

# **Amazon**

## **SOA-C01 Exam**

### **AWS Certified SysOps Administrator - Associate**

#### **Questions & Answers Demo**

# Version: 19.0

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## Question: 1

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A SysOps Administrator is troubleshooting Amazon EC2 connectivity issues to the internet. The EC2 instance is in a private subnet. Below is the route table that is applied to the subnet of the EC2 instance.

Destination – 10.2.0.0/16

Target – local

Status – Active

Propagated – No

Destination – 0.0.0.0/0

Target – nat-xxxxxxx

Status – Blackhole

Propagated – No

What has caused the connectivity issue?

- A. The NAT gateway no longer exists
- B. There is no route to the internet gateway.
- C. The routes are no longer propagating.
- D. There is no route rule with a destination for the internet.

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**Answer: A**

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## Question: 2

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A company has adopted a security policy that requires all customer data to be encrypted at rest. Currently, customer data is stored on a central Amazon EFS file system and accessed by a number of different applications from Amazon EC2 instances.

How can the SysOps Administrator ensure that all customer data stored on the EFS file system meets the new requirement?

- A. Update the EFS file system settings to enable server-side encryption using AES-256.
- B. Create a new encrypted EFS file system and copy the data from the unencrypted EFS file system to the new encrypted EFS file system.
- C. Use AWS CloudHSM to encrypt the files directly before storing them in the EFS file system.
- D. Modify the EFS file system mount options to enable Transport Layer Security (TLS) on each of the EC2 instances.

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**Answer: B**

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## Question: 3

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A SysOps Administrator has implemented an Auto Scaling group with a step scaling policy. The Administrator notices that the additional instances have not been included in the aggregated metrics. Why are the additional instances missing from the aggregated metrics?

- A. The warm-up period has not expired
- B. The instances are still in the boot process
- C. The instances have not been attached to the Auto Scaling group
- D. The instances are included in a different set of metrics

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**Answer: B**

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**Question: 4**

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A company using AWS Organizations requires that no Amazon S3 buckets in its production accounts should ever be deleted.

What is the SIMPLEST approach the SysOps Administrator can take to ensure S3 buckets in those accounts can never be deleted?

- A. Set up MFA Delete on all the S3 buckets to prevent the buckets from being deleted.
- B. Use service control policies to deny the s3:DeleteBucket action on all buckets in production accounts.
- C. Create an IAM group that has an IAM policy to deny the s3:DeleteBucket action on all buckets in production accounts.
- D. Use AWS Shield to deny the s3:DeleteBucket action on the AWS account instead of all S3 buckets.

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**Answer: B**

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**Question: 5**

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A company's static website hosted on Amazon S3 was launched recently, and is being used by tens of thousands of users. Subsequently, website users are experiencing 503 service unavailable errors.

Why are these errors occurring?

- A. The request rate to Amazon S3 is too high.
- B. There is an error with the Amazon RDS database.
- C. The requests to Amazon S3 do not have the proper permissions.
- D. The users are in different geographical region and Amazon Route 53 is restricting access.

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**Answer: A**

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**Question: 6**

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A SysOps Administrator is using AWS KMS with AWS-generated key material to encrypt an Amazon EBS volume in a company's AWS environment. The Administrator wants to rotate the KMS keys using automatic key rotation, and needs to ensure that the EBS volume encrypted with the current key remains readable.

What should be done to accomplish this?

- A. Back up the current KMS key and enable automatic key rotation.
- B. Create a new key in AWS KMS and assign the key to Amazon EBS.
- C. Enable automatic key rotation of the EBS volume key in AWS KMS.
- D. Upload ne key material to the EBS volume key in AWS KMS to enable automatic key rotation for the volume.

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**Answer: C**

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References: <https://docs.aws.amazon.com/kms/latest/developerguide/rotate-keys.html>

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### Question: 7

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A company has an application running on a fleet of Microsoft Windows instances. Patches to the operating system need to be applied each month. AWS Systems Manager Patch Manager is used to apply the patches on a schedule.

When the fleet is being patched, customers complain about delayed service responses.

What can be done to ensure patches are deployed with MINIMAL customer impact?

- A. Change the number of instances patched at any one time to 100%.
- B. Create a snapshot of each server in the fleet using a Systems Manager Automation document before starting the patch process.
- C. Configure the maintenance window to patch 10% of the instance in the patch group at a time.
- D. Create a patched Amazon Machine Image (AMI). Configure the maintenance window option to deploy the patched AMI on only 10% of the fleet at a time.

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**Answer: C**

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Reference: <https://aws.amazon.com/blogs/mt/patching-your-windows-ec2-instances-using-aws-systems-manager-patch-manager/>

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### Question: 8

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An organization has decided to consolidate storage and move all of its backups and archives to Amazon S3. With all of the data gathered into a hierarchy under a single directory, the organization determines there is 70 TB data that needs to be uploaded. The organization currently has a 150-Mbps connection with 10 people working at the location.

Which service would be the MOST efficient way to transfer this data to Amazon S3?

- A. AWS Snowball
- B. AWS Direct Connect
- C. AWS Storage Gateway
- D. Amazon S3 Transfer Acceleration

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**Answer: A**

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**Question: 9**

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A SysOps Administrator is writing a utility that publishes resources from an AWS Lambda function in AWS account A to an Amazon S3 bucket in AWS Account B. The Lambda function is able to successfully write new objects to the S3 bucket, but IAM users in Account B are unable to delete objects written to the bucket by Account A.

Which step will fix this issue?

- A. Add s3:Deleteobject permission to the IAM execution role of the AWS Lambda function in Account A.
- B. Change the bucket policy of the S3 bucket in Account B to allow s3:Deleteobject permission for Account A.
- C. Disable server-side encryption for objects written to the S3 bucket by the Lambda function.
- D. Call the S3:PutObjectAcl API operation from the Lambda function in Account A to specify bucket owner, full control.

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**Answer: A**

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**Question: 10**

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A company's customers are reporting increased latency while accessing static web content from Amazon S3. A SysOps Administrator observed a very high rate of read operations on a particular S3 bucket.

What will minimize latency by reducing load on the S3 bucket?

- A. Migrate the S3 bucket to a region that is closer to end users' geographic locations.
- B. Use cross-regions replication to replicate all of the data to another region.
- C. Create an Amazon CloudFront distribution with the S3 bucket as the origin.
- D. Use Amazon ElasticCache to cache data being served from Amazon S3.

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**Answer: C**

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**Question: 11**

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A SysOps Administrator is configuring AWS SSO for the first time. The Administrator has already created a directory in the master account using AWS Directory Service and enabled full access in AWS Organizations

What should the Administrator do next to configure the service?

- A. Create IAM roles in each account to be used by AWS SSO, and associate users with these roles using AWS SSO
- B. Create IAM users in the master account and use AWS SSO to associate the users with the accounts they will access
- C. Create permission sets in AWS SSO and associate the permission sets with Directory Service users or groups
- D. Create service control policies (SCPs) in Organizations and associate the SCPs with Directory Service

users or groups

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**Answer: B**

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**Question: 12**

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An organization has developed a new memory-intensive application that is deployed to a large Amazon EC2 Linux fleet. There is concern about potential memory exhaustion, so the Development team wants to monitor memory usage by using Amazon CloudWatch.

What is the MOST efficient way to accomplish this goal?

- A. Deploy the solution to memory-optimized EC2 instances, and use the CloudWatch MemoryUtilization metric
- B. Enable the Memory Monitoring option by using AWS Config
- C. Install the AWS Systems Manager agent on the applicable EC2 instances to monitor memory
- D. Monitor memory by using a script within the instance, and send it to CloudWatch as a custom metric

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**Answer: D**

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**Question: 13**

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After launching a new Amazon EC2 instance from a Microsoft Windows 2012 Amazon Machine Image (AMI), the SysOps Administrator is unable to connect to the instance using Remote Desktop Protocol (RDP). The instance is also unreachable. As part of troubleshooting, the Administrator deploys a second instance from a different AMI using the same configuration and is able to connect to the instance.

What should be the next logical step in troubleshooting the first instance?

- A. Use AWS Trusted Advisor to gather operating system log files for analysis.
- B. Use VPC Flow Logs to gather operating system log files for analysis.
- C. Use EC2Rescue to gather operating system log files for analysis.
- D. Use Amazon metrics using Amazon CloudWatch Logs.

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**Answer: C**

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Explanation:

Reference <https://aws.amazon.com/premiumsupport/knowledge-center/troubleshoot-remote-desktop-connection-ec2-windows/>

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**Question: 14**

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A SysOps Administrator is creating additional Amazon EC2 instances and receives an InstanceLimitExceeded error.

What is the cause of the issue and how can it be resolved?

- A. The Administrator has requested too many instances at once and must request fewer instances in batches.

- B. The concurrent running instance limit has been reached, and an EC2 limit increase request must be filed with AWS Support.
- C. AWS does not currently have enough available capacity and a different instance type must be used.
- D. The Administrator must specify the maximum number of instances to be created while provisioning EC2 instances.

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**Answer: B**

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**Question: 15**

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A SysOps Administration team is supporting an applications that stores a configuration file in an Amazon S3 bucket Previous revisions of the configuration file must be maintained for change control and rollback How should the S3 bucket be configured to meet these requirements?

- A. Enable a lifecycle policy on the S3 bucket
- B. Enable cross-origin resource sharing on the S3 bucket
- C. Enable object tagging on the S3 bucket
- D. Enable versioning on the S3 bucket

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**Answer: D**

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**Question: 16**

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A web application accepts orders from online users and places the orders into an Amazon SQS queue. Amazon EC2 instances in an EC2 Auto Scaling group read the messages from the queue, process the orders, and email order confirmations to the users. The Auto Scaling group scales up and down based on the queue depth. At the beginning of each business day, users report confirmation emails are delayed. What action will address this issue?

- A. Create a scheduled scaling action to scale up in anticipation of the traffic.
- B. Change the Auto Scaling group to scale up and down based on CPU utilization.
- C. Change the launch configuration to launch larger EC2 instance types.
- D. Modify the scaling policy to deploy more EC2 instances when scaling up.

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**Answer: A**

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**Question: 17**

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A Security team is concerned about the potential of intellectual property leaking to the internet. A SysOps Administrator is tasked with identifying controls to address the potential problem. The servers in question reside in a VPC and cannot be allowed to send traffic to the internet. How can these requirements be met?

- A. Edit the route for the subnet with the following entry: Destination 0.0.0.0/0target: igw-xxxxxxx
- B. Ensure that the servers do not have Elastic IP addresses.
- C. Enable Enhanced Networking on the instances to control traffic flows.

D. Put the servers in a private subnet.

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**Answer: D**

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**Question: 18**

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A company has deployed its infrastructure using AWS CloudFormation. Recently, the company made manual changes to the infrastructure. A SysOps Administrator is tasked with determining what was changed and updating the CloudFormation template.

Which solution will ensure all the changes are captured?

- A. Create a new CloudFormation stack based on the changes that were made. Delete the old stack and deploy the new stack.
- B. Update the CloudFormation stack using a change set. Review the changes and update the stack.
- C. Update the CloudFormation stack by modifying the selected parameters in the template to match what was changed.
- D. Use drift detection on the CloudFormation stack. Use the output to update the CloudFormation template and redeploy the stack.

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**Answer: D**

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