Vendor: Amazon

Exam Code:DVA-C02

Exam Name:AWS Certified Developer - Associate

Version: Demo

QUESTION 1

A developer created a web API that receives requests by using an internet-facing Application Load Balancer (ALB) with an HTTPS listener. The developer configures an Amazon Cognito user pool and wants to ensure that every request to the API is authenticated through Amazon Cognito.

What should the developer do to meet this requirement?

A. Add a listener rule to the listener to return a fixed response if the Authorization header is missing. Set the fixed response to 401 Unauthorized.

B. Create an authentication action for the listener rules of the ALB. Set the rule action type to authenticate-cognito. Set the OnUnauthenticatedRequest field to "deny."

C. Create an Amazon API Gateway API. Configure all API methods to be forwarded to the ALB endpoint. Create an authorizer of the COGNITO_USER_POOLS type. Configure every API method to use that authorizer.

D. Create a new target group that includes an AWS Lambda function target that validates the Authorization header by using Amazon Cognito. Associate the target group with the listener.

Correct Answer: B

QUESTION 2

A company uses AWS CloudFormation to deploy an application that uses an Amazon API Gateway REST API with AWS Lambda function integration. The application uses Amazon DynamoDB for data persistence. The application has three stages: development, testing, and production. Each stage uses its own DynamoDB table.

The company has encountered unexpected issues when promoting changes to the production stage. The changes were successful in the development and testing stages. A developer needs to route 20% of the traffic to the new production stage API with the next production release. The developer needs to route the remaining 80% of the traffic to the existing production stage. The solution must minimize the number of errors that any single customer experiences.

Which approach should the developer take to meet these requirements?

A. Update 20% of the planned changes to the production stage. Deploy the new production stage. Monitor the results. Repeat this process five times to test all planned changes.

B. Update the Amazon Route 53 DNS record entry for the production stage API to use a weighted routing policy. Set the weight to a value of 80. Add a second record for the production domain name. Change the second routing policy to a weighted routing policy. Set the weight of the second policy to a value of 20. Change the alias of the second policy to use the testing stage API.

C. Deploy an Application Load Balancer (ALB) in front of the REST API. Change the production API Amazon Route 53 record to point traffic to the ALB. Register the production and testing stages as targets of the ALB with weights of 80% and 20%, respectively.

D. Configure canary settings for the production stage API. Change the percentage of traffic directed to canary deployment to 20%. Make the planned updates to the production stage. Deploy the changes

Correct Answer: D

QUESTION 3

An e-commerce web application that shares session state on-premises is being migrated to AWS. The application must be fault tolerant, natively highly scalable, and any service interruption should not affect the user experience. What is the best option to store the session state?

A. Store the session state in Amazon ElastiCache.

B. Store the session state in Amazon CloudFront.

C. Store the session state in Amazon S3.

D. Enable session stickiness using elastic load balancers.

Correct Answer: A

QUESTION 4

A developer needs to manage AWS infrastructure as code and must be able to deploy multiple identical copies of the infrastructure, stage changes, and revert to previous versions.

Which approach addresses these requirements?

A. Use cost allocation reports and AWS OpsWorks to deploy and manage the infrastructure.

B. Use Amazon CloudWatch metrics and alerts along with resource tagging to deploy and manage the infrastructure.

C. Use AWS Elastic Beanstalk and AWS CodeCommit to deploy and manage the infrastructure.

D. Use AWS CloudFormation and AWS CodeCommit to deploy and manage the infrastructure.

Correct Answer: D

QUESTION 5

A company needs to set up secure database credentials for all its AWS Cloud resources. The company\\'s resources include Amazon RDS DB instances, Amazon DocumentDB clusters, and Amazon Aurora DB instances. The company\\'s security policy mandates that database credentials be encrypted at rest and rotated at a regular interval.

Which solution will meet these requirements MOST securely?

A. Set up IAM database authentication for token-based access. Generate user tokens to provide centralized access to RDS DB instances, Amazon DocumentDB clusters, and Aurora DB instances.

B. Create parameters for the database credentials in AWS Systems Manager Parameter Store. Set the Type parameter to SecureString. Set up automatic rotation on the parameters.

C. Store the database access credentials as an encrypted Amazon S3 object in an S3 bucket. Block all public access on the S3 bucket. Use S3 server-side encryption to set up automatic rotation on the encryption key.

D. Create an AWS Lambda function by using the SecretsManagerRotationTemplate template in the AWS Secrets

Manager console. Create secrets for the database credentials in Secrets Manager. Set up secrets rotation on a schedule.

Correct Answer: C

QUESTION 6

A developer is building an application that uses AWS API Gateway APIs, AWS Lambda functions, and AWS DynamoDB tables. The developer uses the AWS Serverless Application Model (AWS SAM) to build and run serverless applications

on AWS. Each time the developer pushes 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

Correct Answer: C

QUESTION 7

A company runs an application on AWS. The company deployed the application on Amazon EC2 instances. The application stores data on Amazon Aurora.

The application recently logged multiple application-specific custom DECRYP_ERROR errors to Amazon CloudWatch logs. The company did not detect the issue until the automated tests that run every 30 minutes failed. A developer must

implement a solution that will monitor for the custom errors and alert a development team in real time when these errors occur in the production environment.

Which solution will meet these requirements with the LEAST operational overhead?

A. Configure the application to create a custom metric and to push the metric to CloudWatch. Create an AWS CloudTrail alarm. Configure the CloudTrail alarm to use an Amazon Simple Notification Service (Amazon SNS) topic to send notifications.

B. Create an AWS Lambda function to run every 5 minutes to scan the CloudWatch logs for the keyword DECRYP_ERROR. Configure the Lambda function to use Amazon Simple Notification Service (Amazon SNS) to send a notification.

C. Use Amazon CloudWatch Logs to create a metric filter that has a filter pattern for DECRYP_ERROR. Create a CloudWatch alarm on this metric for a threshold >=1. Configure the alarm to send Amazon Simple Notification Service (Amazon SNS) notifications.

D. Install the CloudWatch unified agent on the EC2 instance. Configure the application to generate a metric for the keyword DECRYP_ERROR errors. Configure the agent to send Amazon Simple Notification Service (Amazon SNS) notifications.

Correct Answer: C

QUESTION 8

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://169.254.169.254/latest/meta-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.

Correct Answer: A

QUESTION 9

A developer is building an application that gives users the ability to view bank accounts from multiple sources in a single dashboard. The developer has automated the process to retrieve API credentials for these sources. The process invokes

an AWS Lambda function that is associated with an AWS CloudFormation custom resource.

The developer wants a solution that will store the API credentials with minimal operational overhead.

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

A. Add an AWS Secrets Manager GenerateSecretString resource to the CloudFormation template. Set the value to reference new credentials for the CloudFormation resource.

B. Use the AWS SDK ssm:PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter type to SecureString.

C. Add an AWS Systems Manager Parameter Store resource to the CloudFormation template. Set the CloudFormation resource value to reference the new credentials. Set the resource NoEcho attribute to true.

D. Use the AWS SDK ssm:PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter NoEcho

attribute to true.

Correct Answer: D

QUESTION 10

A developer accesses AWS CodeCommit over SSH. The SSH keys configured to access AWS CodeCommit are tied to a user with the following permissions:

```
{
"Version": "2012-10-17",
"Statement": [
  {
   "Effect": "Allow",
   "Action": [
     "codecommit:BatchGetRepositories",
     "codecommit:Get*",
     "codecommit:List*",
     "codecommit:GitPull"
   ],
   "Resource": "*"
  }
]
}
```

The developer needs to create/delete branches.

Which specific IAM permissions need to be added, based on the principle of least privilege?

A. "codecommit:CreateBranch" "codecommit:DeleteBranch"

B. "codecommit:Put*"

C. "codecommit:Update*"

D. "codecommit:*"

Correct Answer: A

QUESTION 11

A developer is deploying an AWS Lambda function The developer wants the ability to return to older versions of the function quickly and seamlessly. How can the developer achieve this goal with the LEAST operational overhead?

A. Use AWS OpsWorks to perform blue/green deployments.

B. Use a function alias with different versions.

C. Maintain deployment packages for older versions in Amazon S3.

D. Use AWS CodePipeline for deployments and rollbacks.

Correct Answer: B

https://stackoverflow.com/questions/50061194/downgrade-to-previous-version-of-aws-lambda
https://docs.aws.amazon.com/lambda/latest/dg/configuration-versions.html

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QUESTION 12

A developer has built a market application that stores pricing data in Amazon DynamoDB with Amazon ElastiCache in front. The prices of items in the market change frequently. Sellers have begun complaining that, after they update the price of an item, the price does not actually change in the product listing.

What could be causing this issue?

A. The cache is not being invalidated when the price of the item is changed.

B. The price of the item is being retrieved using a write-through ElastiCache cluster.

C. The DynamoDB table was provisioned with insufficient read capacity.

D. The DynamoDB table was provisioned with insufficient write capacity.

Correct Answer: A