demonstrations in the AWS environment and guided exercises. Participants are led to concretely manipulate the services through guided laboratories (IAM, EC2, VPC, S3, databases), promoting an in-depth understanding of the concepts. Scenario studies and simulations also make it possible to compare different cloud architectures and develop their ability to make informed technological

choices. The facilitator acts as a technical accompanist by supporting experimentation, answering questions and facilitating the integration of learning.

Prerequisites

- Hands-on experience with distributed systems
- Be proficient in general networking concepts
- Be able to leverage multi-level architectures
- Be proficient in cloud computing concepts

Recommendations

The training favours a progressive approach integrating lectures, live demonstrations and guided exercises. Participants explore AWS services through hands-on labs that allow them to manipulate concepts and consolidate their learning. The emphasis is on applied understanding and the ability to make informed technology choices.