

## Systems Operations on AWS (AWSSYS)

<b>Kosten:</b>	€ 1995,- excl. BTW per deelnemer
<b>Duur:</b>	3 dagen
<b>Max Deelnemers:</b>	10

### Course Content

This course is designed to teach those in a Systems Administrator or Development Operations (DevOps) role how to create automatable and repeatable deployments of networks and systems on the AWS Cloud. The course covers the specific AWS features and tools related to configuration and deployment, in addition to best practices for configuring and deploying systems.

### Who should attend

This course is intended for:

- Systems Administrators and Software Developers, especially those in DevOps roles

### Certifications

This course is part of the following Certifications:

- **AWS Certified Cloud Practitioner (ACCP)**
- **AWS Certified SysOps Administrator – Associate (ACSOAA)**
- **AWS Certified Developer – Associate (ACDA)**
- **AWS Certified Solutions Architect – Professional (ACSAP)**
- **AWS Certified Solutions Architect – Associate (ACSAA)**

### Prerequisites

We recommend that attendees of this course have:

- Successfully completed the **AWS Technical Essentials (AWSE)**
- A background in either software development or systems administration
- Proficiency in maintaining operating systems at the command line, such as shell

- scripting in Linux environments or cmd/PowerShell in Windows
- Basic knowledge of networking protocols (TCP/IP, HTTP)

## Course Objectives

This course is designed to teach you how to:

- Understand the AWS infrastructures as it relates to system operations such as the global infrastructure, core services and account security
- Use the AWS Command Line Interface, and understand additional administration and development tools
- Manage, secure, and scale compute instances on AWS
- Identify container services and services available for serverless computing
- Build virtual private networks with Amazon VPC
- Configure and manage storage options utilizing the storage services offered with AWS
- Monitor the health of your infrastructure with services such as Amazon CloudWatch, AWS CloudTrail and AWS Config
- Manage resource consumption in an AWS account using tags, Amazon CloudWatch, and AWS Trusted Advisor
- Create and configure automated and repeatable deployments with tools such as AMIs and AWS CloudFormation

## AWS Technical Essentials (AWSE) – Course Content

### Day One

#### Module 1: Understanding systems operations on AWS

- Systems operations in the Cloud
- AWS Global Infrastructure
- Introduction to core services
- AWS Account Security
- AWS Identity and Access Management (IAM)
- Demonstration: Deploying a website

#### Module 2: Tooling and Automation

- AWS Command Line Interface (CLI)
- AWS System Manager
- Additional administration and development tools
- AWS Software Development Kit (SDK)
- AWS Cloud Formation

- AWS OpsWorks
- Hands-on lab 1: Using AWS System Manager

### **Module 3: Computing (Servers)**

- Computing on AWS
- Managing your AWS instances
- Securing your AWS instances
- AWS EC2 instance pricing
- Hands-on lab 2: Creating Amazon EC2 instances

### **Module 4: Computing (scaling and name resolution)**

- Elastic load balancing
- Amazon EC2 Auto Scaling
- Amazon Route 53
- Hands-on lab 3: Using Auto Scaling in AWS

## **Day Two**

### **Module 5: Computing (Containers and Serverless)**

- Containers on AWS
- AWS Lambda
- Amazon API Gateway
- AWS Batch

### **Module 6: Computing (Database Services)**

- Amazon Relational Database Service (Amazon RDS)
- Amazon Aurora
- Amazon DynamoDB
- AWS Database Migration Services

### **Module 7: Networking**

- Networking and Amazon Virtual Private Cloud (VPC)
- Securing your network
- Troubleshooting networks in AWS
- Hands-on lab 4: Configuring a Virtual Private Cloud (Windows & Linux)

### **Module 8: Storage and archiving**

- Amazon Elastic Block Store ( Amazon EBS)
- Amazon S3
- Amazon Elastic File System (Amazon EFS)
- Amazon Simple Storage Services (Amazon S3)
- Amazon S3 Glacier
- AWS Snowball
- Hands-on lab 5: Managing Storage in AWS (Windows & Linux)

## **Day Three**

## **Module 9: Monitoring and security**

- Amazon CloudWatch-Monitoring, Events, Logging
- AWS Cloud Trail
- AWS Configuration
- Amazon GuardDuty
- Hands-on lab 6: Monitoring your application and infrastructure with CloudWatch

## **Module 10: Managing resource consumption**

- Tagging
- Cost reduction opportunities in the cloud
- Cost monitoring and billing alarms
- AWS Trusted Advisor
- Hands-on lab 7: Managing resources with tagging

## **Module 11: Creating automated and repeatable deployments**

- Configuration management in the cloud
- Creating AMIs and building strategies
- Using configuration software
- AWS Cloud Formation
- Troubleshooting AWS Cloud Formation templates
- Hands-on lab 8: Automating deployments with Cloud Formation

### ***Available as online Course***

### **Price of the course Systems Operations on AWS – AWSSYS**

**Price per participant** € 1995,- excl. VAT

**Max. participants:** 16

### **In-company group rate**

If you register with a group of five or more people for a course at the company location (in-company), we can offer an attractive group rate. For information about our group rates, please contact us and request a quote via this link or call 020 – 820 83 62.

### **No additional costs**

The mentioned course rates are per person, excluding 21% VAT (VAT number is stated on the invoice), including all current teaching materials, a reference work (PDF) and a certificate of participation. So there are no additional costs afterwards.

### ***Tax-deductible***

**The government stimulates knowledge and skills in the Netherlands. That is why SignOn's courses are (partially) tax-deductible. How much you can deduct depends on your situation. Do you want to know more? Check the website of the Tax Authorities.**

### ***Employers***

**As an employer you can deduct the full training costs for employees as operating**

**costs. This applies to the training itself, but also to other costs such as books, registration fees, administrative costs, the certificate or extra supervision. At SignOn all these costs are already included in the price.**

### **Individuals**

If you take a course on your own account, it is often deductible for income tax. In this way, continuing to study is affordable. The education or course must be relevant to your current or future work. If you spend more than € 250 on compulsory costs for a relevant course or course, you may deduct a maximum of € 15,000. Check the website of the **Tax Authorities**.

### **Want to know more?**

Do you have any questions or would you like more information? Feel free to contact us via [info@signon.nl](mailto:info@signon.nl) or call **020 – 820 83 62**.

### **Lesmethodes**

Kies de lesmethode die het beste bij jou past. Deze training kun je op de volgende manieren volgen:

- **Virtual classroom**

Attend a the virtual classroom course from any location (workplace or home). You learn from a live instructor and are in contact with other participants. The instructor has the possibility to look at your screen (if necessary) to answer all your questions. This training will take place via Microsoft Teams (free of use).

- **Classroom live**

A face-to-face training on a location in the Netherlands. Employees from different companies are present during this classroom training. Fully catered for, including an extensive lunch.

- **In-company course**

Our in-company training is tailored to your company. The specialized trainer only deals with what is important for your company and work situation. That makes our tailor-made training very effective. We provide these training courses in Dutch, English and German. The choice for an in-company training provides an attractive discount. Depending on the number of participants, the discount can be as much as 50% compared to participation in an open training. More information or request a quote.

#### **Bezoekadres**

Zuidplein 36  
1077 XV Amsterdam

#### **Telefoon**

020 820 83 62

#### **Email**

[info@signon.nl](mailto:info@signon.nl)

#### **Website**

[www.signon.nl](http://www.signon.nl)