Architecting on AWS

CODICE	**DT0165**
DURATA	**3 gg**
PREZZO	**1.350,00 €**
EXAM	

DESCRIZIONE

Architecting on AWS is for solutions architects, solution-design engineers, and developers seeking an understanding of AWS architecting. In this course, you will learn to identify services and features to build resilient, secure, and highly available IT solutions on the AWS Cloud.

Architectural solutions differ depending on industry, types of applications, and business size. AWS Authorized Instructors emphasize best practices using the AWS Well-Architected Framework, and guide you through the process of designing optimal IT solutions based on real-life scenarios. The modules focus on account security, networking, compute, storage, databases, monitoring, automation, containers, serverless architecture, edge services, and backup and recovery. At the end of the course, you will practice building a solution and apply what you have learned.

OBIETTIVI RAGGIUNTI

- Making decisions based on the AWS-recommended architectural principles and best practices
- Leveraging AWS services to make your infrastructure scalable, reliable, and highly available
- Leveraging AWS managed services to enable greater flexibility and resiliency in an infrastructure
- Making an AWS-based infrastructure more efficient in order to increase performance and reduce costs with AWS Solution Architect course.
- Using the Well-Architected Framework to improve architectures with AWS solutions by taking this AWS Solution Architect Course

TARGET

This course is intended for solutions architects, solution-design engineers, developers seeking an understanding of AWS architecting and individuals seeking the AWS Solutions Architect-Associate certification.

PREREQUISTI

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

Essentials, or

- Working knowledge of distributed systems
- Familiarity with general networking concepts
- Familiarity with IP addressing
- Working knowledge of multi-tier architectures
- Familiarity with cloud computing concepts

CONTENUTI

Day 1

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

Day 2

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

Day 3

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: Capstone lab – Build an AWS Multi-Tier architecture. Participants review the concepts and services learned in class and build a solution based on a scenario. The lab environment provides partial solutions to promote analysis and reflection. Participants deploy a highly available architecture. The instructor is available for consultation.