kod szkolenia: AWS-SO / PL AA 3d

Cloud Operation on AWS

Odbiorcy szkolenia

https://www.altkomakademia.pl/app/uploads/2024/09/AWS_RABATY.png

Korzyści

In this course, you will learn to:

- Recognize the AWS services that support the different phases of Operational Excellence, a WellArchitected 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 using AWS services such as AWS Systems Manager, AWS CloudTrail, and AWS Config.
- Develop a resource deployment strategy utilizing metadata tags, Amazon Machine Images, and Control tower to deploy and maintain an AWS cloud environment.
- Automate resource deployment using AWS services such as AWS CloudFormation and AWS Service Catalog.
- Use AWS services to manage AWS resources through SysOps lifecycle processes such as deployments and patches.
- Configure a highly available cloud environment that leverages 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 Elastic Compute Cloud auto scaling to scale 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 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 costing model to help gather, optimize, and predict your cloud costs using services such as AWS Cost Explorer and the AWS Cost & Usage Report.

Program szkolenia

Day 1

Module 1: Introduction to System Operations on AWS
- Systems operations
- AWS Well-Architected Framework
- AWS Well-Architected Tool

Module 2a: Access Management
- Access management
- Resources, accounts, and AWS Organizations

Module 2b: System Discovery
- Methods to interact with AWS services
- Introduction to monitoring services
- Tools for automating resource discovery
- Inventory with AWS Systems Manager and AWS Config
- Troubleshooting scenario
- Hands-On Lab: Auditing AWS Resources with AWS Systems Manager and AWS Config

Module 3: Deploy and Update Resources
- Systems operations in deployments
- Tagging strategies
- Deployment using Amazon Machine Images (AMIs)
- Deployment using AWS Control Tower
- Troubleshooting scenario

Module 4: Automate Resource Deployment
- Deployment using AWS CloudFormation
- Deployment using AWS Service Catalog
- Troubleshooting scenario
- Hands-On Lab: Infrastructure as Code

Day 2

Module 5: Manage Resources
- AWS Systems Manager

- Troubleshooting scenario
- Hands-On Lab: Operations as Code

Module 6a: Configure Highly Available Systems

- Distributing traffic with Elastic Load Balancing
- Amazon Route 53

Module 6b: Automate Scaling

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

Module 7: Monitor and Maintain System Health

- Monitoring and maintaining healthy workloads
- Monitoring distributed applications
- Monitoring AWS infrastructure
- Monitoring your AWS account
- Troubleshooting scenario
- Hands-On Lab: Monitoring Applications and Infrastructure

Module 8: Data Security and System Auditing

- Maintaining a strong identity and access foundation
- Implementing detection mechanisms
- Automating incident remediation
- Troubleshooting scenario
- Hands-On Lab: Implementing IAM permissions boundaries

Day 3

Module 9: Operate Secure and Resilient Networks

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

Module 10a: Mountable Storage

- Configuring Amazon Elastic Block Storage (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

Module 10b: Object Storage

- Deploying Amazon Simple Storage Service (Amazon S3) with Access Logs, Cross-Region
- Replication, and S3 Intelligent-Tiering
- Hands-On Lab: Automating with AWS Backup for Archiving and Recovery

Module 11: 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 SysOps

Oczekiwane przygotowanie uczestnika

We recommend that attendees of this course have the following prerequisites:

- Successfully completed the AWS Technical Essentials course
- 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)

Czas trwania

3 dni / 21 godzin

Język

- Course: polish