

AWS Certified Solution Architect -Professional

Introduction

Course Overview

AWS And General IT Knowledge

Security features that AWS provides and best practices

Able to design and implement for elasticity and scalability

Network technologies as they relate to AWS networking, including: DNS and load balancing, Amazon Virtual Private Cloud (VPC), and AWS Direct Connect

Working With VPC DNS

Storage and archival options

State management

Database and replication methodologies

Self-healing techniques and fault-tolerant services

Disaster Recovery And Fail-over Strategies

Application migration plans to AWS

Deployment and management

Enterprise Account Management

Consolidated Billing

Consolidated Billing And EC2 Reserved Instances

Cross Account IAM User Strategies

Creating Cross Account Roles

Temporary Access Using Roles and STS

Federated Access Using SAML

Web Identity Federation

Costing And Resource Tagging

Resource Groups

AWS Config

Budgets And CloudWatch Alarms

Third party Tools

Required Services

Amazon CloudTrail

Amazon CloudTrail Overview

Configuring CloudTrail In The Console

Monitoring CloudTrail Events With CloudWatch

AWS Key Management Service

AWS KMS Overview

Using The CLI To Encrypt and Decrypt Data With The CMK

Amazon Kinesis

Amazon Kinesis Overview

Kinesis Mobile IOT Scenario Example

Amazon EC2 And Design Patterns

Integrating CloudWatch Logging With EC2

Real-Time Processing Of Log Files With Amazon Kinesis

Protecting Production Resources

Migrating EC2 Resources To Another Region

EC2 Backup Strategies

HPC (High Performance Computing) On EC2

HPC With Cluster And Grid Computing

Architecting For Performance

Increasing Performance With EBS Raid Configurations

High Availability And Disaster Recovery With Multi-Region Design

Hands-On: Route 53 Complex Configurations

Mitigating DDoS Attacks With AWS

Supporting Legacy Applications In The Cloud

Elastic Load Balancer Design Patterns

Virtual Private Cloud (VPC)

Network And Data Security

Network Monitoring With VPC Flow Logs

Extending On-Premise Networks With VPN

Using Directory Service To Connect Hybrid Architectures

Security Zones

Understanding AWS IP Subnet Reservations

AWS Direct Connect

Working With AWS Direct Connect Virtual Interfaces

Accessing Remote Regions

Amazon ElastiCache

ElastiCache Overview

ElastiCache: Memcache

ElastiCache: Redis

Amazon Redshift

Redshift Overview

Amazon CloudFront

CloudFront Key Concepts And Overview

Dynamic Content With CloudFront

CloudFront Reporting

CloudFront Security

CloudFront Performance Considerations

Streaming Media With CloudFront

Forcing HTTPS To The Origin

Creating A Multi-Region CloudFront Solution

Amazon Elastic Transcoder

ElasticTranscoder Overview

Streaming With S3, CloudFront, and Elastic Transcoder

AWS Data Pipeline

Introduction To Data Pipeline

Using Data Pipeline To Replicate DynamoDB Data Across Regions

Amazon RDS

RDS Overview and Security Options

MySQL and MariaDB On RDS: Multi-region delivery, migrating data from on-premise, and disaster recovery

Oracle DB On RDS

MSSQL DB On RDS

Amazon CloudSearch

Amazon CloudSearch

Amazon EMR

Amazon EMR

Deployment Concepts On AWS Services

CloudFormation

Cloudformation Hands-On

OpsWorks

OpsWorks Hands-on

Amazon SQS

Message Priority

Batch Processing Job Observer

DynamoDB

DynamoDB Overview And Some Design Patterns

Secondary Indexes

DynamoDB Multi-Region Replication