

# AWS SysOps Administrator Associate (SOA-C02) Exam Study Guide



## Study materials:

- [Exam Guide](#)
- [Udemy Course](#)
- [Practice Exams](#)

## Domain 1: Monitoring, Logging, and Remediation

### Task Statement 1.1: Implement metrics, alarms, and filters by using AWS monitoring and logging services

- Identify, collect, analyze, and export logs
  - Notes:
  - Resources:
- Collect metrics and logs by using the CloudWatch agent
  - Notes: You will have to download the cloudwatch agent on Ec2 instance
  - Then you will have to configure it using
  - Resources:
- Create CloudWatch alarms
  - Notes:
  - Resources:
- Create metric filters
  - Notes:
  - Resources:
- Create CloudWatch dashboards
  - Notes:
  - Resources:
- Configure notifications
  - Notes:
  - Resources:

## Task Statement 1.2: Remediate issues based on monitoring and availability metrics

- Troubleshoot or take corrective actions
  - Notes:
  - Resources:
- Configure Amazon EventBridge rules
  - Notes:
  - Resources:
- Use AWS Systems Manager Automation runbooks
  - Notes:
  - Resources:

## Domain 2: Reliability and Business Continuity

### Task Statement 2.1: Implement scalability and elasticity

- Create and maintain AWS Auto Scaling plans
  - Notes:
  - Resources:
- Implement caching
  - Notes:
  - Resources:
- Implement Amazon RDS replicas and Amazon Aurora Replicas
  - Notes:
  - Resources:
- Implement loosely coupled architectures
  - Notes:
  - Resources:
- Differentiate between horizontal and vertical scaling
  - Notes:
  - Resources:

### Task Statement 2.2: Implement high availability and resilient environments

- Configure Elastic Load Balancing (ELB) and Route 53 health checks
  - Notes:
  - Resources:

- Differentiate between single AZ and Multi-AZ deployments
  - Notes:
  - Resources:
- Implement fault-tolerant workloads
  - Notes:
  - Resources:
- Implement Route 53 routing policies
  - Notes:
  - Resources:

## Task Statement 2.3: Implement backup and restore strategies

- Automate snapshots and backups
  - Notes:
  - Resources:
- Restore databases
  - Notes:
  - Resources:
- Implement versioning and lifecycle rules
  - Notes:
  - Resources:
- Configure S3 Cross-Region Replication (CRR)
  - Notes:
  - Resources:
- Perform disaster recovery procedures
  - Notes:
  - Resources:

## Domain 3: Deployment, Provisioning, and Automation

### Task Statement 3.1: Provision and maintain cloud resources

- Create and manage AMIs
  - Notes:
  - Resources:
- Create, manage, and troubleshoot CloudFormation
  - Notes:
  - Resources:
- Provision resources across AWS Regions and accounts
  - Notes:

- Resources:
- Select deployment scenarios and services
  - Notes:
  - Resources:
- Identify and remediate deployment issues
  - Notes:
  - Resources:

## Task Statement 3.2: Automate manual or repeatable processes

- Use AWS services to automate deployment processes
  - Notes:
  - Resources:
- Implement automated patch management
  - Notes:
  - Resources:
- Schedule automated tasks
  - Notes:
  - Resources:

## Domain 4: Security and Compliance

### Task Statement 4.1: Implement and manage security and compliance policies

- Implement IAM features
  - Notes:
  - Resources:
- Troubleshoot and audit access issues
  - Notes:
  - Resources:
- Validate SCPs and permissions boundaries
  - Notes:
  - Resources:
- Review Trusted Advisor security checks
  - Notes:
  - Resources:
- Implement secure multi-account strategies
  - Notes:
  - Resources:

## Task Statement 4.2: Implement data and infrastructure protection strategies

- Enforce a data classification scheme
  - Notes:
  - Resources:
- Manage and protect encryption keys
  - Notes:
  - Resources:
- Implement encryption at rest and in transit
  - Notes:
  - Resources:
- Securely store secrets
  - Notes:
  - Resources:
- Review security reports or findings
  - Notes:
  - Resources:

## Domain 5: Networking and Content Delivery

### Task Statement 5.1: Implement networking features and connectivity

- Configure a VPC
  - Notes:
  - Resources:
- Configure private connectivity
  - Notes:
  - Resources:
- Configure AWS network protection services
  - Notes:
  - Resources:

### Task Statement 5.2: Configure domains, DNS services, and content delivery

- Configure Route 53 hosted zones and records
  - Notes:
  - Resources:
- Implement Route 53 routing policies
  - Notes:

- Resources:
- Configure DNS and Amazon CloudFront
  - Notes:
  - Resources:

### Task Statement 5.3: Troubleshoot network connectivity issues

- Interpret VPC configurations
  - Notes:
  - Resources:
- Collect and interpret logs
  - Notes:
  - Resources:
- Identify and remediate CloudFront caching issues
  - Notes:
  - Resources:
- Troubleshoot hybrid and private connectivity issues
  - Notes:
  - Resources:

## Domain 6: Cost and Performance Optimization

### Task Statement 6.1: Implement cost optimization strategies

- Implement cost allocation tags
  - Notes:
  - Resources:
- Identify and remediate underutilized resources
  - Notes:
  - Resources:
- Configure AWS Budgets and billing alarms
  - Notes:
  - Resources:
- Qualify workloads for EC2 Spot Instances
  - Notes:
  - Resources:

## Task Statement 6.2: Implement performance optimization strategies

- Recommend compute resources
  - Notes:
  - Resources:
- Monitor EBS metrics and modify configurations
  - Notes:
  - Resources:
- Implement S3 performance features
  - Notes:
  - Resources:
- Monitor RDS metrics and increase performance
  - Notes:
  - Resources:
- Enable enhanced EC2 capabilities
  - Notes:
  - Resources:
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