pcsnet

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	AWS Authorized Instructor	Professionista IT	AWS

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-C02 - AWS Certified SysOps Administrator 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)