Amazon Web Services (AWS) - Architecture on AWS

Official course, Architecting on AWS

Hands-on course of 3 days - 21h
Ref.: AWW - Price 2026: CHF2 590 (excl. taxes)

With this course, you'll learn the fundamentals of building an IT infrastructure on the AWS platform. You'll be able to build and deploy an IT infrastructure running on the AWS platform.

EDUCATIONAL OBJECTIVES

At the end of the training, the trainee will be able to:

Decide on the implementation of an architecture on AWS based on AWS principles and best practices

Apply scalability, reliability and high-availability architecture on AWS

Use managed services to bring flexibility and resilience to your architecture

Improve efficiency, increase performance, reduce and optimize costs of an architecture on AWS

Using the AWS Well-Architected framework to enhance architectures with AWS solutions

Know how to use architecture models for current solutions on AWS (web applications, batch processing, etc.).

Use design components and features to guarantee scalability, elasticity and high availability

Concevoir des solutions intégrant des fonctions de sécurité, d'authentification et d'autorisation avec AWS

Identify cloud migration procedures

TEACHING METHODS

Training in French. Official course material in English and digital format. Good understanding of written English.

CERTIFICATION

Successful completion of the exam leads to AWS Certified Solutions Architect - Associate level certification (prerequisite: completion of "Technical Essentials" training).

PARTICIPANTS

Solution architects, solution design engineers, developers, anyone wanting to learn the basics of AWS architectures.

PREREQUISITES

Completion of the AWS Technical Fundamentals course. Knowledge of general cloud and networking concepts. Working knowledge of distributed systems and multi-tier architectures.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

THE PROGRAMME

last updated: 11/2025

1) Review of architectural fundamentals

- AWS services and infrastructure.
- Infrastructure models.
- AWS API tools.
- Secure your infrastructure.
- The AWS Well-Architected framework.

Hands-on work : Explore how to use AWS API tools to deploy an EC2 instance.

2) AWS account security

- AWS account security: IAM/AWS Organization/Landing Zone/Control Tower.
- Safety principles.

- Identity and resource-based policies.
- Federation of accounts.
- Introduction to managing multiple accounts.

3) Networking (Part 1)
- Network: VPC/Routing/Internet connectivity/NACL & Security Groups.
- IP addressing.
- Amazon Virtual Private Cloud (VPC), models and quotas.
- Routing.
- Internet access.
- Network Access Control Lists (NACL).
- Safety groups.

4) Compute
- Amazon Elastic Cloud Compute (EC2).
- EC2 instances and instance selection.
- High-performance computing on AWS.
- Lambda and EC2, knowing when to use one or the other.

Hands-on work : Create your Amazon VPC infrastructure.

5) Storage
- Amazon S3, security, versioning and storage classes.
- Shared file systems.
- Data migration tools.

6) Database services
- AWS database solutions.
- Amazon Relational Database Services (RDS).
- DynamoDB, features and use cases.
- Redshift, features, use cases and comparison with RDS.
- Data caching and migration.

Hands-on work : Create a database layer in your Amazon VPC infrastructure.

7) Monitoring and scaling
- Monitoring: CloudWatch, CloudTrail and VPC Flow Logs.
- Calling up events.
- Elastic Load Balancing.
- Automatic scaling options and monitoring costs.

Hands-on work : Configure high availability in your Amazon VPC infrastructure.

8) Automation
- CloudFormation.
- AWS Systems Manager.

9) Containers
- Microservices.
- Monitoring microservices with X-Ray.
- Containers.

10) Networking (Part 2)
- VPC Peering & Endpoints.
- Transit Gateway.
- Hybrid Networking.
- Hybrid Networking.

11) Serverless Architecture

- Amazon API Gateway.
- Amazon SQS, Amazon SNS.
- Amazon Kinesis Data Streams and Kinesis Firehose.
- Step Functions.

Hands-on work : Create a serverless architecture.

12) Edge Services

- Edge fundamentals.
- Amazon CloudFront.
- AWS Global Accelerator.
- AWS Web Application Firewall (WAF), DDoS and Firewall Manager.
- AWS Outposts.

Hands-on work : Setting up an Amazon CloudFront distribution with Amazon S3 Origin.

13) Backup and restoration

- Disaster recovery planning.
- AWS backup.
- Recovery strategies.

14) Case study: creating a multi-tier architecture (Lab Capstone)

- Review of current concepts and services.
- End-to-end construction of a scenario-based solution.

DATES

Contact us