Cloud Operations on AWS

CODICE	**DT0170**
DURATA	**3 gg**
PREZZO	**1.350,00 €**
EXAM	

DESCRIZIONE

This course 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.

Cloud Operations on AWS helps you build and demonstrate your skills in configuring, deploying, and troubleshooting your AWS environments. And when the time is right for you to validate your new skills with an industry-recognized credential, this course helps you prepare for the AWS Certified SysOps Administrator – Associate certification exam.

TARGET

- System administrators and operators who are operating in the AWS Cloud
- Informational technology workers who want to increase the system operations knowledge.

PREREQUISTI

We recommend that attendees of this course have:

- Successfully completed the AWS Technical Essentials classroom training
- 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)

CONTENUTI

Module 1: Introduction to Cloud Operations on AWS

- What is Cloud Operations

- AWS Well-Architected Framework
- AWS Well-Architected Tool

Module 2: Access Management

- AWS Identity and Access Management (IAM)
- Resources, accounts, and AWS Organizations

Module 3: System Discovery

- Methods to interact with AWS services
- Tools for automating resource discovery
- Inventory with AWS Systems Manager and AWS Config
- Hands-On Lab: Auditing AWS Resources with AWS Systems Manager and AWS Config

Module 4: Deploy and Update Resources

- Cloud Operations in deployments
- Tagging strategies
- Deployment using Amazon Machine Images (AMIs)
- Deployment using AWS Control Tower

Module 5: Automate Resource Deployment

- Deployment using AWS CloudFormation
- Deployment using AWS Service Catalog
- Hands-On Lab: Infrastructure as Code

Module 6: Manage Resources

- AWS Systems Manager
- Hands-On Lab: Operations as Code

Module 7: Configure Highly Available Systems

- Distributing traffic with Elastic Load Balancing
- Amazon Route 53

Module 8: Automate Scaling

- Scaling with AWS Auto Scaling
- Scaling with Spot Instances
- Managing licenses with AWS License Manager

Module 9: Monitor and Maintain System Health

- Monitoring and maintaining healthy workloads
- Monitoring AWS infrastructure
- Monitoring applications
- Hands-On Lab: Monitor Applications and Infrastructure

Module 10: Data Security and System Auditing

- Maintaining a strong identity and access foundation
- Implementing detection mechanisms
- Automating incident remediation

Module 11: Operate Secure and Resilient Networks

- Building a secure Amazon Virtual Private Cloud (Amazon VPC)
- Networking beyond the VPC

Module 12: Mountable Storage

- Configuring Amazon Elastic Block Store (Amazon EBS)
- Sizing Amazon EBS volumes for performance
- Using Amazon EBS snapshots
- Using Amazon Data Lifecycle Manager to manage your AWS resources
- Creating backup and data recovery plans
- Configuring shared file system storage
- Hands-On Lab: Automating with AWS Backup for Archiving and Recovery

Module 13: Object Storage

- Deploying Amazon Simple Storage Service (Amazon S3)
- Managing storage lifecycles on Amazon S3

Module 14: Cost Reporting, Alerts, and Optimization

- Gaining AWS cost awareness
- Using control mechanisms for cost management
- Optimizing your AWS spend and usage
- Hands-On Lab: Capstone lab for CloudOps