

SOA-C02 Cheat Sheet

High-yield AWS SysOps Administrator review for monitoring, reliability, deployment, and operations.

BEST FOR Last review before mini test or app session	FOCUS Ops signals, recovery, deployment, security, networking	USE WITH Quick Summary + Service Map
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<h3>1. Monitoring, logging, and remediation</h3> <p>CloudWatch metrics vs logs - Metrics drive alarms; logs preserve detailed event records.</p> <p>Alarm actions - Use SNS, Auto Scaling, or Systems Manager Automation for response.</p> <p>CloudTrail - Tracks API activity for audit and investigation across accounts.</p> <p>AWS Config - Detects configuration drift and noncompliant resource changes.</p> <p>EventBridge - Routes operational events to automated actions or notifications.</p>	<h3>2. Reliability and business continuity</h3> <p>Multi-AZ - Protects against single-AZ failure for databases and apps.</p> <p>Backup plans - Use AWS Backup, retention rules, and vault separation intentionally.</p> <p>RTO vs RPO - Recovery time and acceptable data-loss targets drive design choices.</p> <p>Route 53 failover - Health checks can shift traffic during outages.</p> <p>EBS snapshots - Point-in-time backups; cross-Region copies improve resilience.</p>
<h3>3. Deployment, provisioning, and security</h3> <p>CloudFormation - Preferred for repeatable infrastructure deployment and updates.</p> <p>Systems Manager - Patch, run commands, manage parameters, and automate ops tasks.</p> <p>IAM least privilege - Narrow actions, resources, and conditions whenever possible.</p> <p>KMS and Secrets Manager - Separate encryption control from secret lifecycle rotation.</p> <p>Service Control Policies - Guardrails at the AWS Organizations level, not per-user grants.</p>	<h3>4. Networking and troubleshooting</h3> <p>VPC flow logs - Use to investigate denied traffic and unusual network paths.</p> <p>NAT Gateway - Gives private subnets outbound internet access without inbound exposure.</p> <p>Security groups vs NACLs - SGs are stateful; NACLs are stateless subnet filters.</p> <p>Reachability Analyzer - Helps trace routing and filtering issues end to end.</p> <p>Load balancer health checks - Verify target readiness before sending production traffic.</p>