

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:**
 -