SAP-C02 Q&As

AWS Certified Solutions Architect - Professional

Pass Amazon SAP-C02 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

https://www.passapply.com/sap-c02.html

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by Amazon Official Exam Center

- **Instant Download** After Purchase
- **100% Money Back** Guarantee
- **365 Days** Free Update
- **800,000+** Satisfied Customers

QUESTION 1

A company has its cloud infrastructure on AWS A solutions architect needs to define the infrastructure as code. The infrastructure is currently deployed in one AWS Region. The company\\'s business expansion plan includes deployments in multiple Regions across multiple AWS accounts

What should the solutions architect do to meet these requirements?

A. Use AWS CloudFormation templates Add IAM policies to control the various accounts Deploy the templates across the multiple Regions

B. Use AWS Organizations Deploy AWS CloudFormation templates from the management account Use AWS Control Tower to manage deployments across accounts

C. Use AWS Organizations and AWS CloudFormation StackSets Deploy a CloudFormation template from an account that has the necessary IAM permissions D. Use nested stacks with AWS CloudFormation templates Change the Region by using nested stacks

Correct Answer: C

https://aws.amazon.com/blogs/aws/new-use-aws-cloudformation-stacksets-for-multiple-accounts-in-an-aws-organization/

AWS Organizations allows the management of multiple AWS accounts as a single entity and AWS CloudFormation StackSets allows creating, updating, and deleting stacks across multiple accounts and regions in an organization. This

solution allows creating a single CloudFormation template that can be deployed across multiple accounts and regions, and also allows for the management of access and permissions for the different accounts through the use of IAM roles and

policies in the management account.

QUESTION 2

An enterprise company wants to implement cost controls for all its accounts in AWS Organizations, which has full features enabled. The company has mapped organizational units (OUs) to its business units, and it wants to bill these business units for their individual AWS spending. There has been a recent spike in the company\\'s AWS bill, which is generating attention from the Finance team.

A Solutions Architect needs to investigate the cause of the spike while designing a solution that will track AWS costs in Organizations and generate a notification to the required teams if costs from a business unit exceed a specific monetary threshold.

Which solution will meet these requirements?

A. Use Cost Explorer to troubleshoot the reason for the additional costs. Set up an AWS Lambda function to monitor the company\\'s AWS bill by each AWS account in an OU. Store the threshold amount set by the Finance team in the AWS Systems Manager Parameter Store. Write the custom rules in the Lambda function to verify any hidden costs for the AWS accounts. Trigger a notification from the Lambda function to an Amazon SNS topic when a budget threshold is breached.

B. Use AWS Trusted Advisor to troubleshoot the reason for the additional costs. Set up an AWS Lambda function to monitor the company\\'s AWS bill by each AWS account in an OU. Store the threshold amount set by the Finance team

in the AWS Systems Manager Parameter Store. Write custom rules in the Lambda function to verify any hidden costs for the AWS accounts. Trigger an email to the required teams from the Lambda function using Amazon SNS when a budget threshold is breached.

C. Use Cost Explorer to troubleshoot the reason for the additional costs. Create a budget using AWS Budgets with the monetary amount set by the Finance team for each OU by grouping the linked accounts. Configure an Amazon SNS notification to the required teams in the budget.

D. Use AWS Trusted Advisor to troubleshoot the reason for the additional costs. Create a budget using AWS Budgets with the monetary amount set by the Finance team for each OU by grouping the linked accounts. Add the Amazon EC2 instance types to be used in the company as a budget filter. Configure an Amazon SNS topic with a subscription for the Finance team email address to receive budget notifications.

Correct Answer: C

Use Cost Explorer to troubleshoot the reason for the additional costs. Create a budget using AWS Budgets with the monetary amount set by the Finance team for each OU by grouping the linked accounts. Configure an Amazon SNS notification to the required teams in the budget.

QUESTION 3

An enterprise company is building an infrastructure services platform for its users. The company has the following requirements:

1.

Provide least privilege access to users when launching AWS infrastructure so users cannot provision unapproved services.

2.

Use a central account to manage the creation of infrastructure services. Provide the ability to distribute infrastructure services to multiple accounts in AWS Organizations.

3.

Provide the ability to enforce tags on any infrastructure that is started by users.

Which combination of actions using AWS services will meet these requirements? (Choose three.)

A. Develop infrastructure services using AWS Cloud Formation templates. Add the templates to a central Amazon S3 bucket and add the-IAM roles or users that require access to the S3 bucket policy.

B. Develop infrastructure services using AWS Cloud Formation templates. Upload each template as an AWS Service Catalog product to portfolios created in a central AWS account. Share these portfolios with the Organizations structure created for the company.

C. Allow user IAM roles to have AWSCloudFormationFullAccess and AmazonS3ReadOnlyAccess permissions. Add an Organizations SCP at the AWS account root user level to deny all services except AWS CloudFormation and Amazon S3.

D. Allow user IAM roles to have ServiceCatalogEndUserAccess permissions only. Use an automation script to import the central portfolios to local AWS accounts, copy the TagOption assign users access and apply launch constraints.

E. Use the AWS Service Catalog TagOption Library to maintain a list of tags required by the company. Apply the

TagOption to AWS Service Catalog products or portfolios.

F. Use the AWS CloudFormation Resource Tags property to enforce the application of tags to any CloudFormation templates that will be created for users.

Correct Answer: BDE

Developing infrastructure services using AWS CloudFormation templates and uploading them as AWS Service Catalog products to portfolios created in a central AWS account will enable the company to centrally manage the creation of

infrastructure services and control who can use them1. AWS Service Catalog allows you to create and manage catalogs of IT services that are approved for use on AWS2. You can organize products into portfolios, which are collections of

products along with configuration information3. You can share portfolios with other accounts in your organization using AWS Organizations4. Allowing user IAM roles to have ServiceCatalogEndUserAccess permissions only and using an

automation script to import the central portfolios to local AWS accounts, copy the TagOption, assign users access, and apply launch constraints will enable the company to provide least privilege access to users when launching AWS

infrastructure services. ServiceCatalogEndUserAccess is a managed IAM policy that grants users permission to list and view products and launch product instances. An automation script can help import the shared portfolios from the central

account to the local accounts, copy the TagOption from the central account, assign users access to the portfolios, and apply launch constraints that specify which IAM role or user can provision a product. Using the AWS Service Catalog

TagOption Library to maintain a list of tags required by the company and applying the TagOption to AWS Service Catalog products or portfolios will enable the company to enforce tags on any infrastructure that is started by users. TagOptions

are key-value pairs that you can use to classify your AWS Service Catalog resources. You can create a TagOption Library that contains all the tags that you want to use across your organization. You can apply TagOptions to products or

portfolios, and they will be automatically applied to any provisioned product instances.

References:

Creating a product from an existing CloudFormation template What is AWS Service Catalog?

Working with portfolios

Sharing a portfolio with AWS Organizations

[Providing least privilege access for users]

[AWS managed policies for job functions]

[Importing shared portfolios]

[Enforcing tag policies]

[Working with TagOptions]

[Creating a TagOption Library]

[Applying TagOptions]

QUESTION 4

A company has an asynchronous HTTP application that is hosted as an AWS Lambda function. A public Amazon API Gateway endpoint invokes the Lambda function. The Lambda function and the API Gateway endpoint reside in the us-east1 Region. A solutions architect needs to redesign the application to support failover to another AWS Region.

Which solution will meet these requirements?

A. Create an API Gateway endpoint in the us-west-2 Region to direct traffic to the Lambda function in us-east-1. Configure Amazon Route 53 to use a failover routing policy to route traffic for the two API Gateway endpoints.

B. Create an Amazon Simple Queue Service (Amazon SQS) queue. Configure API Gateway to direct traffic to the SQS queue instead of to the Lambda function. Configure the Lambda function to pull messages from the queue for processing.

C. Deploy the Lambda function to the us-west-2 Region. Create an API Gateway endpoint in us-west-2 to direct traffic to the Lambda function in us-west-2. Configure AWS Global Accelerator and an Application Load Balancer to manage traffic across the two API Gateway endpoints.

D. Deploy the Lambda function and an API Gateway endpoint to the us-west-2 Region.Configure Amazon Route 53 to use a failover routing policy to route traffic for the two API Gateway endpoints.

Correct Answer: D

This solution allows for deploying the Lambda function and API Gateway endpoint to another region, providing a failover option in case of any issues in the primary region. Using Route 53\\'s failover routing policy allows for automatic routing of traffic to the healthy endpoint, ensuring that the application is available even in case of issues in one region. This solution provides a cost-effective and simple way to implement failover while minimizing operational overhead.

QUESTION 5

An online survey company runs its application in the AWS Cloud. The application is distributed and consists of microservices that run in an automatically scaled Amazon Elastic Container Service (Amazon ECS) cluster. The ECS cluster is a target for an Application Load Balancer (ALB). The ALB is a custom origin for an Amazon CloudFront distribution.

The company has a survey that contains sensitive data. The sensitive data must be encrypted when it moves through the application. The application\\'s data-handling microservice is the only microservice that should be able to decrypt the data.

Which solution will meet these requirements?

A. Create a symmetric AWS Key Management Service (AWS KMS) key that is dedicated to the data-handling microservice. Create a field-level encryption profile and a configuration. Associate the KMS key and the configuration with the CloudFront cache behavior.

B. Create an RSA key pair that is dedicated to the data-handling microservice. Upload the public key to the CloudFront distribution. Create a field-level encryption profile and a configuration. Add the configuration to the CloudFront cache behavior.

C. Create a symmetric AWS Key Management Service (AWS KMS) key that is dedicated to the data-handling microservice. Create a Lambda@Edge function. Program the function to use the KMS key to encrypt the sensitive data.

D. Create an RSA key pair that is dedicated to the data-handling microservice. Create a Lambda@Edge function. Program the function to use the private key of the RSA key pair to encrypt the sensitive data.

Correct Answer: B

The best solution is to create an RSA key pair that is dedicated to the data-handling microservice and upload the public key to the CloudFront distribution. Then, create a field- level encryption profile and a configuration, and add the configuration to the CloudFront cache behavior. This solution will ensure that the sensitive data is encrypted at the edge locations of CloudFront, close to the end users, and remains encrypted throughout the application stack. Only the data-handling microservice, which has access to the private key of the RSA key pair, can decrypt the data. This solution does not require any additional resources or code changes, and leverages the built-in feature of CloudFront field-level encryption. For more information about CloudFront field-level encryption, see Using field- level encryption to help protect sensitive data.