

## **AWS for Developers**

#### **Audience Course AWS for Developers**

The course AWS for Developers is intended for developers who want to use Amazon Web Services to develop and deploy cloud applications.

#### **Prerequisites Course AWS for Developers**

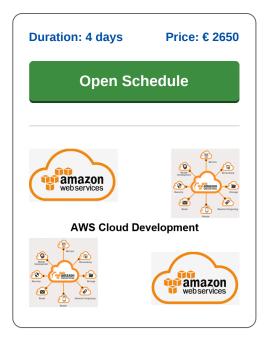
Experience with a modern programming language such as C#, Java, Python or PHP is required to participate in this course.

#### **Realization Training AWS for Developers**

The theory is treated on the basis of presentation slides and demos. During the course theory and exercises are interchanged.

#### **Certification Course AWS for Developers**

After successful completion of the course attendants will receive a certificate of participation in AWS for Developers.



### **Content Course AWS for Developers**

In the course AWS for Developers participants learn to use Amazon Web Services (AWS) for the development of Cloud Applications and Services. AWS is a widely used Cloud Platform that allows companies and individuals to run applications based on a Pay as You go model in AWS server farms.

#### **AWS Intro**

The course AWS for Developers kicks off with an overview of the key services offered by AWS. This includes Compute, Storage and Free Services as well as Virtual Servers. The AWS Architecture, availability zones and the pricing model are also discussed.

#### **EC2 Instances**

Then it is time for a coverage of the use of EC2 instances. EC2 instances are VPCs that are based on Amazon Machine Images (AMIs) but that can be set up entirely at your own discretion. Making connections, allocating storage and the security of EC2 are treated.

#### **Elastic Beanstalk**

Next the AWS orchestration service Elastic Beanstalk on which applications can be deployed is discussed. EBS supports various programming languages and offers services such as load balancing, auto scaling and security with a firewall.

#### **AWS Data Access**

The use of databases in the AWS Cloud is also part of the program of the course. The Relational Database Service is central to this and links to databases such as MySQL and PostgreSQL are covered. Attention is also paid to NoSQL databases and to the creation and management of S3 Storage Buckets.

#### **AWS Lambda**

AWS also supports serverless computing with AWS Lambda. It is explained that serverless computing does not mean that no servers are used, but that the management of servers is completely taken off your hands by AWS. Next the response to events, automatic scaling and orchestration of functions is treated.

#### **Virtual Networks**

Finally attention is paid to setting up Virtual Networks in the AWS Cloud. This includes AWS Networking with Elastic IP Addresses, Internet Gateways, Security Groups and Network Address Translation.

Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online



# **Modules Course AWS for Developers**

Module 1 : AWS Intro	Module 2 : EC2 Instances	Module 3 : Elastic Beanstalk
Amazon Web Services	What is AWS EC2?	What is Elastic Beanstalk?
AWS Cloud Computing	EC2 Instance Types	Elastic Beanstalk Architecture
Compute Services	Amazon Machine Images	Beanstalk Environment
Virtual Servers	EC2 VPC's	Web Server Environment
Storage Services	Selecting Storage	Deploying Applications
AWS CloudFront	Elastic Block Storage	Supported Languages
AWS Architecture	Security Groups	Elastic Load Balancer
AWS Regions	EC2 Key Pair	Auto Scaling Group
Availability Zones	IAM Users	Host Manager
AWS CLI	Instance Creation	Creating Firewall
Developer Tools	Instance Tagging	Worker Environment
AWS Pricing	Connect to EC2 Instance	Communication with Queue
Free Services	EC2 Monitoring	Deploying on EBS
Module 4 : Data Access	Module 5 : AWS Lambda	Module 6 : Virtual Networks
Relational Database Service	What is AWS Lambda?	AWS Networking
Relational Database Service DB Instances	What is AWS Lambda? Serverless Computing	AWS Networking Virtual Private Cloud (VPC)
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DB Instances	Serverless Computing	Virtual Private Cloud (VPC)
DB Instances RDS Database Types	Serverless Computing Automating Infrastructure	Virtual Private Cloud (VPC) Elastic IP Addresses
DB Instances RDS Database Types MySQL and PostgreSQL	Serverless Computing Automating Infrastructure Automated Administration	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora Query API	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events HTTP Requests	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets Route Tables
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora Query API Scaling RDS	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events HTTP Requests Supported Languages	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets Route Tables Internet Gateway
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora Query API Scaling RDS NoSQL Database Service	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events HTTP Requests Supported Languages Custom Backends	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets Route Tables Internet Gateway Security Group
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora Query API Scaling RDS NoSQL Database Service DynamoDB	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events HTTP Requests Supported Languages Custom Backends Fault Tolerance	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets Route Tables Internet Gateway Security Group Network ACL
DB Instances RDS Database Types MySQL and PostgreSQL Amazon Aurora Query API Scaling RDS NoSQL Database Service DynamoDB AWS S3 Storage	Serverless Computing Automating Infrastructure Automated Administration Reacting to Events HTTP Requests Supported Languages Custom Backends Fault Tolerance Automatic Scaling	Virtual Private Cloud (VPC) Elastic IP Addresses Private and Public IP Subnets Route Tables Internet Gateway Security Group Network ACL Understanding VPC CIDR