AW240-EN Cloud Operations on AWS

Kurzbeschreibung:

"Cloud Operations on AWS" teaches systems operators and anyone performing cloud operations functions how to manage and operate automatable and repeatable deployments of networks and systems on AWS. You will learn about cloud operations functions, such as installing, configuring, automating, monitoring, securing, maintaining, and troubleshooting these services, networks, and systems. The course also covers specific AWS features, tools, and best practices related to these functions.

Zielgruppe:

- System administrators and operators who are operating in the AWS Clo
- Informational technology workers who want to increase their cloud operations knowledge

Voraussetzungen:

To participate in the “Cloud Operations on AWS” at qSkills, you should have attended the following AWS training:

- “AWS Technical Essentials”

and additionally meet the following requirements:

- A background in 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)

Sonstiges:

Dauer: 3 Tage

Preis: 1995 Euro plus Mwst.

Ziele:

- Identify the AWS services that support the different phases of Operational Excellence, an AWS Well-Architected Framework pillar
- Manage access to AWS resources using AWS accounts and organizations and AWS Identity and Access Management (IAM)
- Maintain an inventory of in-use AWS resources by using AWS services, such as AWS Systems Manager, AWS CloudTrail, and AWS Config
- Develop a resource deployment strategy using metadata tags, Amazon Machine Images (AMIs), and AWS Control Tower to deploy and maintain an AWS cloud environment
- Automate resource deployment by using AWS services, such as AWS CloudFormation and AWS

Service Catalog
- Use AWS services to manage AWS resources through CloudOps lifecycle processes, such as deployments and patches
- Configure a highly available cloud environment that uses AWS services, such as Amazon Route 53 and Elastic Load Balancing, to route traffic for optimal latency and performance
- Configure AWS Auto Scaling and Amazon EC2 Auto Scaling to scale out your cloud environment based on demand
- Use Amazon CloudWatch and associated features, such as alarms, dashboards, and widgets, to monitor your cloud environment
- Manage permissions and track activity in your cloud environment by using AWS services, such as AWS CloudTrail and AWS Config
- Deploy your resources to an Amazon Virtual Private Cloud (Amazon VPC), establish necessary connectivity to your Amazon VPC, and protect your resources from disruptions of service
- State the purpose, benefits, and appropriate use cases for mountable storage in your AWS Cloud environment
- Explain the operational characteristics of object storage in the AWS Cloud, including Amazon Simple Storage Service (Amazon S3) and Amazon S3 Glacier
- Build a comprehensive cost model to help gather, optimize, and predict your cloud costs by using services such as AWS Cost Explorer and the AWS Cost & Usage Report

Inhalte/Agenda:

- **Day 1**
  - ◊ Module 1: Introduction to Cloud Operations on AWS
  - ◊ Module 2: Access Management
  - ◊ Module 3: System Discovery
  - ◊ Hands-On Lab: Auditing AWS Resources with AWS Systems Manager and AWS Config
  - ◊ Module 4: Deploy and Update Resources
  - ◊ Module 5: Automate Resource Deployment
  - ◊ Hands-On Lab: Infrastructure as Code

- **Day 2** ◊
  - ◊ Module 6: Manage Resources
  - ◊ Hands-On Lab: Operations as Code
  - ◊ Module 7: Configure Highly Available Systems
  - ◊ Module 8: Automate Scaling
  - ◊ Module 9: Monitor and Maintain System Health
  - ◊ Hands-On Lab: Monitor Applications and Infrastructure
  - ◊ Module 10: Data Security and System Auditing

- **Day 3** ◊
  - ◊ Module 11: Operate Secure and Resilient Networks
  - ◊ Module 12: Mountable Storage
  - ◊ Hands-On Lab: Automating with AWS Backup for Archiving and Recovery
  - ◊ Module 13: Object Storage
  - ◊ Module 14: Cost Reporting, Alerts, and Optimization
  - ◊ Hands-On Lab: Capstone lab for CloudOps
  - ◊