AWSC-6 - CLOUD OPERATIONS ON AWS

Categoria: **Amazon Web Services**

INFORMAZIONI SUL CORSO

Durata:	Categoria:	Qualifica Istruttore:	Dedicato a:	Produttore:
3 Giorni	Amazon Web Services	Docente Senior (min. 5 anni)	Professionista IT	PCSNET

OBIETTIVI

In this course, you will learn to:

- 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

PREREQUISITI

We recommend that attendees of this course have:

- Successfully completed the AWS Technical Essentials course

-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)

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

INFO

Esame: SOA-C03 - AWS Certified CloudOps Engineer Associate
Materiale didattico: Materiale didattico in formato digitale
Costo materiale didattico: incluso nel prezzo del corso a Calendario
Natura del corso: Operativo (previsti lab su PC)