

# **AWS Certified Security - Specialty**

#### Content

# Day 1

- Module 1: Security Overview and Review
  - Explain Security in the AWS Cloud
  - Explain AWS Shared Responsibility Model
  - Summarize IAM, Data Protection, and Threat Detection and Response
  - State the different ways to interact with AWS using the console, CLI, and SDKs
  - Describe how to use MFA for extra protection
  - State how to protect the root user account and access keys

# • Module 2: Securing Entry Points on AWS

- Describe how to use multi-factor authentication (MFA) for extra protection
- Describe how to protect the root user account and access keys
- Describe IAM policies, roles, policy components, and permission boundaries
- Explain how API requests can be logged and viewed using AWS CloudTrail and how to view and analyze access history
- o Hands-On Lab: Using Identity and Resource-Based Policies

### • Module 3: Account Management and Provisioning on AWS

- Explain how to manage multiple AWS accounts using AWS Organizations and AWS Control Tower
- Explain how to implement multi-account environments with AWS Control Tower
- Demonstrate the ability to use identity providers and brokers to acquire access to AWS services
- Explain the use of AWS IAM Identity Center (successor to AWS Single Sign-On) and AWS Directory Service
- Demonstrate the ability to manage domain user access with Directory Service and IAM Identity Center
- Hands-On Lab: Managing Domain User Access with AWS Directory Service

# Day 2

- Module 4: Secrets Management on AWS
  - Describe and list the features of AWS KMS, CloudHSM, AWS Certificate Manager (ACM), and AWS Secrets Manager
  - Demonstrate how to create a multi-Region AWS KMS key
  - o Demonstrate how to encrypt a Secrets Manager secret with an AWS KMS key
  - Demonstrate how to use an encrypted secret to connect to an Amazon RDS database in multiple AWS Regions
  - Hands-On Lab: Using AWS KMS to Encrypt Secrets in Secrets Manager

# • Module 5: Data Security

- o Monitor data for sensitive information with Amazon Macie
- Describe how to protect data at rest through encryption and access controls



- Identify AWS services used to replicate data for protection
- Determine how to protect data after it has been archived
- Hands-On Lab: Data Security in Amazon S3

# • Module 6: Infrastructure Edge Protection

- Describe the AWS features used to build secure infrastructure
- Describe the AWS services used to create resiliency during an attack
- Identify the AWS services used to protect workloads from external threats
- Compare the features of AWS Shield and AWS Shield Advanced
- Explain how centralized deployment for AWS Firewall Manager can enhance security
- o Hands-On Lab: Using AWS WAF to Mitigate Malicious Traffic

#### Day 3

### • Module 7: Monitoring and Collecting Logs on AWS

- Identify the value of generating and collecting logs
- Use Amazon VPC Flow Logs to monitor for security events
- Explain how to monitor for baseline deviations
- Describe Amazon EventBridge events
- Describe Amazon CloudWatch metrics and alarms
- List log analysis options and available techniques
- Identify use cases for using VPC Traffic Mirroring
- Hands-On Lab: Monitoring for and Responding to Security Incidents

# • Module 8: Responding to Threats

- Classify incident types in incident response
- Understand incident response workflows
- Discover sources of information for incident response using AWS services
- Understand how to prepare for incidents
- Detect threats using AWS services
- Analyze and respond to security findings
- Hands-On Lab: Incident Response