

Exam : DOP-C02

Title : AWS Certified DevOps

**Engineer - Professional** 

Version: DEMO

- 1.A company uses AWS Organizations to manage multiple accounts. Information security policies require that all unencrypted Amazon EBS volumes be marked as non-compliant. A DevOps engineer needs to automatically deploy the solution and ensure that this compliance check is always present. Which solution will accomplish this?
- A. Create an AWS CloudFormation template that defines an AWS Inspector rule to check whether EBS encryption is enabled. Save the template to an Amazon S3 bucket that has been shared with all accounts within the company. Update the account creation script pointing to the CloudFormation template in Amazon S3.
- B. Create an AWS Config organizational rule to check whether EBS encryption is enabled and deploy the rule using the AWS CLI. Create and apply an SCP to prohibit stopping and deleting AWS Config across the organization.
- C. Create an SCP in Organizations. Set the policy to prevent the launch of Amazon EC2 instances without encryption on the EBS volumes using a conditional expression. Apply the SCP to all AWS accounts. Use Amazon Athena to analyze the AWS CloudTrail output, looking for events that deny an ec2: RunInstances action.
- D. Deploy an IAM role to all accounts from a single trusted account. Build a pipeline with AWS CodePipeline with a stage in AWS Lambda to assume the IAM role, and list all EBS volumes in the account. Publish a report to Amazon S3.

Answer: B

2.A company has chosen AWS to host a new application. The company needs to implement a multi-account strategy. A DevOps engineer creates a new AWS account and an organization in AWS Organizations. The DevOps engineer also creates the OU structure for the organization and sets up a landing zone by using AWS Control Tower.

The DevOps engineer must implement a solution that automatically deploys resources for new accounts that users create through AWS Control Tower Account Factory. When a user creates a new account, the solution must apply AWS CloudFormation templates and SCPs that are customized for the OU or the account to automatically deploy all the resources that are attached to the account. All the OUs are enrolled in AWS Control Tower.

Which solution will meet these requirements in the MOST automated way?

A. Use AWS Service Catalog with AWS Control Tower. Create portfolios and products in AWS Service Catalog. Grant granular permissions to provision these resources. Deploy SCPs by using the AWS CLI and JSON documents.

- B. Deploy CloudFormation stack sets by using the required templates. Enable automatic deployment. Deploy stack instances to the required accounts. Deploy a CloudFormation stack set to the organization's management account to deploy SCPs.
- C. Create an Amazon EventBridge rule to detect the CreateManagedAccount event. Configure AWS Service Catalog as the target to deploy resources to any new accounts. Deploy SCPs by using the AWS CLI and JSON documents.
- D. Deploy the Customizations for AWS Control Tower (CfCT) solution. Use an AWS CodeCommit repository as the source. In the repository, create a custom package that includes the CloudFormation templates and the SCP JSON documents.

Answer: D

3.A space exploration company receives telemetry data from multiple satellites. Small packets of data are received through Amazon API Gateway and are placed directly into an Amazon Simple Queue Service (Amazon SQS) standard queue. A custom application is subscribed to the queue and transforms the data into a standard format.

Because of inconsistencies in the data that the satellites produce, the application is occasionally unable to transform the data. In these cases, the messages remain in the SQS queue. A DevOps engineer must develop a solution that retains the failed messages and makes them available to scientists for review and future processing.

Which solution will meet these requirements?

- A. Configure AWS Lambda to poll the SQS queue and invoke a Lambda function to check whether the queue messages are valid. If validation fails, send a copy of the data that is not valid to an Amazon S3 bucket so that the scientists can review and correct the data. When the data is corrected, amend the message in the SQS queue by using a replay Lambda function with the corrected data.
- B. Convert the SQS standard queue to an SQS FIFO queue. Configure AWS Lambda to poll the SQS queue every 10 minutes by using an Amazon EventBridge schedule. Invoke the Lambda function to identify any messages with a SentTimestamp value that is older than 5 minutes, push the data to the same location as the application's output location, and remove the messages from the queue.
- C. Create an SQS dead-letter queue. Modify the existing queue by including a redrive policy that sets the Maximum Receives setting to 1 and sets the dead-letter queue ARN to the ARN of the newly created queue. Instruct the scientists to use the dead-letter queue to review the data that is not valid. Reprocess this data at a later time.
- D. Configure API Gateway to send messages to different SQS virtual queues that are named for each of the satellites. Update the application to use a new virtual queue for any data that it cannot transform, and send the message to the new virtual queue. Instruct the scientists to use the virtual queue to review the data that is not valid. Reprocess this data at a later time.

## Answer: A

4.A company has multiple member accounts that are part of an organization in AWS Organizations. The security team needs to review every Amazon EC2 security group and their inbound and outbound rules. The security team wants to programmatically retrieve this information from the member accounts using an AWS Lambda function in the management account of the organization.

Which combination of access changes will meet these requirements? (Choose three.)

- A. Create a trust relationship that allows users in the member accounts to assume the management account IAM role.
- B. Create a trust relationship that allows users in the management account to assume the IAM roles of the member accounts.
- C. Create an IAM role in each member account that has access to the AmazonEC2ReadOnlyAccess managed policy.
- D. Create an I AM role in each member account to allow the sts: AssumeRole action against the management account IAM role's ARN.
- E. Create an I AM role in the management account that allows the sts: AssumeRole action against the member account IAM role's ARN.
- F. Create an IAM role in the management account that has access to the AmazonEC2ReadOnlyAccess managed policy.

Answer: B,C,E

5.A company uses AWS Key Management Service (AWS KMS) keys and manual key rotation to meet regulatory compliance requirements. The security team wants to be notified when any keys have not been rotated after 90 days.

Which solution will accomplish this?

- A. Configure AWS KMS to publish to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.
- B. Configure an Amazon EventBridge event to launch an AWS Lambda function to call the AWS Trusted Advisor API and publish to an Amazon Simple Notification Service (Amazon SNS) topic.
- C. Develop an AWS Config custom rule that publishes to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.
- D. Configure AWS Security Hub to publish to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.

Answer: C