kod szkolenia: AWS-ARCH-ACC / PL AA 5d

Architecting on AWS - Accelerator

Przeznaczenie szkolenia

This course is intended for:

- Solutions architects
- Solution-design engineers
- Developers
- People in other IT/cloud roles who want to understand how to design and build cloud architectures

Korzyści wynikające z ukończenia szkolenia

In this course, you will learn to:

- Relate AWS architectural principles to make architectural decisions
- Apply AWS services to make your infrastructure scalable, reliable, secure, and highly available.
- Explore how to manage AWS services to provide greater flexibility and resiliency in an infrastructure.
  • Determine how to make an infrastructure based on AWS more efficient to increase performance and reduce costs.
- Apply the Well-Architected Framework to improve architectures with AWS solutions.

Oczekiwane przygotowanie słuchaczy

We recommend that attendees of this course have:

- Not attended the Architecting on AWS course
- Familiarity with AWS cloud computing, which can be learned in AWS Cloud Practitioner Essentials or AWS Technical Essentials

- Familiarity with TCP/IP networking concepts such as VPNs, routing, subnets/gateways, segments, and user permissions
- Familiarity with and knowledge of multi-tier architectures and distributed systems

Język szkolenia

- Szkolenie: polski
- Materiały: angielski

Czas trwania

5 dni / 35 godzin

Agenda szkolenia

Module 1: Architecting Fundamentals
- AWS services • AWS infrastructure
- AWS Well-Architected Framework
- Hands-On Lab: Explore and interact with the AWS Management Console and AWS Command Line Interface

Module 2: Account Security
- Principals and identities
- Security policies
- Managing multiple accounts

Module 3: Networking 1
- IP addressing
- VPC fundamentals
- VPC traffic security

Module 4: Compute
- Compute services
- EC2 instances
- Storage for EC2 instances
- Amazon EC2 pricing options
- AWS Lambda
- Hands-On Lab: Build your Amazon VPC infrastructure

Module 5: Storage

- Storage services
- Amazon S3
- Shared file systems
- Data migration tools

Module 6: Database Services

- Database services
- Amazon RDS
- Amazon DynamoDB
- Database caching
- Database migration tools
- Hands-on Lab: Create a database layer in your Amazon VPC infrastructure

Module 7: Monitoring and Scaling

- Monitoring
- Alarms and events
- Load balancing
- Auto scaling • Hands-on Lab: Configure high availability in your Amazon VPC

Module 8: Automation

- AWS CloudFormation •
- Infrastructure management

Module 9: Containers

- Microservices
- Containers
- Container services

Module 10: Networking 2

- VPC endpoints
- VPC peering
- Hybrid networking
- AWS Transit Gateway

Module 11: Serverless

- What is serverless?
- Amazon API Gateway
- Amazon SQS • Amazon SNS
- Amazon Kinesis • AWS Step Functions
- Hands-on Lab: Build a serverless architecture

Module 12: Edge Services

- Edge fundamentals
- Amazon Route 53
- Amazon CloudFront
- DDoS protection
- AWS Outposts

- Hands-On Lab: Configure an Amazon CloudFront distribution with an Amazon S3 origin

Module 13: Backup and Recovery

- Disaster planning
- AWS Backup
- Recovery strategies
- Hands-on Lab: Build an AWS multi-tier architecture

Module 14: Single to Multiple Accounts

- Multi-account strategies
- AWS SSO
- AWS Control Tower

Module 15: Hybrid Connectivity

- AWS Client VPN
- AWS Site-to-Site VPN
- AWS Direct Connect
- Amazon Route 53 Resolver
- Hands-on Lab: Securing Amazon S3 VPC endpoint communications

Module 16: Securing Data

- Cryptography
- AWS KMS
- AWS CloudHSM
- AWS Secrets Manager

Module 17: Connecting Networks

- AWS Transit Gateway
- AWS Resource Access Manager
- AWS PrivateLink
- Hands-On Lab: Configuring AWS transit gateways

Module 18: High Availability and DDoS

- AWS WAF
- AWS Shield Advanced
- AWS Firewall Manager

Module 19: Migrating Workloads

- Migration process
- Migration tools
- Migrating databases
- Hands-on Lab: Migrating an on-premises NFS share using DataSync and Storage Gateway

Module 20: Optimizing Cost

- Cloud cost management
- Cost management tools
- Cost optimization