Exam Questions DVA-C02

DVA-C02

https://www.2passeasy.com/dumps/DVA-C02/

NEW QUESTION 1
A developer is creating a mobile app that calls a backend service by using an Amazon API Gateway REST API. For integration testing during the development phase, the developer wants to simulate different backend responses without invoking the backend service.
Which solution will meet these requirements with the LEAST operational overhead?

A. Create an AWS Lambda functio
B. Use API Gateway proxy integration to return constant HTTP responses.
C. Create an Amazon EC2 instance that serves the backend REST API by using an AWS CloudFormation template.
D. Customize the API Gateway stage to select a response type based on the request.
E. Use a request mapping template to select the mock integration response.

Answer: D

Explanation:
Amazon API Gateway supports mock integration responses, which are predefined responses that can be returned without sending requests to a backend service. Mock integration responses can be used for testing or prototyping purposes, or for simulating different backend responses based on certain conditions. A request mapping template can be used to select a mock integration response based on an expression that evaluates some aspects of the request, such as headers, query strings, or body content. This solution does not require any additional resources or code changes and has the least operational overhead. Reference: Set up mock integrations for an API Gateway REST API
https://docs.aws.amazon.com/apigateway/latest/developerguide/how-to-mock- integration.html

NEW QUESTION 2
A developer is deploying a company's application to Amazon EC2 instances The application generates gigabytes of data files each day The files are rarely accessed but the files must be available to the application's users within minutes of a request during the first year of storage The company must retain the files for 7 years.
How can the developer implement the application to meet these requirements MOST cost- effectively?

A. Store the files in an Amazon S3 bucket Use the S3 Glacier Instant Retrieval storage class Create an S3 Lifecycle policy to transition the files to the S3 Glacier Deep Archive storage class after 1 year
B. Store the files in an Amazon S3 bucke
C. Use the S3 Standard storage clas
D. Create an S3 Lifecycle policy to transition the files to the S3 Glacier Flexible Retrieval storage class after 1 year.
E. Store the files on an Amazon Elastic Block Store (Amazon EBS) volume Use Amazon Data Lifecycle Manager (Amazon DLM) to create snapshots of the EBS volumes and to store those snapshots in Amazon S3
F. Store the files on an Amazon Elastic File System (Amazon EFS) moun
G. Configure EFS lifecycle management to transition the files to the EFS Standard-Infrequent Access (Standard-IA) storage class after 1 year.

Answer: A

Explanation:
Amazon S3 Glacier Instant Retrieval is an archive storage class that delivers the lowest-cost storage for long-lived data that is rarely accessed and requires retrieval in
milliseconds. With S3 Glacier Instant Retrieval, you can save up to 68% on storage costs compared to using the S3 Standard-Infrequent Access (S3 Standard-IA) storage class, when your data is accessed once per quarter. https://aws.amazon.com/s3/storage- classes/glacier/instant-retrieval/

NEW QUESTION 3
A company has an application that uses Amazon Cognito user pools as an identity provider. The company must secure access to user records. The company has set up multi-factor authentication (MFA). The company also wants to send a login activity notification by email every time a user logs in.
What is the MOST operationally efficient solution that meets this requirement?

A. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notificatio
B. Add an Amazon API Gateway API to invoke the functio
C. Call the API from the client side when login confirmation is received.
D. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notificatio
E. Add an Amazon Cognito post authentication Lambda trigger for the function.
F. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notificatio
G. Create an Amazon CloudWatch Logs log subscription filter to invoke the function based on the login status.
H. Configure Amazon Cognito to stream all logs to Amazon Kinesis Data Firehos
I. Create an AWS Lambda function to process the streamed logs and to send the email notification based on the login status of each user.

Answer: B

Explanation:
Amazon Cognito user pools support Lambda triggers, which are custom functions that can be executed at various stages of the user pool workflow. A post authentication Lambda trigger can be used to perform custom actions after a user is authenticated, such as sending an email notification. Amazon SES is a cloud-based email sending service that can be used to send transactional or marketing emails. A Lambda function can use the Amazon SES API to send an email to the user’s email address after the user logs in successfully. Reference: Post authentication Lambda trigger

NEW QUESTION 4
A developer is building an application that uses AWS API Gateway APIs. AWS Lambda function, and AWS Dynamic DB tables. The developer uses the AWS Serverless Application Model (AWS SAM) to build and run serverless applications on AWS. Each time the developer pushes of changes for only to the Lambda functions, all the artifacts in the application are rebuilt.
The developer wants to implement AWS SAM Accelerate by running a command to only redeploy the Lambda functions that have changed.
Which command will meet these requirements?

A. sam deploy -force-upload
B. sam deploy -no-execute-changeset

C. sam package
D. sam sync -watch

Answer: D

Explanation:
The command that will meet the requirements is sam sync -watch. This command enables AWS SAM Accelerate mode, which allows the developer to only redeploy the Lambda functions that have changed. The -watch flag enables file watching, which automatically detects changes in the source code and triggers a redeployment. The other commands either do not enable AWS SAM Accelerate mode, or do not redeploy the Lambda functions automatically.
Reference: AWS SAM Accelerate

NEW QUESTION 5
A developer is creating an application that includes an Amazon API Gateway REST API in the us-east-2 Region. The developer wants to use Amazon CloudFront and a custom domain name for the API. The developer has acquired an SSL/TLS certificate for the domain from a third-party provider. How should the developer configure the custom domain for the application?

A. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the AP
B. Create a DNS A record for the custom domain.
C. Import the SSL/TLS certificate into CloudFron
D. Create a DNS CNAME record for the custom domain.
E. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the AP
F. Create a DNS CNAME record for the custom domain.
G. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the us-east-1 Regio
H. Create a DNS CNAME record for the custom domain.

Answer: D

Explanation:
Amazon API Gateway is a service that enables developers to create, publish, maintain, monitor, and secure APIs at any scale. Amazon CloudFront is a content delivery network (CDN) service that can improve the performance and security of web applications. The developer can use CloudFront and a custom domain name for the API Gateway REST API. To do so, the developer needs to import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the us-east-1 Region. This is because CloudFront requires certificates from ACM to be in this Region. The developer also needs to create a DNS CNAME record for the custom domain that points to the CloudFront distribution.
References:
? [What Is Amazon API Gateway? - Amazon API Gateway]
? [What Is Amazon CloudFront? - Amazon CloudFront]
? [Custom Domain Names for APIs - Amazon API Gateway]

NEW QUESTION 6
A developer is testing a RESTful application that is deployed by using Amazon API Gateway and AWS Lambda When the developer tests the user login by using credentials that are not valid, the developer receives an HTTP 405 METHOD_NOT_ALLOWED error The developer has verified that the test is sending the correct request for the resource
Which HTTP error should the application return in response to the request?

A. HTTP 401
B. HTTP 404
C. HTTP 503
D. HTTP 505

Answer: A

Explanation:
The HTTP 401 error indicates that the request has not been applied because it lacks valid authentication credentials for the target resource. This is the appropriate error code to return when the user login fails due to invalid credentials. The HTTP 405 error means that the method specified in the request is not allowed for the resource identified by the request URI, which is not the case here. The other error codes are not relevant to the authentication failure scenario.
References
? HTTP Status Codes
? AWS Lambda Function Errors in API Gateway

NEW QUESTION 7
A developer has observed an increase in bugs in the AWS Lambda functions that a development team has deployed in its Node is application. To minimize these bugs, the developer wants to impendent automated testing of Lambda functions in an environment that Closely simulates the Lambda environment.
The developer needs to give other developers the ability to run the tests locally. The developer also needs to integrate the tests into the team's continuous integration and continuous delivery (Ct/CO) pipeline before the AWS Cloud Development Kit (AWS COK) deployment.
Which solution will meet these requirements?

A. Create sample events based on the Lambda documentatio
B. Create automated test scripts that use the cdk local invoke command to invoke the Lambda function
C. Check the response Document the test scripts for the other developers on the team Update the CI/CD pipeline to run the test scripts.
D. Install a unit testing framework that reproduces the Lambda execution environmen
E. Create sample events based on the Lambda Documentation Invoke the handler function by using a unit testing framewor
framework for the other developers on the tea
F. Check the response Document how to run the unit testing
G. Update the OCD pipeline to run the unit testing framework.
H. Install the AWS Serverless Application Model (AWS SAW) CLI tool Use the Sam local generate-event command to generate sample events for me automated test
I. Create automated test scripts that use the Sam local invoke command to invoke the Lambda function
J. Check the response Document the test scripts tor the other developers on the team Update the CI/CD pipeline to run the test scripts.
K. Create sample events based on the Lambda documentatio

L. Create a Docker container from the Node is base image to invoke the Lambda function
M. Check the response Document how to run the Docker container for the more developers on the team update the CI/CD pipeline to run the Docker container.

Answer: C

Explanation:
This solution will meet the requirements by using AWS SAM CLI tool, which is a command line tool that lets developers locally build, test, debug, and deploy serverless applications defined by AWS SAM templates. The developer can use sam local generate- event command to generate sample events for different event sources such as API Gateway or S3. The developer can create automated test scripts that use sam local invoke command to invoke Lambda functions locally in an environment that closely simulates Lambda environment. The developer can check the response from Lambda functions and document how to run the test scripts for other developers on the team. The developer can also update CI/CD pipeline to run these test scripts before deploying with AWS CDK. Option A is not optimal because it will use cdk local invoke command, which does not exist in AWS CDK CLI tool. Option B is not optimal because it will use a unit testing framework that reproduces Lambda execution environment, which may not be accurate or consistent with Lambda environment. Option D is not optimal because it will create a Docker container from Node.js base image to invoke Lambda functions, which may introduce additional overhead and complexity for creating and running Docker containers.
References: [AWS Serverless Application Model (AWS SAM)], [AWS Cloud Development Kit (AWS CDK)]

NEW QUESTION 8
A company has a web application that is hosted on Amazon EC2 instances The EC2 instances are configured to stream logs to Amazon CloudWatch Logs The company needs to receive an Amazon Simple Notification Service (Amazon SNS) notification when the number of application error messages exceeds a defined threshold within a 5-minute period
Which solution will meet these requirements?

A. Rewrite the application code to stream application logs to Amazon SNS Configure an SNS topic to send a notification when the number of errors exceeds the defined threshold within a 5-minute period
B. Configure a subscription filter on the CloudWatch Logs log grou
C. Configure the filter to send an SNS notification when the number of errors exceeds the defined threshold within a 5-minute period.
D. Install and configure the Amazon Inspector agent on the EC2 instances to monitor for errors Configure Amazon Inspector to send an SNS notification when the number of errors exceeds the defined threshold within a 5-minute period
E. Create a CloudWatch metric filter to match the application error pattern in the log data. Set up a CloudWatch alarm based on the new custom metri
F. Configure the alarm to send an SNS notification when the number of errors exceeds the defined threshold within a 5- minute period.

Answer: D

Explanation:
The best solution is to create a CloudWatch metric filter to match the application error pattern in the log data. This will allow you to create a custom metric that tracks the number of errors in your application. You can then set up a CloudWatch alarm based on this metric and configure it to send an SNS notification when the number of errors exceeds a defined threshold within a 5-minute period. This solution does not require any changes to your application code or installing any additional agents on your EC2 instances. It also leverages the existing integration between CloudWatch and SNS for sending notifications. References
? Create Metric Filters - Amazon CloudWatch Logs
? Creating Amazon CloudWatch Alarms - Amazon CloudWatch
? How to send alert based on log message on CloudWatch - Stack Overflow

NEW QUESTION 9
A developer is creating an AWS Lambda function that searches for Items from an Amazon DynamoDQ table that contains customer contact information. The DynamoDB table items have the customers as the partition and additional properties such as customer -type, name, and job_title.
The Lambda function runs whenever a user types a new character into the customer_type text Input. The developer wants to search to return partial matches of all tne email_address property of a particular customer type. The developer does not want to recreate the DynamoDB table.
What should the developer do to meet these requirements?

A. Add a global secondary index (GSI) to the DynamoDB table with customer-type input, as the partition key and email_address as the sort ke
B. Perform a query operation on the GSI by using the begins with key condition expression with the email_address property.
C. Add a global secondary index (GSI) to the DynamoDB table with email_address as the partition key and customer_type as the sort ke
D. Perform a query operation on the GSI by using the begine_with key condition expresses with the emai
E. Address property.
F. Add a local secondary index (LSI) to the DynemoOB table with customer_type as the partition Key and email_address as the sort Ke
G. Perform a quick operation on the LSI by using the begine_with Key condition expression with the email-address property.
H. Add a local secondary index (LSI) to the DynamoDB table with job-title as the partition key and email_address as the sort ke
I. Perform a query operation on the LSI by using the begins_with key condition expression with the email_address property.

Answer: A

Explanation:
The solution that will meet the requirements is to add a global secondary index (GSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key. Perform a query operation on the GSI by using the begins_with key condition expression with the email_address property. This way, the developer can search for partial matches of the email_address property of a particular customer type without recreating the DynamoDB table. The other options either involve using a local secondary index (LSI), which requires recreating the table, or using a different partition key, which does not allow filtering by customer_type.
Reference: Using Global Secondary Indexes in DynamoDB

NEW QUESTION 10
A developer is creating an application that will store personal health information (PHI). The PHI needs to be encrypted at all times. An encrypted Amazon RDS for MySQL DB instance is storing the data. The developer wants to increase the performance of the application by caching frequently accessed data while adding the ability to sort or rank the cached datasets.
Which solution will meet these requirements?

A. Create an Amazon ElastiCache for Redis instanc
B. Enable encryption of data in transit and at res

C. Store frequently accessed data in the cache.
D. Create an Amazon ElastiCache for Memcached instanc
E. Enable encryption of data in transit and at res
F. Store frequently accessed data in the cache.
G. Create an Amazon RDS for MySQL read replic
H. Connect to the read replica by using SS
I. Configure the read replica to store frequently accessed data.
J. Create an Amazon DynamoDB table and a DynamoDB Accelerator (DAX) cluster for the tabl
K. Store frequently accessed data in the DynamoDB table.

Answer: A

Explanation:
Amazon ElastiCache is a service that offers fully managed in-memory data stores that are compatible with Redis or Memcached. The developer can create an ElastiCache for Redis instance and enable encryption of data in transit and at rest. This will ensure that the PHI is encrypted at all times. The developer can store frequently accessed data in the cache and use Redis features such as sorting and ranking to enhance the performance of the application.
References:
? [What Is Amazon ElastiCache? - Amazon ElastiCache]
? [Encryption in Transit - Amazon ElastiCache for Redis]
? [Encryption at Rest - Amazon ElastiCache for Redis]

NEW QUESTION 10
A developer is creating a new REST API by using Amazon API Gateway and AWS Lambda. The development team tests the API and validates responses for the known use cases before deploying the API to the production environment.
The developer wants to make the REST API available for testing by using API Gateway locally.
Which AWS Serverless Application Model Command Line Interface (AWS SAM CLI) subcommand will meet these requirements?

A. Sam local invoke
B. Sam local generate-event
C. Sam local start-lambda
D. Sam local start-api

Answer: D

Explanation:
? The sam local start-api subcommand allows you to run your serverless application locally for quick development and testing1. It creates a local HTTP server that acts as a proxy for API Gateway and invokes your Lambda functions based on the AWS SAM template1. You can use the sam local start-api subcommand to test your REST API locally by sending HTTP requests to the local endpoint1.

NEW QUESTION 12
A company needs to harden its container images before the images are in a running state. The company's application uses Amazon Elastic Container Registry (Amazon ECR) as an image registry. Amazon Elastic Kubernetes Service (Amazon EKS) for compute, and an AWS CodePipeline pipeline that orchestrates a continuous integration and continuous delivery (CI/CD) workflow.
Dynamic application security testing occurs in the final stage of the pipeline after a new image is deployed to a development namespace in the EKS cluster. A developer needs to
place an analysis stage before this deployment to analyze the container image earlier in the CI/CD pipeline.
Which solution will meet these requirements with the MOST operational efficiency?

A. Build the container image and run the docker scan command locall
B. Mitigate any findings before pushing changes to the source code repositor
C. Write a pre-commit hook that enforces the use of this workflow before commit.
D. Create a new CodePipeline stage that occurs after the container image is buil
E. Configure ECR basic image scanning to scan on image pus
F. Use an AWS Lambda function as the action provide
G. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings.
H. Create a new CodePipeline stage that occurs after source code has been retrieved from its repositor
I. Run a security scanner on the latest revision of the source cod
J. Fail the pipeline if there are findings.
K. Add an action to the deployment stage of the pipeline so that the action occurs before the deployment to the EKS cluste
L. Configure ECR basic image scanning to scan on image pus
M. Use an AWS Lambda function as the action provide
N. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings.

Answer: B

Explanation:
The solution that will meet the requirements with the most operational efficiency is to create a new CodePipeline stage that occurs after the container image is built. Configure ECR basic image scanning to scan on image push. Use an AWS Lambda function as the action provider. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings. This way, the container image is analyzed earlier in the CI/CD pipeline and any vulnerabilities are detected and reported before deploying to the EKS cluster. The other options either delay the analysis until after deployment, which increases the risk of exposing insecure images, or perform analysis on the source code instead of the container image, which may not capture all the dependencies and configurations that affect the security posture of the image.
Reference: Amazon ECR image scanning

NEW QUESTION 16
A company is building a compute-intensive application that will run on a fleet of Amazon EC2 instances. The application uses attached Amazon Elastic Block Store (Amazon EBS) volumes for storing data. The Amazon EBS volumes will be created at time of initial deployment. The application will process sensitive information. All of the data must be encrypted. The solution should not impact the application's performance.
Which solution will meet these requirements?

A. Configure the fleet of EC2 instances to use encrypted EBS volumes to store data.
B. Configure the application to write all data to an encrypted Amazon S3 bucket.
C. Configure a custom encryption algorithm for the application that will encrypt and decrypt all data.
D. Configure an Amazon Machine Image (AMI) that has an encrypted root volume and store the data to ephemeral disks.

Answer: A

Explanation:
Amazon Elastic Block Store (Amazon EBS) provides block level storage volumes for use with Amazon EC2 instances1. Amazon EBS encryption offers a straight-forward encryption solution for your EBS resources associated with your EC2 instances1. When you create an encrypted EBS volume and attach it to a supported instance type, the following types of data are encrypted: Data at rest inside the volume, all data moving between the volume and the instance, all snapshots created from the volume, and all volumes created from those snapshots1. Therefore, option A is correct.

NEW QUESTION 20
A developer is creating an AWS CloudFormation template to deploy Amazon EC2 instances across multiple AWS accounts. The developer must choose the EC2 instances from a list of approved instance types.
How can the developer incorporate the list of approved instance types in the CloudFormation template?

A. Create a separate CloudFormation template for each EC2 instance type in the list.
B. In the Resources section of the CloudFormation template, create resources for each EC2 instance type in the list.
C. In the CloudFormation template, create a separate parameter for each EC2 instance type in the list.
D. In the CloudFormation template, create a parameter with the list of EC2 instance types as AllowedValues.

Answer: D
Explanation:
In the CloudFormation template, the developer should create a parameter with the list of approved EC2 instance types as AllowedValues. This way, users can select the instance type they want to use when launching the CloudFormation stack, but only from the approved list.

NEW QUESTION 24
A company uses a custom root certificate authority certificate chain (Root CA Cert) that is 10 KB in size generate SSL certificates for its on-premises HTTPS endpoints. One of the company's cloud based applications has hundreds of AWS Lambda functions that pull date from these endpoints. A developer updated the trust store of the Lambda execution environment to use the Root CA Cert when the Lambda execution environment is initialized. The developer bundled the Root CA Cert as a text file in the Lambdas deployment bundle.
After 3 months of development the root CA Cert is no longer valid and must be updated. The developer needs a more efficient solution to update the Root CA Cert for all deployed Lambda functions. The solution must not include rebuilding or updating all Lambda functions that use the Root CA Cert. The solution must also work for all development, testing and production environment. Each environment is managed in a separate AWS account.
When combination of steps Would the developer take to meet these environments MOST cost-effectively? (Select TWO)

A. Mastered
B. Not Mastered

Answer: A

Explanation:
This solution will meet the requirements by storing the Root CA Cert as a Secure String parameter in AWS Systems Manager Parameter Store, which is a secure and scalable service for storing and managing configuration data and secrets. The resource-based policy will allow IAM users in different AWS accounts and environments to access the parameter without requiring cross-account roles or permissions. The Lambda code will be refactored to load the Root CA Cert from the parameter store and modify the runtime trust store outside the Lambda function handler, which will improve performance and reduce latency by avoiding repeated calls to Parameter Store and trust store modifications for each invocation of the Lambda function. Option A is not optimal because it will use AWS Secrets Manager instead of AWS Systems Manager Parameter Store, which will incur additional costs and complexity for storing and managing a non-secret configuration data such as Root CA Cert. Option C is not optimal because it will deactivate the application secrets and monitor the application error logs temporarily, which will cause application downtime and potential data loss. Option D is not optimal because it will modify the runtime trust store inside the Lambda function handler, which will degrade performance and increase latency by repeating unnecessary operations for each invocation of the Lambda function.
References: AWS Systems Manager Parameter Store, [Using SSL/TLS to Encrypt a Connection to a DB Instance]

NEW QUESTION 27
A developer has written the following IAM policy to provide access to an Amazon S3 bucket:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "s3:GetObject",
                "s3:PutObject"
            ],
            "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/*"
        },
        {
            "Effect": "Deny",
            "Action": "s3:*",
            "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/secrets*"
        }
    ]
}
```

Which access does the policy allow regarding the s3:GetObject and s3:PutObject actions?

A. Access on all buckets except the “DOC-EXAMPLE-BUCKET” bucket

B. Access on all buckets that start with “DOC-EXAMPLE-BUCKET” except the “DOC-EXAMPLE-BUCKET/secrets” bucket

C. Access on all objects in the “DOC-EXAMPLE-BUCKET” bucket along with access to all S3 actions for objects in the “DOC-EXAMPLE-BUCKET” bucket that start with “secrets”

D. Access on all objects in the “DOC-EXAMPLE-BUCKET” bucket except on objects that start with “secrets”

Answer: D

Explanation:
The IAM policy shown in the image is a resource-based policy that grants or denies access to an S3 bucket based on certain conditions. The first statement allows access to any S3 action on any object in the “DOC-EXAMPLE-BUCKET” bucket when the request is made over HTTPS (the value of aws:SecureTransport is true). The second statement denies access to the s3:GetObject and s3:PutObject actions on any object in the “DOC-EXAMPLE-BUCKET/secrets” prefix when the request is made over HTTP (the value of aws:SecureTransport is false). Therefore, the policy allows access on all objects in the “DOC-EXAMPLE-BUCKET” bucket except on objects that start with “secrets”.
Reference: Using IAM policies for Amazon S3

NEW QUESTION 32
A company wants to share information with a third party. The third party has an HTTP API endpoint that the company can use to share the information. The company has the required API key to access the HTTP API.
The company needs a way to manage the API key by using code. The integration of the API key with the application code cannot affect application performance.
Which solution will meet these requirements MOST securely?

A. Mastered
B. Not Mastered

Answer: A

Explanation:
AWS Secrets Manager is a service that helps securely store, rotate, and manage secrets such as API keys, passwords, and tokens. The developer can store the API credentials in AWS Secrets Manager and retrieve them at runtime by using the AWS SDK. This solution will meet the requirements of security, code management, and performance. Storing the API credentials in a local code variable or an S3 object is not secure, as it exposes the credentials to unauthorized access or leakage. Storing the API credentials in a DynamoDB table is also not secure, as it requires additional encryption and access control measures. Moreover, retrieving the credentials from S3 or DynamoDB may affect application performance due to network latency.
References:
? [What Is AWS Secrets Manager? - AWS Secrets Manager]
? [Retrieving a Secret - AWS Secrets Manager]

NEW QUESTION 33
A company is migrating an on-premises database to Amazon RDS for MySQL. The company has read-heavy workloads. The company wants to refactor the code to achieve optimum read performance for queries.
Which solution will meet this requirement with LEAST current and future effort?

A. Use a multi-AZ Amazon RDS deploymen
B. Increase the number of connections that the code makes to the database or increase the connection pool size if a connection pool is in use.
C. Use a multi-AZ Amazon RDS deploymen
D. Modify the code so that queries access the secondary RDS instance.
E. Deploy Amazon RDS with one or more read replica
F. Modify the application code so that queries use the URL for the read replicas.
G. Use open source replication software to create a copy of the MySQL database on an Amazon EC2 instanc
H. Modify the application code so that queries use the IP address of the EC2 instance.

Answer: C

Explanation:

Amazon RDS for MySQL supports read replicas, which are copies of the primary database instance that can handle read-only queries. Read replicas can improve the read performance of the database by offloading the read workload from the primary instance and distributing it across multiple replicas. To use read replicas, the application code needs to be modified to direct read queries to the URL of the read replicas, while write queries still go to the URL of the primary instance. This solution requires less current and future effort than using a multi-AZ deployment, which does not provide read scaling benefits, or using open source replication software, which requires additional configuration and maintenance. Reference: Working with read replicas

NEW QUESTION 35
A developer is testing an application that invokes an AWS Lambda function asynchronously. During the testing phase the Lambda function fails to process after two retries.
How can the developer troubleshoot the failure?

A. Configure AWS CloudTrail logging to investigate the invocation failures.
B. Configure Dead Letter Queues by sending events to Amazon SQS for investigation.
C. Configure Amazon Simple Workflow Service to process any direct unprocessed events.
D. Configure AWS Config to process any direct unprocessed events.

Answer: B

Explanation:
This solution allows the developer to troubleshoot the failure by capturing unprocessed events in a queue for further analysis. Dead Letter Queues (DLQs) are queues that store messages that could not be processed by a service, such as Lambda, for various reasons, such as configuration errors, throttling limits, or permissions issues. The developer can configure DLQs for Lambda functions by sending events to either an Amazon Simple Queue Service (SQS) queue or an Amazon Simple Notification Service (SNS) topic. The developer can then inspect the messages in the queue or topic to identify and fix the root cause of the failure. Configuring AWS CloudTrail logging will not capture invocation failures for asynchronous Lambda invocations, but only record API calls made by or on behalf of Lambda. Configuring Amazon Simple Workflow Service (SWF) or AWS Config will not process any direct unprocessed events, but require additional integration and configuration.
Reference: [Using AWS Lambda with DLQs], [Asynchronous invocation]

NEW QUESTION 40
A developer is trying get data from an Amazon DynamoDB table called demoman-table. The developer configured the AWS CLI to use a specific IAM use's credentials and ran the following command.

```
aws dynamodb get-item --table-name demoman-table --key '{"id": {"N":"1993"}}'
```

The command returned errors and no rows were returned. What is the MOST likely cause of these issues?

A. The command is incorrect; it should be rewritten to use put-item with a string argument
B. The developer needs to log a ticket with AWS Support to enable access to the demoman-table
C. Amazon DynamoOB cannot be accessed from the AWS CLI and needs to called via the REST API
D. The IAM user needs an associated policy with read access to demoman-table

Answer: D

Explanation:
This solution will most likely solve the issues because it will grant the IAM user the necessary permission to access the DynamoDB table using the AWS CLI command. The error message indicates that the IAM user does not have sufficient access rights to perform the scan operation on the table. Option A is not optimal because it will change the command to use put-item instead of scan, which will not achieve the desired result of getting data from the table. Option B is not optimal because it will involve contacting AWS Support, which may not be necessary or efficient for this issue. Option C is not optimal because it will state that DynamoDB cannot be accessed from the AWS CLI, which is incorrect as DynamoDB supports AWS CLI commands.
References: AWS CLI for DynamoDB, [IAM Policies for DynamoDB]

NEW QUESTION 45
A company built an online event platform For each event the company organizes quizzes and generates leaderboards that are based on the quiz scores. The company stores the leaderboard data in Amazon DynamoDB and retains the data for 30 days after an event is complete The company then uses a scheduled job to delete the old leaderboard data
The DynamoDB table is configured with a fixed write capacity. During the months when many events occur, the DynamoDB write API requests are throttled when the scheduled delete job runs.
A developer must create a long-term solution that deletes the old leaderboard data and optimizes write throughput
Which solution meets these requirements?

A. Configure a TTL attribute for the leaderboard data
B. Use DynamoDB Streams to schedule and delete the leaderboard data
C. Use AWS Step Functions to schedule and delete the leaderboard data.
D. Set a higher write capacity when the scheduled delete job runs

Answer: A

Explanation:
"deletes the item from your table without consuming any write throughput" https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/TTL.html

NEW QUESTION 50
A developer is building a serverless application by using AWS Serverless Application Model (AWS SAM) on multiple AWS Lambda functions.
When the application is deployed, the developer wants to shift 10% of the traffic to the new deployment of the application for the first 10 minutes after deployment. If there are no issues, all traffic must switch over to the new version.
Which change to the AWS SAM template will meet these requirements?

A. Set the Deployment Preference Type to Canary10Percent10Minute
AutoPublishAlias property to the Lambda alias.
B. Set the

C. Set the Deployment Preference Type to LinearlOPercentEvery10Minute
D. Set AutoPublishAlias property to the Lambda alias.
E. Set the Deployment Preference Type to CanaryIOPercentIOMinute
F. Set the PreTraffic and PostTraffic properties to the Lambda alias.
G. Set the Deployment Preference Type to LinearlOPercentEveryIOMinute
H. Set PreTraffic and Post Traffic properties to the Lambda alias.

Answer: A

Explanation:
The AWS Serverless Application Model (AWS SAM) comes built-in with CodeDeploy to provide gradual AWS Lambda deployments1.
The DeploymentPreference property in AWS SAM allows you to specify the type of deployment that you want. The Canary10Percent10Minutes option means that 10 percent of your customer traffic is immediately shifted to your new version. After 10 minutes, all traffic is shifted to the new version1. The AutoPublishAlias property in AWS SAM allows AWS SAM to automatically create an alias that points to the updated version of the Lambda function1. Therefore, option A is correct.

NEW QUESTION 52
A developer is using AWS Amplify Hosting to build and deploy an application. The developer is receiving an increased number of bug reports from users. The developer wants to add end-to-end testing to the application to eliminate as many bugs as possible before the bugs reach production.
Which solution should the developer implement to meet these requirements?

A. Run the amplify add test command in the Amplify CLI.
B. Create unit tests in the applicatio
C. Deploy the unit tests by using the amplify push command in the Amplify CLI.
D. Add a test phase to the amplify.yml build settings for the application.
E. Add a test phase to the aws-exports.js file for the application.

Answer: C

Explanation:
The solution that will meet the requirements is to add a test phase to the amplify.yml build settings for the application. This way, the developer can run end-to-end tests on every code commit and catch any bugs before deploying to production. The other options either do not support end-to-end testing, or do not run tests automatically.
Reference: End-to-end testing

NEW QUESTION 56
A company has an ecommerce application. To track product reviews, the company's development team uses an Amazon DynamoDB table.
Every record includes the following
• A Review ID a 16-digrt universally unique identifier (UUID)
• A Product ID and User ID 16 digit UUlDs that reference other tables
• A Product Rating on a scale of 1-5
• An optional comment from the user
The table partition key is the Review ID. The most performed query against the table is to find the 10 reviews with the highest rating for a given product.
Which index will provide the FASTEST response for this query"?

A. A global secondary index (GSl) with Product ID as the partition key and Product Rating as the sort key
B. A global secondary index (GSl) with Product ID as the partition key and Review ID as the sort key
C. A local secondary index (LSI) with Product ID as the partition key and Product Rating as the sort key
D. A local secondary index (LSI) with Review ID as the partition key and Product ID as the sort key

Answer: A

Explanation:
This solution allows the fastest response for the query because it enables the query to use a single partition key value (the Product ID) and a range of sort key values (the Product Rating) to find the matching items. A global secondary index (GSI) is an index that has a partition key and an optional sort key that are different from those on the base table. A GSI can be created at any time and can be queried or scanned independently of the base table. A local secondary index (LSI) is an index that has the same partition key as the base table, but a different sort key. An LSI can only be created when the base table is created and must be queried together with the base table partition key. Using a GSI with Product ID as the partition key and Review ID as the sort key will not allow the query to use a range of sort key values to find the highest ratings. Using an LSI with Product ID as the partition key and Product Rating as the sort key will not work because Product ID is not the partition key of the base table. Using an LSI with Review ID as the partition key and Product ID as the sort key will not allow the query to use a single partition key value to find the matching items.
Reference: [Global Secondary Indexes], [Querying]

NEW QUESTION 61
A company is migrating legacy internal applications to AWS. Leadership wants to rewrite the internal employee directory to use native AWS services. A developer needs to create a solution for storing employee contact details and high-resolution photos for use with the new application.
Which solution will enable the search and retrieval of each employee's individual details and high-resolution photos using AWS APIs?

A. Encode each employee's contact information and photos using Base64. Store the information in an Amazon DynamoDB table using a sort key.
B. Store each employee's contact information in an Amazon DynamoDB table along with the object keys for the photos stored in Amazon S3.
C. Use Amazon Cognito user pools to implement the employee directory in a fully managed software-as-a-service (SaaS) method.
D. Store employee contact information in an Amazon RDS DB instance with the photos stored in Amazon Elastic File System (Amazon EFS).

Answer: B

Explanation:
Amazon DynamoDB is a fully managed NoSQL database service that provides fast and consistent performance with seamless scalability. The developer can store each employee’s contact information in a DynamoDB table along with the object keys for the photos stored in Amazon S3. Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance. The developer can use AWS APIs to search and retrieve the employee

details and photos from DynamoDB and S3.
References:
? [Amazon DynamoDB]
? [Amazon Simple Storage Service (S3)]

NEW QUESTION 64
A developer deployed an application to an Amazon EC2 instance The application needs to know the public IPv4 address of the instance
How can the application find this information?

A. Query the instance metadata from http./M69.254.169.254. latestmeta-data/.
B: Query the instance user data from http '169 254.169 254. latest/user-data/
C. Query the Amazon Machine Image (AMI) information from http://169.254.169.254/latest/meta-data/ami/.
D. Check the hosts file of the operating system

Answer: A

Explanation:
The instance metadata service provides information about the EC2 instance, including the public IPv4 address, which can be obtained by querying the endpoint http://169.254.169.254/latest/meta-data/public-ipv4. References
? Instance metadata and user data
? Get Public IP Address on current EC2 Instance
? Get the public ip address of your EC2 instance quickly

NEW QUESTION 66
A company runs a batch processing application by using AWS Lambda functions and Amazon API Gateway APIs with deployment stages for development, user acceptance testing and production A development team needs to configure the APIs in the deployment stages to connect to third-party service endpoints.
Which solution will meet this requirement?

A. Store the third-party service endpoints in Lambda layers that correspond to the stage
B. Store the third-party service endpoints in API Gateway stage variables that correspond to the stage
C. Encode the third-party service endpoints as query parameters in the API Gateway request URL.
D. Store the third-party service endpoint for each environment in AWS AppConfig

Answer: B

Explanation:
API Gateway stage variables are name-value pairs that can be defined as configuration attributes associated with a deployment stage of a REST API. They act like environment variables and can be used in the API setup and mapping templates. For example, the development team can define a stage variable named endpoint and assign it different values for each stage, such as dev.example.com for development, uat.example.com for user acceptance testing, and prod.example.com for production. Then, the team can use the stage variable value in the integration request URL, such as http://$ { stageVariables.endpoint}/api. This way, the team can use the same API setup with different endpoints at each stage by resetting the stage variable value. The other solutions are either not feasible or not cost-effective. Lambda layers are used to package and load dependencies for Lambda functions, not for storing endpoints. Encoding the endpoints as query parameters would expose them to the public and make the request URL unnecessarily long. Storing the endpoints in AWS AppConfig would incur and complexity, and would require additional logic to retrieve the values from the configuration store. References additional costs
? Using Amazon API Gateway stage variables
? Setting up stage variables for a REST API deployment
? Setting stage variables using the Amazon API Gateway console

NEW QUESTION 67
A developer warns to add request validation to a production environment Amazon API Gateway API. The developer needs to test the changes before the API is deployed to the production environment. For the lest the developer will send test requests to the API through a testing tool.
Which solution will meet these requirements with the LEAST operational overhead?

A. Export the existing API to an OpenAPI fil
B. Create a new API Import the OpenAPI file Modify the new API to add request validatio
C. Perform the tests Modify the existing API to add request validatio
D. Deploy the existing API to production.
E. Modify the existing API to add request validatio
F. Deploy the updated API to a new API Gateway stage Perform the tests Deploy the updated API to the API Gateway production stage.
G. Create a new API Add the necessary resources and methods including new request validatio
H. Perform the tests Modify the existing API to add request validatio
I. Deploy the existing API to production.
J. Clone the exiting API Modify the new API lo add request validatio
Modify the existing API to add request validation Deploy the existing API to production.
K. Perform the tests

Answer: D

Explanation:
This solution allows the developer to test the changes without affecting the production environment. Cloning an API creates a copy of the API definition that can be modified independently. The developer can then add request validation to the new API and test it using a testing tool. After verifying that the changes work as expected, the developer can apply the same changes to the existing API and deploy it to production.
Reference: Clone an API, [Enable Request Validation for an API in API Gateway]

NEW QUESTION 71
A developer is creating an Amazon DynamoDB table by using the AWS CLI The DynamoDB table must use server-side encryption with an AWS owned encryption key
How should the developer create the DynamoDB table to meet these requirements?

A. Create an AWS Key Management Service (AWS KMS) customer managed ke
B. Provide the key's Amazon Resource Name (ARN) in the KMSMasterKeyId parameter during creation of the DynamoDB table
C. Create an AWS Key Management Service (AWS KMS) AWS managed key Provide the key's Amazon Resource Name (ARN) in the KMSMasterKeyId parameter during creation of the DynamoDB table
D. Create an AWS owned key Provide the key's Amazon Resource Name (ARN) in the KMSMasterKeyId parameter during creation of the DynamoDB table.
E. Create the DynamoDB table with the default encryption options

Answer: D

Explanation:
When creating an Amazon DynamoDB table using the AWS CLI, server-side encryption with an AWS owned encryption key is enabled by default. Therefore, the developer does not need to create an AWS KMS key or specify the KMSMasterKeyId parameter. Option A and B are incorrect because they suggest creating customer- managed and AWS-managed KMS keys, which are not needed in this scenario. Option C is also incorrect because AWS owned keys are automatically used for server-side encryption by default.

NEW QUESTION 76
An application is using Amazon Cognito user pools and identity pools for secure access. A developer wants to integrate the user-specific file upload and download features in the application with Amazon S3. The developer must ensure that the files are saved and retrieved in a secure manner and that users can access only their own files. The file sizes range from 3 KB to 300 MB.
Which option will meet these requirements with the HIGHEST level of security?

A. Use S3 Event Notifications to validate the file upload and download requests and update the user interface (UI).
B. Save the details of the uploaded files in a separate Amazon DynamoDB tabl
C. Filter the list of files in the user interface (UI) by comparing the current user ID with the user ID associated with the file in the table.
D. Use Amazon API Gateway and an AWS Lambda function to upload and download file
E. Validate each request in the Lambda function before performing the requested operation.
F. Use an IAM policy within the Amazon Cognito identity prefix to restrict users to use their own folders in Amazon S3.

Answer: D

Explanation:
https://docs.aws.amazon.com/cognito/latest/developerguide/amazon-cognito-integrating-user-pools-with-identity-pools.html

NEW QUESTION 81
A company developed an API application on AWS by using Amazon CloudFront, Amazon API Gateway, and AWS Lambda. The API has a minimum of four requests every second. A developer notices that many API users run the same query by using the POST method. The developer wants to cache the POST request to optimize the API resources. Which solution will meet these requirements?

A.

Configure the CloudFront cach
B. Update the application to return cached content based upon the default request headers.
C. Override the cache method in the selected stage of API Gatewa
D. Select the POST method.
E. Save the latest request response in Lambda /tmp director
F. Update the Lambda function to check the /tmp directory.
G. Save the latest request in AWS Systems Manager Parameter Stor
H. Modify the Lambda function to take the latest request response from Parameter Store.

Answer: B

Explanation:
Amazon API Gateway provides tools for creating and documenting web APIs that route HTTP requests to Lambda functions2. You can secure access to your API with authentication and authorization controls. Your APIs can serve traffic over the internet or can be accessible only within your VPC2. You can override the cache method in the selected stage of API Gateway2. Therefore, option B is correct.

NEW QUESTION 83

A company has deployed an application on AWS Elastic Beanstalk. The company has configured the Auto Scaling group that is associated with the Elastic Beanstalk environment to have five Amazon EC2 instances. If the capacity is fewer than four EC2 instances during the deployment, application performance degrades. The company is using the all-at-once deployment policy.
What is the MOST cost-effective way to solve the deployment issue?

A. Change the Auto Scaling group to six desired instances.
B. Change the deployment policy to traffic splittin
C. Specify an evaluation time of 1 hour.
D. Change the deployment policy to rolling with additional batc
E. Specify a batch size of 1.
F. Change the deployment policy to rollin
G. Specify a batch size of 2.

Answer: C

Explanation:
This solution will solve the deployment issue by deploying the new version of the application to one new EC2 instance at a time, while keeping the old version running on the existing instances. This way, there will always be at least four instances serving traffic during the deployment, and no downtime or performance degradation will occur. Option A is not optimal because it will increase the cost of running the Elastic Beanstalk environment without solving the deployment issue. Option B is not optimal because it will split the traffic between two versions of the application, which may cause inconsistency and confusion for the customers. Option D is not optimal because it will deploy the new version of the application to two existing instances at a time, which may reduce the capacity below four instances during the deployment.
References: AWS Elastic Beanstalk Deployment Policies

NEW QUESTION 87
A company is using Amazon API Gateway to invoke a new AWS Lambda function The company has Lambda function versions in its PROD and DEV environments. In each environment, there is a Lambda function alias pointing to the corresponding Lambda function version API Gateway has one stage that is configured to point at the PROD alias
The company wants to configure API Gateway to enable the PROD and DEV Lambda function versions to be simultaneously and distinctly available
Which solution will meet these requirements?

A. Enable a Lambda authorizer for the Lambda function alias in API Gateway Republish PROD and create a new stage for DEV Create API Gateway stage variables for the PROD and DEV stage
B. Point each stage variable to the PROD Lambda authorizer to the DEV Lambda authorizer.
C. Set up a gateway response in API Gateway for the Lambda function alia
D. Republish PROD and create a new stage for DE
E. Create gateway responses in API Gateway for PROD and DEV Lambda aliases
F. Use an environment variable for the Lambda function alias in API Gatewa
G. Republish PROD and create a new stage for developmen
H. Create API gateway environment variables for PROD and DEV stage
I. Point each stage variable to the PROD Lambda function alias to the DEV Lambda function alias.
J. Use an API Gateway stage variable to configure the Lambda function alias Republish PROD and create a new stage for development Create API Gateway stage variables for PROD and DEV stages Point each stage variable to the PROD Lambda function alias and to the DEV Lambda function alias

Answer: D

Explanation:
The best solution is to use an API Gateway stage variable to configure the Lambda function alias. This allows you to specify the Lambda function name and its alias or version using the syntax function_name:$ {stageVariables.variable_name} in the Integration Request. You can then create different stages in API Gateway, such as PROD and DEV, and assign different values to the stage variable for each stage. This way, you can invoke different Lambda function versions or aliases based on the stage that you are using, without changing the function name in the Integration Request. References
? Using API Gateway stage variables to manage Lambda functions
? How to point AWS API gateway stage to specific lambda function alias?
? Setting stage variables using the Amazon API Gateway console
? Amazon API Gateway stage variables reference

NEW QUESTION 90

When a developer tries to run an AWS Code Build project, it raises an error because the length of all environment variables exceeds the limit for the combined maximum of characters.
What is the recommended solution?

A. Add the export LC-_ALL" on _ US, tuft" command to the pre _ build section to ensure POSIX Localization.
B. Use Amazon Cognate to store key-value pairs for large numbers of environment variables
C. Update the settings for the build project to use an Amazon S3 bucket for large numbers of environment variables
D. Use AWS Systems Manager Parameter Store to store large numbers ot environment variables

Answer: D

Explanation:
This solution allows the developer to overcome the limit for the combined maximum of characters for environment variables in AWS CodeBuild. AWS Systems Manager Parameter Store provides secure, hierarchical storage for configuration data management and secrets management. The developer can store large numbers of environment variables as parameters in Parameter Store and reference them in the buildspec file using parameter references. Adding export LC_ALL="en_US.utf8" command to the pre_build section will not affect the environment variables limit. Using Amazon Cognito or an Amazon S3 bucket to store key-value pairs for environment variables will require additional configuration and integration.
Reference: [Build Specification Reference for AWS CodeBuild], [What Is AWS Systems Manager Parameter Store?]

NEW QUESTION 92
A company wants to automate part of its deployment process. A developer needs to automate the process of checking for and deleting unused resources that supported previously deployed stacks but that are no longer used.
The company has a central application that uses the AWS Cloud Development Kit (AWS CDK) to manage all deployment stacks. The stacks are spread out across multiple accounts. The developer's solution must integrate as seamlessly as possible within the current deployment process.
Which solution will meet these requirements with the LEAST amount of configuration?

A. In the central AWS CDK application, write a handler function in the code that uses AWS SDK calls to check for and delete unused resource
B. Create an AWS CloudPormation template from a JSON fil
C. Use the template to attach the function code to an AWS Lambda function and lo invoke the Lambda function when the deployment slack runs.
D. In the central AWS CDK applicatio
E. write a handler function in the code that uses AWS SDK calls to check for and delete unused resource
F. Create an AWS CDK custom resource Use the custom resource to attach the function code to an AWS Lambda function and to invoke the Lambda function when the deployment stack runs.
G. In the central AWS CDK, write a handler function m the code that uses AWS SDK calls to check for and delete unused resource
H. Create an API in AWS Amplify Use the API to attach the function code to an AWS Lambda function and to invoke the Lambda function when the deployment stack runs.
I. In the AWS Lambda console write a handler function in the code that uses AWS SDK calls to check for and delete unused resource
J. Create an AWS CDK custom resourc
K. Use the custom resource to import the Lambda function into the stack and to Invoke the Lambda function when the deployment stack runs.

Answer: B

Explanation:
This solution meets the requirements with the least amount of configuration because it uses a feature of AWS CDK that allows custom logic to be executed during stack deployment or deletion. The AWS Cloud Development Kit (AWS CDK) is a software development framework that allows you to define cloud infrastructure as code and provision it through CloudFormation. An AWS CDK custom resource is a construct that enables you to create resources that are not natively supported by CloudFormation or perform tasks that are not supported by CloudFormation during stack deployment or deletion. The developer can write a handler function in the code that uses AWS SDK calls to check for and delete unused resources, and create an AWS CDK custom resource that attaches the function code to a Lambda function and invokes it when the deployment stack runs. This way, the developer can automate the cleanup process without requiring additional configuration or integration. Creating a CloudFormation template from a JSON file will require additional configuration and integration with the central AWS CDK application. Creating an API in AWS Amplify will require additional configuration and integration with the central AWS CDK application and may not provide optimal performance or availability. Writing a handler function in the AWS Lambda console will require additional configuration and integration with the central AWS CDK application.
Reference: [AWS Cloud Development Kit (CDK)], [Custom Resources]

NEW QUESTION 96
A company has multiple Amazon VPC endpoints in the same VPC. A developer needs configure an Amazon S3 bucket policy so users can access an S3 bucket only by using these VPC endpoints.
Which solution will meet these requirements?

A. Create multiple S3 bucket polices by using each VPC endpoint ID that have the aws SourceVpce value in the StringNotEquals condition.
B. Create a single S3 bucket policy that has the aws SourceVpc value and in the StingNotEquals condition to use VPC ID.
C. Create a single S3 bucket policy that the multiple aws SourceVpce value and in the SringNotEquals condton to use vpce.
D. Create a single S3 bucket policy that has multiple aws sourceVpce value in the StingNotEquale conditio
E. Repeat for all the VPC endpoint IDs.

Answer: D

Explanation:
This solution will meet the requirements by creating a single S3 bucket policy that denies access to the S3 bucket unless the request comes from one of the specified VPC endpoints. The aws:SourceVpce condition key is used to match the ID of the VPC endpoint that is used to access the S3 bucket. The StringNotEquals condition operator is used to negate the condition, so that only requests from the listed VPC endpoints are allowed.
Option A is not optimal because it will create multiple S3 bucket policies, which is not possible as only one bucket policy can be attached to an S3 bucket. Option B is not optimal because it will use the aws:SourceVpc condition key, which matches the ID of the VPC that is used to access the S3 bucket, not the VPC endpoint. Option C is not optimal because it will use the StringNotEquals condition operator with a single value, which will deny access to the S3 bucket from all VPC endpoints except one.
References: Using Amazon S3 Bucket Policies and User Policies, AWS Global Condition Context Keys

NEW QUESTION 99
A company is implementing an application on Amazon EC2 instances. The application needs to process incoming transactions. When the application detects a transaction that is not valid, the application must send a chat message to the company's support team. To send the message, the application needs to retrieve the access token to authenticate by using the chat API.
A developer needs to implement a solution to store the access token. The access token must be encrypted at rest and in transit. The access token must also be accessible from other AWS accounts.
Which solution will meet these requirements with the LEAST management overhead?

A. Use an AWS Systems Manager Parameter Store SecureString parameter that uses an AWS Key Management Service (AWS KMS) AWS managed key to store the access toke
B. Add a resource-based policy to the parameter to allow access from other account
C. Update the IAM role of the EC2 instances with permissions to access Parameter Stor
D. Retrieve the token from Parameter Store with the decrypt flag enable
E. Use the decrypted access token to send the message to the chat.
F. Encrypt the access token by using an AWS Key Management Service (AWS KMS) customer managed ke
G. Store the access token in an Amazon DynamoDB tabl
H. Update the IAM role of the EC2 instances with permissions to access DynamoDB and AWS KM
I. Retrieve the token from DynamoD
J. Decrypt the token by using AWS KMS on the EC2 instance
K. Use the decrypted access token to send the message to the chat.
L. Use AWS Secrets Manager with an AWS Key Management Service (AWS KMS) customer managed key to store the access toke
M. Add a resource-based policy to the secret to allow access from other account
N. Update the IAM role of the EC2 instances with permissions to access Secrets Manage
O. Retrieve the token from Secrets Manage
P. Use the decrypted access token to send the message to the chat.
Q. Encrypt the access token by using an AWS Key Management Service (AWS KMS) AWS managed ke
R. Store the access token in an Amazon S3 bucke
S. Add a bucket policy to the S3 bucket to allow access from other account
T. Update the IAM role of the EC2 instances with permissions to access Amazon S3 and AWS KM
. Retrieve the token from the S3 bucke
. Decrypt the token by using AWS KMS on the EC2 instance
. Use the decrypted access token to send the massage to the chat.

Answer: C

Explanation:
https://aws.amazon.com/premiumsupport/knowledge-center/secrets-manager-share-between-accounts/
https://docs.aws.amazon.com/secretsmanager/latest/userguide/auth-and- access_examples_cross.html

NEW QUESTION 101
A company built a new application in the AWS Cloud. The company automated the bootstrapping of new resources with an Auto Scaling group by using AWS Cloudf-ormation templates. The bootstrap scripts contain sensitive data.
The company needs a solution that is integrated with CloudFormation to manage the sensitive data in the bootstrap scripts.
Which solution will meet these requirements in the MOST secure way?

A. Put the sensitive data into a CloudFormation paramete
B. Encrypt the CloudFormation templates by using an AWS Key Management Service (AWS KMS) key.
C. Put the sensitive data into an Amazon S3 bucket Update the CloudFormation templates to download the object from Amazon S3 during bootslrap.
D. Put the sensitive data into AWS Systems Manager Parameter Store as a secure string paramete
E. Update the CloudFormation templates to use dynamic references to specify template values.
F. Put the sensitive data into Amazon Elastic File System (Amazon EPS) Enforce EFS encryption after file system creatio
G. Update the CloudFormation templates to retrieve data from Amazon EFS.

Answer: C

Explanation:
This solution meets the requirements in the most secure way because it uses a service that is integrated with CloudFormation to manage sensitive data in encrypted form. AWS Systems Manager Parameter Store provides secure, hierarchical storage for configuration data management and secrets management. You

can store sensitive data as secure string parameters, which are encrypted using an AWS Key Management Service (AWS KMS) key of your choice. You can also use dynamic references in your CloudFormation templates to specify template values that are stored in Parameter Store or Secrets Manager without having to include them in your templates. Dynamic references are resolved only during stack creation or update operations, which reduces exposure risks for sensitive data. Putting sensitive data into a CloudFormation parameter will not encrypt them or protect them from unauthorized access. Putting sensitive data into an Amazon S3 bucket or Amazon Elastic File System (Amazon EFS) will require additional configuration and integration with CloudFormation and may not provide fine-grained access control or encryption for sensitive data.
Reference: [What Is AWS Systems Manager Parameter Store?], [Using Dynamic
References to Specify Template Values]

NEW QUESTION 104
A developer is migrating an application to Amazon Elastic Kubernetes Service (Amazon EKS). The developer migrates the application to Amazon Elastic Container Registry (Amazon ECR) with an EKS cluster.
As part of the application migration to a new backend, the developer creates a new AWS account. The developer makes configuration changes to the application to point the application to the new AWS account and to use new backend resources. The developer successfully tests the changes within the application by deploying the pipeline.
The Docker image build and the pipeline deployment are successful, but the application is still connecting to the old backend. The developer finds that the application's configuration is still referencing the original EKS cluster and not referencing the new backend resources.
Which reason can explain why the application is not connecting to the new resources?

A. The developer did not successfully create the new AWS account.
B. The developer added a new tag to the Docker image.
C. The developer did not update the Docker image tag to a new version.
D. The developer pushed the changes to a new Docker image tag.

Answer: C

Explanation:
The correct answer is C. The developer did not update the Docker image tag to a new version.
* C. The developer did not update the Docker image tag to a new version. This is correct. When deploying an application to Amazon EKS, the developer needs to specify the Docker image tag that contains the application code and configuration. If the developer does not update the Docker image tag to a new version after making changes to the application, the EKS cluster will continue to use the old Docker image tag that references the original backend resources. To fix this issue, the developer should update the Docker image tag to a new version and redeploy the application to the EKS cluster.
* A. The developer did not successfully create the new AWS account. This is incorrect. The creation of a new AWS account is not related to the application's connection to the backend resources. The developer can use any AWS account to host the EKS cluster and the backend resources, as long as they have the proper permissions and configurations.
* B. The developer added a new tag to the Docker image. This is incorrect. Adding a new tag to the Docker image is not enough to deploy the changes to the application. The developer also needs to update the Docker image tag in the EKS cluster configuration, so that the EKS cluster can pull and run the new Docker image.
* D. The developer pushed the changes to a new Docker image tag. This is incorrect. Pushing the changes to a new Docker image tag is not enough to deploy the changes to the application. The developer also needs to update the Docker image tag in the EKS cluster configuration, so that the EKS cluster can pull and run the new Docker image. References:
? 1: Amazon EKS User Guide, "Deploying applications to your Amazon EKS cluster", https://docs.aws.amazon.com/eks/latest/userguide/deploying- applications.html
? 2: Amazon ECR User Guide, "Pushing an image", https://docs.aws.amazon.com/AmazonECR/latest/userguide/docker-push-ecr- image.html
? 3: Amazon EKS User Guide, "Updating an Amazon EKS cluster", https://docs.aws.amazon.com/eks/latest/userguide/update-cluster.html

NEW QUESTION 106
A developer needs to store configuration variables for an application. The developer needs to set an expiration date and time for me configuration. The developer wants to receive notifications. Before the configuration expires. Which solution will meet these requirements with the LEAST operational overhead?

A. Create a standard parameter in AWS Systems Manager Parameter Store Set Expiation and Expiration Notification policy types.
B. Create a standard parameter in AWS Systems Manager Parameter Store Create an AWS Lambda function to expire the configuration and to send Amazon Simple Notification Service (Amazon SNS) notifications.
C. Create an advanced parameter in AWS Systems Manager Parameter Store Set Expiration and Expiration Notification policy types.
D. Create an advanced parameter in AWS Systems Manager Parameter Store Create an Amazon EC2 instance with a corn job to expire the configuration and to send notifications.

Answer: C

Explanation:
This solution will meet the requirements by creating an advanced parameter in AWS Systems Manager Parameter Store, which is a secure and scalable service for storing and managing configuration data and secrets. The advanced parameter allows setting expiration and expiration notification policy types, which enable specifying an expiration date and time for the configuration and receiving notifications before the configuration expires. The Lambda code will be refactored to load the Root CA Cert from the parameter store and modify the runtime trust store outside the Lambda function handler, which will improve performance and reduce latency by avoiding repeated calls to Parameter Store and trust store modifications for each invocation of the Lambda function. Option A is not optimal because it will create a standard parameter in AWS Systems Manager Parameter Store, which does not support expiration and expiration notification policy types. Option B is not optimal because it will create a secret access key and access key ID with permission to access the S3 bucket, which will introduce additional security risks and complexity for storing and managing credentials. Option D is not optimal because it will create a Docker container from Node.js base image to invoke Lambda functions, which will incur additional costs and overhead for creating and running Docker containers. References: AWS Systems Manager Parameter Store, [Using SSL/TLS to Encrypt a Connection to a DB Instance]

NEW QUESTION 110
A developer is troubleshooting an application mat uses Amazon DynamoDB in the uswest- 2 Region. The application is deployed to an Amazon EC2 instance. The application requires read-only permissions to a table that is named Cars The EC2 instance has an attached IAM role that contains the following IAM policy.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "ReadOnlyAPIActions",
            "Effect": "Allow",
            "Action": [
                "dynamodb:GetItem",
                "dynamodb:BatchGetItem",
                "dynamodb:Scan",
                "dynamodb:Query",
                "dynamodb:ConditionCheckItem"
            ],
            "Resource": "arn:aws:dynamodb:us-west-2:account-id:table/Cars"
        }
    ]
}
```

When the application tries to read from the Cars table, an Access Denied error occurs. How can the developer resolve this error?

A. Modify the IAM policy resource to be "arn aws dynamo* us-west-2 account-id table/*"
B. Modify the IAM policy to include the dynamodb * action
C. Create a trust policy that specifies the EC2 service principa
D. Associate the role with the policy.
E. Create a trust relationship between the role and dynamodb Amazonas com.

Answer: C

Explanation:
https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/access-control- overview.html#access-control-resource-ownership

NEW QUESTION 113
A developer is preparing to begin development of a new version of an application. The previous version of the application is deployed in a production environment. The developer needs to deploy fixes and updates to the current version during the development of the new version of the application. The code for the new version of the application is stored in AWS CodeCommit.
Which solution will meet these requirements?

A. From the main branch, create a feature branch for production bug fixe
B. Create a second feature branch from the main branch for development of the new version.
C. Create a Git tag of the code that is currently deployed in productio
D. Create a Git tag for the development of the new versio
E. Push the two tags to the CodeCommit repository.
F. From the main branch, create a branch of the code that is currently deployed in productio
G. Apply an IAM policy that ensures no other other users can push or merge to the branch.
H. Create a new CodeCommit repository for development of the new version of the applicatio
I. Create a Git tag for the development of the new version.

Answer: A

Explanation:
? A feature branch is a branch that is created from the main branch to work on a specific feature or task1. Feature branches allow developers to isolate their work from the main branch and avoid conflicts with other changes1. Feature branches can be merged back to the main branch when the feature or task is completed and tested1.
? In this scenario, the developer needs to maintain two parallel streams of work: one for fixing and updating the current version of the application that is deployed in production, and another for developing the new version of the application. The developer can use feature branches to achieve this goal.
? The developer can create a feature branch from the main branch for production bug fixes. This branch will contain the code that is currently deployed in production, and any fixes or updates that need to be applied to it. The developer can push this branch to the CodeCommit repository and use it to deploy changes to the production environment.
? The developer can also create a second feature branch from the main branch for development of the new version of the application. This branch will contain the code that is under development for the new version, and any changes or enhancements that are part of it. The developer can push this branch to the CodeCommit repository and use it to test and deploy the new version of the application in a separate environment.
? By using feature branches, the developer can keep the main branch stable and clean, and avoid mixing code from different versions of the application. The developer can also easily switch between branches and merge them when needed.

NEW QUESTION 117
A developer is creating a service that uses an Amazon S3 bucket for image uploads. The service will use an AWS Lambda function to create a thumbnail of each image Each time an image is uploaded the service needs to send an email notification and create the thumbnail The developer needs to configure the image processing and email notifications setup.
Which solution will meet these requirements?

A. Create an Amazon Simple Notification Service (Amazon SNS) topic Configure S3 event notifications with a destination of the SNS topic Subscribe the Lambda function to the SNS topic Create an email notification subscription to the SNS topic
B. Create an Amazon Simple Notification Service (Amazon SNS) topi
C. Configure S3 event notifications with a destination of the SNS topi
D. Subscribe the Lambda function to the SNS topi
E. Create an Amazon Simple Queue Service (Amazon SQS) queue Subscribe the SQS queue to the SNS topic Create an email notification subscription to the SQS queue.
F. Create an Amazon Simple Queue Service (Amazon SQS) queue Configure S3 event notifications with a destination of the SQS queue Subscribe the Lambda function to the SQS queue Create an email notification subscription to the SQS queue.
G. Create an Amazon Simple Queue Service (Amazon SQS) queu
H. Send S3 event notifications to Amazon EventBridg
I. Create an EventBndge rule that runs the Lambda function when images are uploaded to the S3 bucket Create an EventBridge rule that sends notifications to the SQS queue Create an email notification subscription to the SQS queue

Answer: A

Explanation:
This solution will allow the developer to receive notifications for each image uploaded to the S3 bucket, and also create a thumbnail using the Lambda function. The SNS topic will serve as a trigger for both the Lambda function and the email notification subscription. When an image is uploaded, S3 will send a notification to the SNS topic, which will trigger the Lambda function to create the thumbnail and also send an email notification to the specified email address.

NEW QUESTION 118
.....

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual DVA-C02 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the DVA-C02 Product From:

https://www.2passeasy.com/dumps/DVA-C02/

Money Back Guarantee

DVA-C02 Practice Exam Features:

* DVA-C02 Questions and Answers Updated Frequently

* DVA-C02 Practice Questions Verified by Expert Senior Certified Staff

* DVA-C02 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* DVA-C02 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year