**Devops Test 27-MAR-2023**

QUESTION NO: 1

A Developer created a dashboard for an application using Amazon API Gateway, Amazon S3,

AWS Lambda, and Amazon RDS. The Developer needs an authentication mechanism allowing a user to sign in and view the dashboard. It must be accessible from mobile applications, desktops,and tablets, and must remember user preferences across platforms.

Which AWS service should the Developer use to support this authentication scenario?

A.AWS KMS

B.Amazon Cognito

C.AWS Directory Service

D.Amazon IAM

Answer: AWS Directory Services

QUESTION NO: 2

A Developer has created an S3 bucket s3://mycoolapp and has enabled server across logging that

points to the folder s3://mycoolapp/logs. The Developer moved 100 KB of Cascading Style Sheets

(CSS) documents to the folder s3://mycoolapp/css, and then stopped work. When the developer

came back a few days later, the bucket was 50 GB.

What is the MOST likely cause of this situation?

A.

The CSS files were not compressed and S3 versioning was enabled.

B.

S3 replication was enabled on the bucket.

C.

Logging into the same bucket caused exponential log growth.

D.

An S3 lifecycle policy has moved the entire CSS file to S3 Infrequent Access.

Answer: Logging into the same bucket caused exponential log growth.

QUESTION NO: 3

A Developer is creating an Auto Scaling group whose instances need to publish a custom metric

to Amazon CloudWatch.

Which method would be the MOST secure way to authenticate a CloudWatch PUT request?

A.

Create an IAM user with PutMetricData permission and put the user credentials in a private

repository; have applications pull the credentials as needed.

B.

Create an IAM user with PutMetricData permission, and modify the Auto Scaling launch

configuration to inject the user credentials into the instance user data.

C.

Modify the CloudWatch metric policies to allow the PutMetricData permission to instances from the

Auto Scaling group.

D.

Create an IAM role with PutMetricData permission and modify the Auto Scaling launching

configuration to launch instances using that role.

Answer: Create an IAM user with PutMetricData permission and put the user credentials in a private repository; have applications pull the credentials as needed.

QUESTION NO: 4

A Developer is working on an application that tracks hundreds of millions of product reviews in an

Amazon DynamoDB table. The records include the data elements shown in the table:

Which field, when used as the partition key, would result in the MOST consistent performance

using DynamoDB?

A.

starRating

B.

reviewID

C.

comment

D.

productid

Answer: productid

QUESTION NO: 5

A Developer has written a serverless application using multiple AWS services. The business logic is written as a Lambda function which has dependencies on third-party libraries. The Lambda function endpoints will be exposed using Amazon API Gateway. The Lambda function will write the information to Amazon DynamoDB. The Developer is ready to deploy the application but must have the ability to rollback. How can this deployment be automated, based on these requirements?

A.

Deploy using Amazon Lambda API operations to create the Lambda function by providing a

deployment package.

B.

Use an AWS CloudFormation template and use CloudFormation syntax to define the Lambda

function resource in the template.

C.

Use syntax conforming to the Serverless Application Model in the AWS CloudFormation template

to define the Lambda function resource.

D.

Create a bash script which uses AWS CLI to package and deploy the application.

Answer: Deploy using Amazon Lambda API operations to create the Lambda function by providing a deployment package.

QUESTION NO: 6

What are the steps to using the AWS CLI to launch a templatized serverless application?

A.

Use AWS CloudFormation get-template then CloudFormation execute-change-set.

B.

Use AWS CloudFormation validate-template then CloudFormation create-change-set.

C.

Use AWS CloudFormation package then CloudFormation deploy.

D.

Use AWS CloudFormation create-stack then CloudFormation update-stack.

Answer:

QUESTION NO: 7

A Developer is creating a web application that requires authentication, but also needs to support

guest access to provide users limited access without having to authenticate. What service can

provide support for the application to allow guest access?

A.

IAM temporary credentials using AWS STS.

B.

Amazon Directory Service

C.

Amazon Cognito with unauthenticated access enabled.

D.

IAM with SAML integration

Answer:

QUESTION NO: 8

An application takes 40 seconds to process instructions received in an Amazon SQS message.

Assuming the SQS queue is configured with the default VisibilityTimeout value, what is the BEST

way, upon receiving a message, to ensure that no other instances can retrieve a message that

has already been processed or is currently being processed?

A.

Use the ChangeMessageVisibility API to increase the VisibilityTimeout, then use the

DeleteMessage API to delete the message.

B.

Use the DeleteMessage API call to delete the message from the queue, then call DeleteQueue

API to remove the queue.

C.

Use the ChangeMessageVisibility API to decrease the timeout value, then use the DeleteMessage

API to delete the message.

D.

Use the DeleteMessageVisibility API to cancel the VisibilityTimeout, then use the DeleteMessage

API to delete the message.

QUESTION NO: 9

A Developer has implemented a Lambda function that needs to add new customers to an RDS

database that is expected to run hundreds of times per hour. The Lambda function is configured to

use 512MB of RAM and is based on the following pseudo code:

After testing the Lambda function, the Developer notices that the Lambda execution time is much

longer than expected. What should the Developer do to improve performance?

A.

Increase the amount of RAM allocated to the Lambda function, which will increase the number of

threads the Lambda can use.

B.

Increase the size of the RDS database to allow for an increased number of database connections

each hour.

C.

Move the database connection and close statement out of the handler. Place the connection in the

global space.

D.

Replace RDS wit Amazon DynamoDB to implement control over the number of writes per second.

QUESTION NO: 10

A current architecture uses many Lambda functions invoking one another as a large state

machine. The coordination of this state machine is legacy custom code that breaks easily.

Which AWS Service can help refactor and manage the state machine?

A.

AWS Data Pipeline

B.

AWS SNS with AWS SQS

C.

Amazon Elastic MapReduce

D.

AWS Step Functions

QUESTION NO: 11

A Developer is asked to implement a caching layer in front of Amazon RDS. Cached content is

expensive to regenerate in case of service failure. Which implementation below would work while

maintaining maximum uptime?

A.

Implement Amazon ElastiCache Redis in Cluster Mode

B.

Install Redis on an Amazon EC2 instance.

C.

Implement Amazon ElastiCache Memcached.

D.

Migrate the database to Amazon Redshift.

QUESTION NO: 12

A current architecture uses many Lambda functions invoking one another as large state machine.

The coordination of this state machine is legacy custom code that breaks easily.

Which AWS Service can help refactor and manage the state machine?

A.

AWS Data Pipeline

B.

AWS SNS with AWS SQS

C.

Amazon Elastic MapReduce

D.

AWS Step Functions

QUESTION NO: 13

A large e-commerce site is being designed to deliver static objects from Amazon S3. The Amazon

S3 bucket will server more than 300 GET requests per second. What should be done to optimize

performance? (Choose two.)

A.

Integrate Amazon CloudFront with Amazon S3.

B.

Enable Amazon S3 cross-region replication.

C.

Delete expired Amazon S3 server log files.

D.

Configure Amazon S3 lifecycle rules.

E.

Randomize Amazon S3 key name prefixes.

QUESTION NO: 14

A company is building a stock trading application that requires sub-millisecond latency in

processing trading requests. Amazon DynamoDB is used to store all the trading data that is used

to process each request. After load testing the application, the development team found that due

to data retrieval times, the latency requirement is not satisfied. Because of sudden high spikes in

the number of requests, DynamoDB read capacity has to be significantly over-provisioned to avoid

throttling.

What steps should be taken to meet latency requirements and reduce the cost of running the

application?

A.

Add Global Secondary Indexes for trading data.

B.

Store trading data in Amazon S3 and use Transfer Acceleration.

C.

Add retries with exponential back-off for DynamoDB queries

D.

Use DynamoDB Accelerator to cache trading data.

QUESTION NO: 15

A Developer needs temporary access to resources in a second account.

What is the MOST secure way to achieve this?

A.

Use the Amazon Cognito user pools to get short-lived credentials for the second account.

B.

Create a dedicated IAM access key for the second account, and send it by mail.

C.

Create a cross-account access role, and use sts:AssumeRole API to get short-lived credentials.

D.

Establish trust, and add an SSH key for the second account to the IAM user.

QUESTION NO: 16

An application reads data from an Amazon DynamoDB table. Several times a day, for a period of

15 seconds, the application receives multiple ProvisionedThroughputExceeded errors.

How should this exception be handled?

A.

Create a new global secondary index for the table to help with the additional requests.

B.

Retry the failed read requests with exponential backoff.

C.

Immediately retry the failed read requests.

D.

Use the DynamoDB “UpdateItem” API to increase the provisioned throughput capacity of the table.

QUESTION NO: 17

A Developer has created a large Lambda function, and deployment is failing with the following

error:

ClientError: An error occurred (InvalidParameterValueException) when calling the CreateFunction

operation: Unzipped size must be smaller than XXXXXXXXX bytes’, where XXXXXXXXX is the

current Lambda limit

What can the Developer do to fix this problem?

A.

Submit a limit increase request to AWS Support to increase the function to the size needed.

B.

Use a compression algorithm that is more efficient than ZIP.

C.

Break the function into multiple smaller Lambda functions.

D.

ZIP the ZIP file twice to compress it further.

QUESTION NO: 18

Given the source code for an AWS Lambda function in the local store.py containing a handler

function called get\_store and the following AWS CloudFormation template:

What should be done to prepare the template so that it can be deployed using the AWS CLI

command aws cloudformation deploy?

A.

Use aws cloudformation compile to base64 encode and embed the source file into a modified

CloudFormation template.

B.

Use aws cloudformation package to upload the source code to an Amazon S3 bucket and produce

a modified CloudFormation template.

C.

Use aws lambda zip to package the source file together with the CloudFormation template and

deploy the resulting zip archive.

D.

Use aws serverless create-package to embed the source file directly into the existing

CloudFormation template.

QUESTION NO: 19

An application stores images in an S3 bucket. Amazon S3 event notifications are used to trigger a

Lambda function that resizes the images. Processing each image takes less than a second.

How will AWS Lambda handle the additional traffic?

A.

Lambda will scale out to execute the requests concurrently.

B.

Lambda will handle the requests sequentially in the order received.

C.

Lambda will process multiple images in a single execution.

D.

Lambda will add more compute to each execution to reduce processing time.

QUESTION NO: 20

A company wants to implement a continuous integration for its workloads on AWS. The company

wants to trigger unit test in its pipeline for commits-on its code repository, and wants to be notified

of failure events in the pipeline.

How can these requirements be met?

A.

Store the source code in AWS CodeCommit. Create a CodePipeline to automate unit testing. Use

Amazon SNS to trigger notifications of failure events.

B.

Store the source code in GitHub. Create a CodePipeline to automate unit testing. Use Amazon

SES to trigger notifications of failure events.

C.

Store the source code on GitHub. Create a CodePipeline to automate unit testing. Use Amazon

CloudWatch to trigger notifications of failure events.

D.

Store the source code in AWS CodeCommit. Create a CodePipeline to automate unit testing. Use

Amazon CloudWatch to trigger notification of failure events.

QUESTION NO: 21

A serverless application uses an API Gateway and AWS Lambda.

Where should the Lambda function store its session information across function calls?

A.

In an Amazon DynamoDB table

B.

In an Amazon SQS queue

C.

In the local filesystem

D.

In an SQLite session table using –DSQLITE\_ENABLE\_SESSION

QUESTION NO: 22

A Developer has created a software package to be deployed on multiple EC2 instances using IAM

roles.

What actions could be performed to verify IAM access to get records from Amazon Kinesis

Streams? (Choose two.)

A.

Use the AWS CLI to retrieve the IAM group.

B.

Query Amazon EC2 metadata for in-line IAM policies.

C.

Request a token from AWS STS, and perform a describe action.

D.

Perform a get action using the –-dry-run argument.

E.

Validate the IAM role policy with the IAM policy simulator.

QUESTION NO: 23

When writing a Lambda function, what is the benefit of instantiating AWS clients outside the scope

of the handler?

A.

Legibility and stylistic convention

B.

Taking advantage of connection re-use

C.

Better error handling

D.

Creating a new instance per invocation

QUESTION NO: 24

An application on AWS is using third-party APIs. The Developer needs to monitor API errors in the

code, and wants to receive notifications if failures go above a set threshold value.

How can the Developer achieve these requirements?

A.

Publish a custom metric on Amazon CloudWatch and use Amazon SES for notification.

B.

Use an Amazon CloudWatch API-error metric and use Amazon SNS for notification.

C.

Use an Amazon CloudWatch API-error metric and use Amazon SES for notification.

D.

Publish a custom metric on Amazon CloudWatch and use Amazon SNS for notification.

QUESTION NO: 25

A Developer has an application that can upload tens of thousands of objects per second to

Amazon S3 in parallel within a single AWS account. As part of new requirements, data stored in

S3 must use server side encryption with AWS KMS (SSE-KMS). After creating this change,

performance of the application is slower.

Which of the following is MOST likely the cause of the application latency?

A.

Amazon S3 throttles the rate at which uploaded objects can be encrypted using Customer Master

Keys.

B.

The AWS KMS API calls limit is less than needed to achieve the desired performance.

C.

The client encryption of the objects is using a poor algorithm.

D.

KMS requires that an alias be used to create an independent display name that can be mapped to

a CMK.

QUESTION NO: 26

A company wants to migrate its web application to AWS and leverage Auto Scaling to handle pear

workloads. The Solutions Architect determined that the best metric for an Auto Scaling event is the

number of concurrent users.

Based on this information, what should the Developer use to autoscale based on concurrent

users?

A.

An Amazon SNS topic to be triggered when a concurrent user threshold is met

B.

An Amazon Cloudwatch Networkin metric

C.

Amazon CloudFront to leverage AWS Edge Locations

D.

A Custom Amazon CloudWatch metric for concurrent users.

QUESTION NO: 27

A company is migrating its on-premises database to Amazon RDS for MySQL. The company has

read-heavy workloads, and wants to make sure it re-factors its code to achieve optimum read

performance for its queries.

How can this objective be met?

A.

Add database retries to effectively use RDS with vertical scaling

B.

Use RDS with multi-AZ deployment

C.

Add a connection string to use an RDS read replica for read queries

D.

Add a connection string to use a read replica on an EC2 instance.

QUESTION NO: 28

A Developer is receiving HTTP 400: ThrottlingException errors intermittently when calling the

Amazon CloudWatch API. When a call fails, no data is retrieved.

What best practice should first be applied to address this issue?

A.

Contact AWS Support for a limit increase.

B.

Use the AWS CLI to get the metrics

C.

Analyze the applications and remove the API call

D.

Retry the call with exponential backoff

QUESTION NO: 29

A Developer is testing a Docker-based application that uses the AWS SDK to interact with

Amazon DynamoDB. In the local development environment, the application has used IAM access

keys. The application is now ready for deployment onto an ECS cluster.

How should the application authenticate with AWS services in production?

A.

Configure an ECS task IAM role for the application to use

B.

Refactor the application to call AWS STS AssumeRole based on an instance role

C.

Configure AWS access key/secret access key environment variables with new credentials

D.

Configure the credentials file with a new access key/secret access key

QUESTION NO: 30

A Developer created a Lambda function for a web application backend. When testing the Lambda

function from the AWS Lambda console, the Developer can see that the function is being

executed, but there is no log data being generated in Amazon CloudWatch Logs, even after

several minutes.

What could cause this situation?

A.

The Lambda function does not have any explicit log statements for the log data to send it to

CloudWatch Logs.

B.

The Lambda function is missing CloudWatch Logs as a source trigger to send log data.

C.

The execution role for the Lambda function is missing permissions to write log data to the

CloudWatch Logs.

D.

The Lambda function is missing a target CloudWatch Log group.

QUESTION NO: 31

An application has hundreds of users. Each user may use multiple devices to access the

application. The Developer wants to assign unique identifiers to these users regardless of the

device they use.

Which of the following methods should be used to obtain unique identifiers?

A.

Create a user table in Amazon DynamoDB as key-value pairs of users and their devices. Use

these keys as unique identifiers.

B.

Use IAM-generated access key IDs for the users as the unique identifier, but do not store secret

keys.

C.

Implement developer-authenticated identities by using Amazon Cognito, and get credentials for

these identities.

D.

Assign IAM users and roles to the users. Use the unique IAM resource ID as the unique identifier.

QUESTION NO: 32

An application is designed to use Amazon SQS to manage messages from many independent

senders. Each sender’s messages must be processed in the order they are received.

Which SQS feature should be implemented by the Developer?

A.

Configure each sender with a unique MessageGroupId

B.

Enable MessageDeduplicationIds on the SQS queue

C.

Configure each message with unique MessageGroupIds.

D.

Enable ContentBasedDeduplication on the SQS queue

QUESTION NO: 33

A deployment package uses the AWS CLI to copy files into any S3 bucket in the account, using

access keys stored in environment variables. The package is running on EC2 instances, and the

instances have been modified to run with an assumed IAM role and a more restrictive policy that

allows access to only one bucket. After the change, the Developer logs into the host and still has

the ability to write into all of the S3 buckets in that account.

What is the MOST likely cause of this situation?

A.

An IAM inline policy is being used on the IAM role

B.

An IAM managed policy is being used on the IAM role

C.

The AWS CLI is corrupt and needs to be reinstalled

D.

The AWS credential provider looks for instance profile credentials last

QUESTION NO: 34

A Developer is writing transactions into a DynamoDB table called “SystemUpdates” that has 5

write capacity units.

Which option has the highest read throughput?

A.

Eventually consistent reads of 5 read capacity units reading items that are 4 KB in size

B.

Strongly consistent reads of 5 read capacity units reading items that are 4 KB in size

C.

Eventually consistent reads of 15 read capacity units reading items that are 1 KB in size

D.

Strongly consistent reads of 15 read capacity units reading items that are 1 KB in size

QUESTION NO: 35

Where should an Elastic Beanstalk configuration file named healthcheckur1.config be placed in

the application source bundle?

A.

In the root of the application

B.

In the bin folder

C.

In healthcheckur1.config.ebextension under root

D.

In the .ebextensions folder

QUESTION NO: 36

During non-peak hours, a Developer wants to minimize the execution time of a full Amazon

DynamoDB table scan without affecting normal workloads. The workloads average half of the

strongly consistent read capacity units during non-peak hours.

How would the Developer optimize this scan?

A.

Use parallel scans while limiting the rate

B.

Use sequential scans

C.

Increase read capacity units during the scan operation

D.

Change consistency to eventually consistent during the scan operation

QUESTION NO: 37

A Developer is creating a Lambda function and will be using external libraries that are not included

in the standard Lambda libraries.

What action would minimize the Lambda compute time consumed?

A.

Install the dependencies and external libraries at the beginning of the Lambda function.

B.

Create a Lambda deployment package that includes the external libraries.

C.

Copy the external libraries to Amazon S3, and reference the external libraries to the S3 location.

D.

Install the external libraries in Lambda to be available to all Lambda functions.

QUESTION NO: 38

A Developer is writing a Linux-based application to run on AWS Elastic Beanstalk. Application

requirements state that the application must maintain full capacity during updates while minimizing

cost.

Which type of Elastic Beanstalk deployment policy should the Developer specify for the

environment?

A.

Immutable

B.

Rolling

C.

All at Once

D.

Rolling with additional batch

QUESTION NO: 39

An application under development is required to store hundreds of video files. The data must be

encrypted within the application prior to storage, with a unique key for each video file.

How should the Developer code the application?

A.

Use the KMS Encrypt API to encrypt the data. Store the encrypted data key and data.

B.

Amazon AWS Certified Developer Associate Exam

www.braindumps.com 24

Use a cryptography library to generate an encryption key for the application. Use the encryption

key to encrypt the data. Store the encrypted data.

C.

Use the KMS GenerateDataKey API to get a data key. Encrypt the data with the data key. Store

the encrypted data key and data.

D.

Upload the data to an S3 bucket using server side-encryption with an AWS KMS key.

QUESTION NO: 40

A Developer is creating an application that needs to locate the public IPv4 address of the Amazon

EC2 instance on which it runs. How can the application locate this information?

A.

Get the instance metadata by retrieving http://169.254.169.254/latest/metadata/.

B.

Get the instance user data by retrieving http://169.254.169.254/latest/userdata/.

C.

Get the application to run IFCONFIG to get the public IP address.

D.

Get the application to run IPCONFIG to get the public IP address.

QUESTION NO: 41

The Lambda function below is being called through an API using Amazon API Gateway. The

average execution time for the Lambda function is about 1 second. The pseudocode for the

Lambda function is as shown in the exhibit.

Amazon AWS Certified Developer Associate Exam

www.braindumps.com 25

What two actions can be taken to improve the performance of this Lambda function without

increasing the cost of the solution? (Choose two.)

A.

Package only the modules the Lambda function requires

B.

Use Amazon DynamoDB instead of Amazon RDS

C.

Move the initialization of the variable Amazon RDS connection outside of the handler function

D.

Implement custom database connection pooling with the Lambda function

E.

Implement local caching of Amazon RDS data so Lambda can re-use the cache

QUESTION NO: 42

An application will ingest data at a very high throughput from many sources and must store the

data in an Amazon S3 bucket. Which service would BEST accomplish this task?

A.

Amazon Kinesis Firehose

B.

Amazon S3 Acceleration Transfer

C.

Amazon SQS

D.

Amazon SNS

QUESTION NO: 43

A Developer has setup an Amazon Kinesis Stream with 4 shards to ingest a maximum of 2500

records per second. A Lambda function has been configured to process these records.

In which order will these records be processed?

A.

Lambda will receive each record in the reverse order it was placed into the stream following a

LIFO (last-in, first-out) method

B.

Lambda will receive each record in the exact order it was placed into the stream following a FIFO

(first-in, first-out) method.

C.

Lambda will receive each record in the exact order it was placed into the shard following a FIFO

(first-in, first-out) method. There is no guarantee of order across shards.

D.

The Developer can select FIFO, (first-in, first-out), LIFO (last-in, last-out), random, or request

specific record using the getRecords API.

QUESTION NO: 44

A static website is hosted in an Amazon S3 bucket. Several HTML pages on the site use

JavaScript to download images from another Amazon S3 bucket. These images are not displayed

when users browse the site.

What is the possible cause for the issue?

A.

The referenced Amazon S3 bucket is in another region.

B.

The images must be stored in the same Amazon S3 bucket.

C.

Port 80 must be opened on the security group in which the Amazon S3 bucket is located.

D.

Cross Origin Resource Sharing must be enabled on the Amazon S3 bucket.

QUESTION NO: 45

Amazon S3 has the following structure: S3://BUCKET/FOLDERNAME/FILENAME.zip

Which S3 best practice would optimize performance with thousands of PUT request each second

to a single bucket?

A.

Prefix folder names with user id; for example, s3://BUCKET/2013-FOLDERNAME/FILENAME.zip

B.

Prefix file names with timestamps; for example, s3://BUCKET/FOLDERNAME/2013-26-05-15-00-

00-FILENAME.zip

C.

Prefix file names with random hex hashes; for example, s3://BUCKET/FOLDERNAME/23a6-

FILENAME.zip

D.

Prefix folder names with random hex hashes; for example, s3://BUCKET/23a6-

FOLDERNAME/FILENAME.zip

QUESTION NO: 46

For a deployment using AWS CodeDeploy, what is the run order of the hooks for in-place

deployments?

A.

Before Install -> Application Stop -> Application Start -> After Install

B.

Application Stop -> Before Install -> After Install -> Application Start

C.

Before Install -> Application Stop -> Validate Service -> Application Start

D.

Application Stop -> Before Install -> Validate Service -> Application Start

QUESTION NO: 47

A Developer is developing an application that manages financial transactions. To improve security,

multi-factor authentication (MFA) will be required as part of the login protocol.

What services can the Developer use to meet these requirements?

A.

Amazon DynamoDB to store MFA session data, and Amazon SNS to send MFA codes

B.

Amazon Cognito with MFA

C.

AWS Directory Service

D.

AWS IAM with MFA enabled

QUESTION NO: 48

A game stores user game data in an Amazon DynamoDB table. Individual users should not have

access to other users’ game data. How can this be accomplished?

A.

Encrypt the game data with individual user keys.

B.

Restrict access to specific items based on certain primary key values.

C.

Stage data in SQS queues to inject metadata before accessing DynamoDB.

D.

Read records from DynamoDB and discard irrelevant data client-side.

QUESTION NO: 49

A company developed a set of APIs that are being served through the Amazon API Gateway. The

API calls need to be authenticated based on OpenID identity providers such as Amazon or

Facebook. The APIs should allow access based on a custom authorization model.

Which is the simplest and MOST secure design to use to build an authentication and authorization

model for the APIs?

A.

Use Amazon Cognito user pools and a custom authorizer to authenticate and authorize users

based on JSON Web Tokens.

B.

Build a OpenID token broker with Amazon and Facebook. Users will authenticate with these

identify providers and pass the JSON Web Token to the API to authenticate each API call.

C.

Store user credentials in Amazon DynamoDB and have the application retrieve temporary

credentials from AWS STS. Make API calls by passing user credentials to the APIs for

authentication and authorization.

D.

Use Amazon RDS to store user credentials and pass them to the APIs for authentications and

authorization.

QUESTION NO: 50

A supplier is writing a new RESTful API for customers to query the status of orders. The

customers requested the following API endpoint.

http://www.supplierdomain.com/status/customerID

Which of the following application designs meet the requirements? (Choose two.)

A.

Amazon SQS; Amazon SNS

B.

Elastic Load Balancing; Amazon EC2

C.

Amazon ElastiCache; Amazon Elacticsearch Service

D.

Amazon API Gateway; AWS Lambda

E.

Amazon S3; Amazon CloudFront

QUESTION NO: 51

A development team consists of 10 team members. Similar to a home directory for each team

member, the manager wants to grant access to user-specific folders in an Amazon S3 bucket. For

the team member with the username “TeamMemberX”, the snippet of the IAM policy looks like

this:

Instead of creating distinct policies for each team member, what approach can be used to make

this policy snippet generic for all team members?

A.

Use IAM policy condition

B.

Use IAM policy principal

C.

Use IAM policy variables

D.

Use IAM policy resource

QUESTION NO: 52

A legacy service has an XML-based SOAP interface. The Developer wants to expose the

functionality of the service to external clients with the Amazon API Gateway. Which technique will

accomplish this?

A.

Create a RESTful API with the API Gateway; transform the incoming JSON into a valid XML

message for the SOAP interface using mapping templates.

B.

Create a RESTful API with the API Gateway; pass the incoming JSON to the SOAP interface

through an Application Load Balancer.

C.

Create a RESTful API with the API Gateway; pass the incoming XML to the SOAP interface

through an Application Load Balancer.

D.

Create a RESTful API with the API Gateway; transform the incoming XML into a valid message for

the SOAP interface using mapping templates.

QUESTION NO: 53

A company is using AWS CodeBuild to compile a website from source code stored in AWS

CodeCommit. A recent change to the source code has resulted in the CodeBuild project being

unable to successfully compile the website.

How should the Developer identify the cause of the failures?

A.

Modify the buildspec.yml file to include steps to send the output of build commands to Amazon

CloudWatch.

B.

Use a custom Docker image that includes the AWS X-Ray agent in the AWS CodeBuild project

configuration.

C.

Check the build logs of the failed phase in the last build attempt in the AWS CodeBuild project

build history.

D.

Manually re-run the build process on a local machine so that the output can be visualized.

QUESTION NO: 54

A web application is using Amazon Kinesis Streams for clickstream data that may not be

consumed for up to 12 hours.

How can the Developer implement encryption at rest for data within the Kinesis Streams?

A.

Enable SSL connections to Kinesis

B.

Use Amazon Kinesis Consumer Library

C.

Encrypt the data once it is at rest with a Lambda function

D.

Enable server-side encryption in Kinesis Streams

QUESTION NO: 55

A Developer wants to use AWS X-Ray to trace a user request end-to-end throughput the software

stack. The Developer made the necessary changes in the application tested it, and found that the

application is able to send the traces to AWS X-Ray. However, when the application is deployed to

an EC2 instance, the traces are not available.

Which of the following could create this situation? (Choose two.)

A.

The traces are reaching X-Ray, but the Developer does not have access to view the records.

B.

The X-Ray daemon is not installed on the EC2 instance.

C.

The X-Ray endpoint specified in the application configuration is incorrect.

D.

The instance role does not have “xray:BatchGetTraces” and “xray:GetTraceGraph” permissions.

E.

The instance role does not have “xray:PutTraceSegments” and “xray:PutTelemetryRecords”

permissions.

QUESTION NO: 56

A Developer executed a AWS CLI command and received the error shown below:

What action should the Developer perform to make this error human-readable?

A.

Make a call to AWS KMS to decode the message.

B.

Use the AWS STS decode-authorization-message API to decode the message.

C.

Use an open source decoding library to decode the message.

D.

Use the AWS IAM decode-authorization-message API to decode this message.

QUESTION NO: 57

A company is using Amazon API Gateway to manage access to a set of microservices

implemented as AWS Lambda functions. Following a bug report, the company makes a minor

breaking change to one of the APIs.

In order to avoid impacting existing clients when the new API is deployed, the company wants to

allow clients six months to migrate from v1 to v2.

Which approach should the Developer use to handle this change?

A.

Update the underlying Lambda function and provide clients with the new Lambda invocation URL.

B.

Use API Gateway to automatically propagate the change to clients, specifying 180 days in the

phased deployment parameter.

C.

Use API Gateway to deploy a new stage named v2 to the API and provide users with its URL.

D.

Update the underlying Lambda function, create an Amazon CloudFront distribution with the

updated Lambda function as its origin.

QUESTION NO: 58

A company has written a Java AWS Lambda function to be triggered whenever a user uploads an

image to an Amazon S3 bucket. The function converts the original image to several different

formats and then copies the resulting images to another Amazon S3 bucket.

The Developers find that no images are being copied to the second Amazon S3 bucket. They

have tested the code on an Amazon EC2 instance with 1GB of RAM, and it takes an average of

500 seconds to complete.

What is the MOST likely cause of the problem?

A.

The Lambda function has insufficient memory and needs to be increased to 1 GB to match the

Amazon EC2 instance

B.

Files need to be copied to the same Amazon S3 bucket for processing, so the second bucket

needs to be deleted.

C.

Lambda functions have a maximum execution limit of 300 seconds, therefore the function is not

completing.

D.

There is a problem with the Java runtime for Lambda, and the function needs to be converted to

node.js.

QUESTION NO: 59

An application stops working with the following error: The specified bucket does not exist. Where

is the BEST place to start the root cause analysis?

A.

Check the Elastic Load Balancer logs for DeleteBucket requests.

B.

Check the application logs in Amazon CloudWatch Logs for Amazon S3 DeleteBucket errors.

C.

Check AWS X-Ray for Amazon S3 DeleteBucket alarms.

D.

Check AWS CloudTrail for a DeleteBucket event.

QUESTION NO: 60

An organization must store thousands of sensitive audio and video files in an Amazon S3 bucket.

Organizational security policies require that all data written to this bucket be encrypted.

How can compliance with this policy be ensured?

A.

Use AWS Lambda to send notifications to the security team if unencrypted objects are pun in the

bucket.

B.

Configure an Amazon S3 bucket policy to prevent the upload of objects that do not contain the xamz-server-side-encryption header.

C.

Create an Amazon CloudWatch event rule to verify that all objects stored in the Amazon S3

bucket are encrypted.

D.

Configure an Amazon S3 bucket policy to prevent the upload of objects that contain the x-amzserver-side-encryption header.