



Exam **SOA-C02**

Title **AWS Certified SysOps Administrator
– Associate**

**Product
Type** **276 Q&A with explanations**

QUESTION 1

A SysOps administrator is creating two AWS CloudFormation templates. The first template will create a VPC with associated resources, such as subnets, route tables, and an internet gateway. The second template will deploy application resources within the VPC that was created by the first template. The second template should refer to the resources created by the first template.

How can this be accomplished with the LEAST amount of administrative effort?

- A. Add an export field to the outputs of the first template and import the values in the second template.
- B. Create a custom resource that queries the stack created by the first template and retrieves the required values.
- C. Create a mapping in the first template that is referenced by the second template.
- D. Input the names of resources in the first template and refer to those names in the second template as a parameter.

Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

A company has deployed a web application in a VPC that has subnets in three Availability Zones. The company launches three Amazon EC2 instances from an EC2 Auto Scaling group behind an Application Load Balancer (ALB).

A SysOps administrator notices that two of the EC2 instances are in the same Availability Zone, rather than being distributed evenly across all three Availability Zones. There are no errors in the Auto Scaling group's activity history.

What is the MOST likely reason for the unexpected placement of EC2 instances?

- A. One Availability Zone did not have sufficient capacity for the requested EC2 instance type.
- B. The ALB was configured for only two Availability Zones.
- C. The Auto Scaling group was configured for only two Availability Zones.
- D. Amazon EC2 Auto Scaling randomly placed the instances in Availability Zones.

Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

A company is running an application on premises and wants to use AWS for data backup. All of the data must be available locally. The backup application can write only to block-based storage that is compatible with the Portable Operating System Interface (POSIX).

Which backup solution will meet these requirements?

- A. Configure the backup software to use Amazon S3 as the target for the data backups.
- B. Configure the backup software to use Amazon S3 Glacier as the target for the data backups.
- C. Use AWS Storage Gateway, and configure it to use gateway-cached volumes.
- D. Use AWS Storage Gateway, and configure it to use gateway-stored volumes.

Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

A company asks a SysOps administrator to ensure that AWS CloudTrail files are not tampered with after they are created. Currently, the company uses AWS Identity and Access Management (IAM) to restrict access to specific trails. The company's security team needs the ability to trace the integrity of each file. What is the MOST operationally efficient solution that meets these requirements?

- A. Create an Amazon EventBridge (Amazon CloudWatch Events) rule that invokes an AWS Lambda function when a new file is delivered. Configure the Lambda function to compute an MD5 hash check on the file and store the result in an Amazon DynamoDB table. The security team can use the values that are stored in DynamoDB to verify the integrity of the delivered files.
- B. Create an AWS Lambda function that is invoked each time a new file is delivered to the CloudTrail bucket. Configure the Lambda function to compute an MD5 hash check on the file and store the result as a tag in an Amazon S3 object. The security team can use the information in the tag to verify the integrity of the delivered files.
- C. Enable the CloudTrail file integrity feature on an Amazon S3 bucket. Create an IAM policy that grants the security team access to the file integrity logs that are stored in the S3 bucket.
- D. Enable the CloudTrail file integrity feature on the trail. The security team can use the digest file that is created by CloudTrail to verify the integrity of the delivered files.

Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 5

A company has an Amazon RDS DB instance. The company wants to implement a caching service while maintaining high availability.

Which combination of actions will meet these requirements? (Choose two.)

- A. Add Auto Discovery to the data store.
- B. Create an Amazon ElastiCache for Memcached data store.
- C. Create an Amazon ElastiCache for Redis data store.
- D. Enable Multi-AZ for the data store.
- E. Enable Multi-threading for the data store.

Answer: A,D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

An existing, deployed solution uses Amazon EC2 instances with Amazon EBS General Purpose SSD volumes, an Amazon RDS PostgreSQL database, an Amazon EFS file system, and static objects stored in an Amazon S3 bucket. The Security team now mandates that at-rest encryption be turned on immediately for all aspects of the application, without creating new resources and without any downtime.

To satisfy the requirements, which one of these services can the SysOps administrator enable at-rest encryption on?

- A. EBS General Purpose SSD volumes
- B. RDS PostgreSQL database
- C. Amazon EFS file systems
- D. S3 objects within a bucket

Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 7

A manufacturing company uses an Amazon RDS DB instance to store inventory of all stock items. The company maintains several AWS Lambda functions that interact with the database to add, update, and delete items. The Lambda functions use hardcoded credentials to connect to the database.

A SysOps administrator must ensure that the database credentials are never stored in plaintext and that the password is rotated every 30 days.

Which solution will meet these requirements in the MOST operationally efficient manner?

A. Store the database password as an environment variable for each Lambda function. Create a new Lambda function that is named PasswordRotate. Use Amazon EventBridge (Amazon CloudWatch Events) to schedule the PasswordRotate function every 30 days to change the database password and update the environment variable for each Lambda function.

B. Use AWS Key Management Service (AWS KMS) to encrypt the database password and to store the encrypted password as an environment variable for each Lambda function. Grant each Lambda function access to the KMS key so that the database password can be decrypted when required. Create a new Lambda function that is named PasswordRotate to change the password every 30 days.

C. Use AWS Secrets Manager to store credentials for the database. Create a Secrets Manager secret and select the database so that Secrets Manager will use a Lambda function to update the database password automatically. Specify an automatic rotation schedule of 30 days. Update each Lambda function to access the database password from Secrets Manager.

D. Use AWS Systems Manager Parameter Store to create a secure string to store credentials for the database. Create a new Lambda function called PasswordRotate. Use Amazon EventBridge (Amazon CloudWatch Events) to schedule the PasswordRotate function every 30 days to change the database password and to update the secret within Parameter Store. Update each Lambda function to access the database password from Parameter Store.

Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 8

A company hosts its website in the us-east-1 Region. The company is preparing to deploy its website into the eu-central-1 Region. Website visitors who are located in Europe should access the website that is hosted in eu-central-1. All other visitors access the website that is hosted in us-east-1. The company uses Amazon Route 53 to manage the website's DNS records.

Which routing policy should a SysOps administrator apply to the Route 53 record set to meet these requirements?

- A. Geolocation routing policy
- B. Geoproximity routing policy
- C. Latency routing policy
- D. Multivalue answer routing policy

Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html>

QUESTION 9

A company is running a website on Amazon EC2 instances that are in an Auto Scaling group. When the website traffic increases, additional instances take several minutes to become available because of a longrunning user data script that installs software. A SysOps administrator must decrease the time that is required for new instances to become available.

Which action should the SysOps administrator take to meet this requirement?

- A. Reduce the scaling thresholds so that instances are added before traffic increases.
- B. Purchase Reserved Instances to cover 100% of the maximum capacity of the Auto Scaling group.
- C. Update the Auto Scaling group to launch instances that have a storage optimized instance type.
- D. Use EC2 Image Builder to prepare an Amazon Machine Image (AMI) that has pre-installed software.

Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 10

A company needs to restrict access to an Amazon S3 bucket to Amazon EC2 instances in a VPC only. All traffic must be over the AWS private network.

What actions should the SysOps administrator take to meet these requirements?

- A. Create a VPC endpoint for the S3 bucket, and create an IAM policy that conditionally limits all S3 actions on the bucket to the VPC endpoint as the source.
- B. Create a VPC endpoint for the S3 bucket, and create an S3 bucket policy that conditionally limits all S3 actions on the bucket to the VPC endpoint as the source.
- C. Create a service-linked role for Amazon EC2 that allows the EC2 instances to interact directly with Amazon