



# Amazon-Web-Services

## Exam Questions SAA-C03

AWS Certified Solutions Architect - Associate (SAA-C03)

#### NEW QUESTION 1

A company has two applications: a sender application that sends messages with payloads to be processed and a processing application intended to receive the messages with payloads. The company wants to implement an AWS service to handle messages between the two applications. The sender application can send about 1,000 messages each hour. The messages may take up to 2 days to be processed. If the messages fail to process, they must be retained so that they do not impact the processing of any remaining messages.

Which solution meets these requirements and is the MOST operationally efficient?

- A. Set up an Amazon EC2 instance running a Redis database.
- B. Configure both applications to use the instance.
- C. Store, process, and delete the messages, respectively.
- D. Use an Amazon Kinesis data stream to receive the messages from the sender application.
- E. Integrate the processing application with the Kinesis Client Library (KCL).
- F. Integrate the sender and processor applications with an Amazon Simple Queue Service (Amazon SQS) queue.
- G. Configure a dead-letter queue to collect the messages that failed to process.
- H. Subscribe the processing application to an Amazon Simple Notification Service (Amazon SNS) topic to receive notifications to process.
- I. Integrate the sender application to write to the SNS topic.

**Answer:** C

#### Explanation:

Explanation

<https://aws.amazon.com/blogs/compute/building-loosely-coupled-scalable-c-applications-with-amazon-sqs-and->

<https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-dead-letter-queues.htm>

#### NEW QUESTION 2

A company has created an image analysis application in which users can upload photos and add photo frames to their images. The users upload images and metadata to indicate which photo frames they want to add to their images. The application uses a single Amazon EC2 instance and Amazon DynamoDB to store the metadata.

The application is becoming more popular, and the number of users is increasing. The company expects the number of concurrent users to vary significantly depending on the time of day and day of week. The company must ensure that the application can scale to meet the needs of the growing user base.

Which solution meets these requirements?

- A. Use AWS Lambda to process the photo.
- B. Store the photos and metadata in DynamoDB.
- C. Use Amazon Kinesis Data Firehose to process the photos and to store the photos and metadata.
- D. Use AWS Lambda to process the photo.
- E. Store the photos in Amazon S3. Retain DynamoDB to store the metadata.
- F. Increase the number of EC2 instances to three.
- G. Use Provisioned IOPS SSD (io2) Amazon Elastic Block Store (Amazon EBS) volumes to store the photos and metadata.

**Answer:** A

#### NEW QUESTION 3

A solutions architect must design a highly available infrastructure for a website. The website is powered by Windows web servers that run on Amazon EC2 instances. The solutions architect must implement a solution that can mitigate a large-scale DDoS attack that originates from thousands of IP addresses.

Downtime is not acceptable for the website.

Which actions should the solutions architect take to protect the website from such an attack? (Select TWO.)

- A. Use AWS Shield Advanced to stop the DDoS attack.
- B. Configure Amazon GuardDuty to automatically block the attackers.
- C. Configure the website to use Amazon CloudFront for both static and dynamic content.
- D. Use an AWS Lambda function to automatically add attacker IP addresses to VPC network ACLs.
- E. Use EC2 Spot Instances in an Auto Scaling group with a target tracking scaling policy that is set to 80% CPU utilization.

**Answer:** AC

#### NEW QUESTION 4

A company wants to manage Amazon Machine Images (AMIs). The company currently copies AMIs to the same AWS Region where the AMIs were created. The company needs to design an application that captures AWS API calls and sends alerts whenever the Amazon EC2 CreateImage API operation is called within the company's account.

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

- A. Create an AWS Lambda function to query AWS CloudTrail logs and to send an alert when a CreateImage API call is detected.
- B. Configure AWS CloudTrail with an Amazon Simple Notification Service (Amazon SNS) notification that occurs when updated logs are sent to Amazon S3. Use Amazon Athena to create a new table and to query on CreateImage when an API call is detected.
- C. Create an Amazon EventBridge (Amazon CloudWatch Events) rule for the CreateImage API call. Configure the target as an Amazon Simple Notification Service (Amazon SNS) topic to send an alert when a CreateImage API call is detected.
- D. Configure an Amazon Simple Queue Service (Amazon SQS) FIFO queue as a target for AWS CloudTrail log.
- E. Create an AWS Lambda function to send an alert to an Amazon Simple Notification Service (Amazon SNS) topic when a CreateImage API call is detected.

**Answer:** B

#### NEW QUESTION 5

A company hosts a containerized web application on a fleet of on-premises servers that process incoming requests. The number of requests is growing quickly. The on-premises servers cannot handle the increased number of requests. The company wants to move the application to AWS with minimum code changes and minimum development effort.

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

- A. Use AWS Fargate on Amazon Elastic Container Service (Amazon ECS) to run the containerized web application with Service Auto Scaling
- B. Use an Application Load Balancer to distribute the incoming requests.
- C. Use two Amazon EC2 instances to host the containerized web application
- D. Use an Application Load Balancer to distribute the incoming requests
- E. Use AWS Lambda with a new code that uses one of the supported languages
- F. Create multiple Lambda functions to support the load
- G. Use Amazon API Gateway as an entry point to the Lambda functions.
- H. Use a high performance computing (HPC) solution such as AWS ParallelCluster to establish an HPC cluster that can process the incoming requests at the appropriate scale.

**Answer:** A

#### NEW QUESTION 6

A company needs the ability to analyze the log files of its proprietary application. The logs are stored in JSON format in an Amazon S3 bucket. Queries will be simple and will run on-demand. A solutions architect needs to perform the analysis with minimal changes to the existing architecture. What should the solutions architect do to meet these requirements with the LEAST amount of operational overhead?

- A. Use Amazon Redshift to load all the content into one place and run the SQL queries as needed
- B. Use Amazon CloudWatch Logs to store the logs. Run SQL queries as needed from the Amazon CloudWatch console
- C. Use Amazon Athena directly with Amazon S3 to run the queries as needed
- D. Use AWS Glue to catalog the logs. Use a transient Apache Spark cluster on Amazon EMR to run the SQL queries as needed

**Answer:** C

#### Explanation:

Explanation

Amazon Athena can be used to query JSON in S3

#### NEW QUESTION 7

The management account has an Amazon S3 bucket that contains project reports. The company wants to limit access to this S3 bucket to only users of accounts within the organization in AWS Organizations. Which solution meets these requirements with the LEAST amount of operational overhead?

- A. Add the aws:PrincipalOrgID global condition key with a reference to the organization ID to the S3 bucket policy.
- B. Create an organizational unit (OU) for each department
- C. Add the aws:PrincipalOrgPaths global condition key to the S3 bucket policy.
- D. Use AWS CloudTrail to monitor the CreateAccount, InviteAccountToOrganization, LeaveOrganization, and RemoveAccountFromOrganization events
- E. Update the S3 bucket policy accordingly.
- F. Tag each user that needs access to the S3 bucket
- G. Add the aws:PrincipalTag global condition key to the S3 bucket policy.

**Answer:** A

#### Explanation:

Explanation

<https://aws.amazon.com/blogs/security/control-access-to-aws-resources-by-using-the-aws-organization-of-iam-principals/>

The aws:PrincipalOrgID global key provides an alternative to listing all the account IDs for all AWS accounts in an organization. For example, the following Amazon S3 bucket policy allows members of any account in the XXX organization to add an object into the examtopics bucket.

```
{"Version": "2020-09-10",
"Statement": {
  "Sid": "AllowPutObject",
  "Effect": "Allow",
  "Principal": "*",
  "Action": "s3:PutObject",
  "Resource": "arn:aws:s3:::examtopics/*",
  "Condition": { "StringEquals": {
    "aws:PrincipalOrgID": ["XXX"]
  }
}}
```

[https://docs.aws.amazon.com/IAM/latest/UserGuide/reference\\_policies\\_condition-keys.html](https://docs.aws.amazon.com/IAM/latest/UserGuide/reference_policies_condition-keys.html)

#### NEW QUESTION 8

A company observes an increase in Amazon EC2 costs in its most recent bill.

The billing team notices unwanted vertical scaling of instance types for a couple of EC2 instances.

A solutions architect needs to create a graph comparing the last 2 months of EC2 costs and perform an in-depth analysis to identify the root cause of the vertical scaling.

How should the solutions architect generate the information with the LEAST operational overhead?

- A. Use AWS Budgets to create a budget report and compare EC2 costs based on instance types
- B. Use Cost Explorer's granular filtering feature to perform an in-depth analysis of EC2 costs based on instance types
- C. Use graphs from the AWS Billing and Cost Management dashboard to compare EC2 costs based on instance types for the last 2 months
- D. Use AWS Cost and Usage Reports to create a report and send it to an Amazon S3 bucket. Use Amazon QuickSight with Amazon S3 as a source to generate an interactive graph based on instance types.

**Answer:** B

#### Explanation:

#### Explanation

AWS Cost Explorer is a tool that enables you to view and analyze your costs and usage. You can explore your usage and costs using the main graph, the Cost Explorer cost and usage reports, or the Cost Explorer RI reports. You can view data for up to the last 12 months, forecast how much you're likely to spend for the next 12 months, and get recommendations for what Reserved Instances to purchase. You can use Cost Explorer to identify areas that need further inquiry and see trends that you can use to understand your costs. <https://docs.aws.amazon.com/costmanagement/latest/userguide/ce-what-is.html>

#### NEW QUESTION 9

A company needs to review its AWS Cloud deployment to ensure that its Amazon S3 buckets do not have unauthorized configuration changes. What should a solutions architect do to accomplish this goal?

- A. Turn on AWS Config with the appropriate rules.
- B. Turn on AWS Trusted Advisor with the appropriate checks.
- C. Turn on Amazon Inspector with the appropriate assessment template.
- D. Turn on Amazon S3 server access logging
- E. Configure Amazon EventBridge (Amazon Cloud Watch Events).

**Answer:** A

#### NEW QUESTION 10

A company is launching a new application and will display application metrics on an Amazon CloudWatch dashboard. The company's product manager needs to access this dashboard periodically. The product manager does not have an AWS account. A solution architect must provide access to the product manager by following the principle of least privilege. Which solution will meet these requirements?

- A. Share the dashboard from the CloudWatch console
- B. Enter the product manager's email address, and complete the sharing step
- C. Provide a shareable link for the dashboard to the product manager.
- D. Create an IAM user specifically for the product manager
- E. Attach the CloudWatch Read Only Access managed policy to the user
- F. Share the new login credential with the product manager
- G. Share the browser URL of the correct dashboard with the product manager.
- H. Create an IAM user for the company's employees, Attach the View Only Access AWS managed policy to the IAM user
- I. Share the new login credentials with the product manager
- J. Ask the product manager to navigate to the CloudWatch console and locate the dashboard by name in the Dashboards section.
- K. Deploy a bastion server in a public subnet
- L. When the product manager requires access to the dashboard, start the server and share the RDP credential
- M. On the bastion server, ensure that the browser is configured to open the dashboard URL with cached AWS credentials that have appropriate permissions to view the dashboard.

**Answer:** A

#### NEW QUESTION 10

A company provides a Voice over Internet Protocol (VoIP) service that uses UDP connections. The service consists of Amazon EC2 instances that run in an Auto Scaling group. The company has deployments across multiple AWS Regions. The company needs to route users to the Region with the lowest latency. The company also needs automated failover between Regions. Which solution will meet these requirements?

- A. Deploy a Network Load Balancer (NLB) and an associated target group
- B. Associate the target group with the Auto Scaling group
- C. Use the NLB as an AWS Global Accelerator endpoint in each Region.
- D. Deploy an Application Load Balancer (ALB) and an associated target group
- E. Associate the target group with the Auto Scaling group
- F. Use the ALB as an AWS Global Accelerator endpoint in each Region.
- G. Deploy a Network Load Balancer (NLB) and an associated target group
- H. Associate the target group with the Auto Scaling group
- I. Create an Amazon Route 53 latency record that points to aliases for each NLB
- J. Create an AmazonCloudFront distribution that uses the latency record as an origin.
- K. Deploy an Application Load Balancer (ALB) and an associated target group
- L. Associate the target group with the Auto Scaling group
- M. Create an Amazon Route 53 weighted record that points to aliases for each ALB
- N. Deploy an AmazonCloudFront distribution that uses the weighted record as an origin.

**Answer:** C

#### NEW QUESTION 15

A company is building an application in the AWS Cloud. The application will store data in Amazon S3 buckets in two AWS Regions. The company must use an AWS Key Management Service (AWS KMS) customer managed key to encrypt all data that is stored in the S3 buckets. The data in both S3 buckets must be encrypted and decrypted with the same KMS key. The data and the key must be stored in each of the two Regions. Which solution will meet these requirements with the LEAST operational overhead?

- A. Create an S3 bucket in each Region Configure the S3 buckets to use server-side encryption with Amazon S3 managed encryption keys (SSE-S3) Configure replication between the S3 buckets.
- B. Create a customer managed multi-Region KMS key
- C. Create an S3 bucket in each Region
- D. Configure replication between the S3 buckets
- E. Configure the application to use the KMS key with client-side encryption.
- F. Create a customer managed KMS key and an S3 bucket in each Region Configure the S3 buckets to use server-side encryption with Amazon S3 managed encryption keys (SSE-S3) Configure replication between the S3 buckets.



G. Create a customer managed KMS key and an S3 bucket in each Region. Configure the S3 buckets to use server-side encryption with AWS KMS keys (SSE-KMS). Configure replication between the S3 buckets.

**Answer: C**

**Explanation:**

Explanation

From <https://docs.aws.amazon.com/kms/latest/developerguide/custom-key-store-overview.html> For most users, the default AWS KMS key store, which is protected by FIPS 140-2 validated cryptographic modules, fulfills their security requirements. There is no need to add an extra layer of maintenance responsibility or a dependency on an additional service. However, you might consider creating a custom key store if your organization has any of the following requirements: Key material cannot be stored in a shared environment. Key material must be subject to a secondary, independent audit path. The HSMs that generate and store key material must be certified at FIPS 140-2 Level 3.

<https://docs.aws.amazon.com/kms/latest/developerguide/custom-key-store-overview.html>

**NEW QUESTION 18**

A company runs a highly available image-processing application on Amazon EC2 instances in a single VPC. The EC2 instances run inside several subnets across multiple Availability Zones. The EC2 instances do not communicate with each other. However, the EC2 instances download images from Amazon S3 and upload images to Amazon S3 through a single NAT gateway. The company is concerned about data transfer charges. What is the MOST cost-effective way for the company to avoid Regional data transfer charges?

- A. Launch the NAT gateway in each Availability Zone
- B. Replace the NAT gateway with a NAT instance
- C. Deploy a gateway VPC endpoint for Amazon S3
- D. Provision an EC2 Dedicated Host to run the EC2 instances

**Answer: C**

**NEW QUESTION 22**

A company wants to migrate its on-premises application to AWS. The application produces output files that vary in size from tens of gigabytes to hundreds of terabytes. The application data must be stored in a standard file system structure.

The company wants a solution that scales automatically, is highly available, and requires minimum operational overhead.

Which solution will meet these requirements?

- A. Migrate the application to run as containers on Amazon Elastic Container Service (Amazon ECS). Use Amazon S3 for storage.
- B. Migrate the application to run as containers on Amazon Elastic Kubernetes Service (Amazon EKS). Use Amazon Elastic Block Store (Amazon EBS) for storage.
- C. Migrate the application to Amazon EC2 instances in a Multi-AZ Auto Scaling group.
- D. Use Amazon Elastic File System (Amazon EFS) for storage.
- E. Migrate the application to Amazon EC2 instances in a Multi-AZ Auto Scaling group.
- F. Use Amazon Elastic Block Store (Amazon EBS) for storage.

**Answer: C**

**NEW QUESTION 26**

A company is preparing to store confidential data in Amazon S3. For compliance reasons, the data must be encrypted at rest. Encryption key usage must be logged for auditing purposes. Keys must be rotated every year.

Which solution meets these requirements and is the MOST operationally efficient?

- A. Server-side encryption with customer-provided keys (SSE-C)
- B. Server-side encryption with Amazon S3 managed keys (SSE-S3)
- C. Server-side encryption with AWS KMS (SSE-KMS) customer master keys (CMKs) with manual rotation
- D. Server-side encryption with AWS KMS (SSE-KMS) customer master keys (CMKs) with automatic rotation

**Answer: D**

**Explanation:**

<https://docs.aws.amazon.com/kms/latest/developerguide/rotate-keys.html>

When you enable automatic key rotation for a customer managed key, AWS KMS generates new cryptographic material for the KMS key every year. AWS KMS also saves the KMS key's older cryptographic material in perpetuity so it can be used to decrypt data that the KMS key encrypted.

Key rotation in AWS KMS is a cryptographic best practice that is designed to be transparent and easy to use.

AWS KMS supports optional automatic key rotation only for customer managed CMKs. Enable and disable key rotation. Automatic key rotation is disabled by default on customer managed CMKs. When you enable (or re-enable) key rotation, AWS KMS automatically rotates the CMK 365 days after the enable date and every 365 days thereafter.

**NEW QUESTION 28**

A company collects data from thousands of remote devices by using a RESTful web services application that runs on an Amazon EC2 instance. The EC2 instance receives the raw data, transforms the raw data, and stores all the data in an Amazon S3 bucket. The number of remote devices will increase into the millions soon. The company needs a highly scalable solution that minimizes operational overhead.

Which combination of steps should a solutions architect take to meet these requirements? (Select TWO.)

- A. Use AWS Glue to process the raw data in Amazon S3.
- B. Use Amazon Route 53 to route traffic to different EC2 instances.
- C. Add more EC2 instances to accommodate the increasing amount of incoming data.
- D. Send the raw data to Amazon Simple Queue Service (Amazon SQS). Use EC2 instances to process the data.
- E. Use Amazon API Gateway to send the raw data to an Amazon Kinesis data stream.
- F. Configure Amazon Kinesis Data Firehose to use the data stream as a source to deliver the data to Amazon S3.

**Answer: BE**

#### NEW QUESTION 30

A company hosts its product information webpages on AWS. The existing solution uses multiple Amazon EC2 instances behind an Application Load Balancer in an Auto Scaling group. The website also uses a custom DNS name and communicates with HTTPS only using a dedicated SSL certificate. The company is planning a new product launch and wants to be sure that users from around the world have the best possible experience on the new website. What should a solutions architect do to meet these requirements?

- A. Redesign the application to use Amazon CloudFront
- B. Redesign the application to use AWS Elastic Beanstalk
- C. Redesign the application to use a Network Load Balancer.
- D. Redesign the application to use Amazon S3 static website hosting

**Answer:** A

#### Explanation:

as CloudFront can help provide the best experience for global users. CloudFront integrates seamlessly with ALB and provides an option to use custom DNS and SSL certs.

#### NEW QUESTION 31

A company is planning to build a high performance computing (HPC) workload as a service solution that is hosted on AWS. A group of 16 Amazon EC2 Linux instances requires the lowest possible latency for node-to-node communication. The instances also need a shared block device volume for high-performing storage. Which solution will meet these requirements?

- A. Use a duster placement group
- B. Attach a single Provisioned IOPS SSD Amazon Elastic Block Store (Amazon EBS) volume to all the instances by using Amazon EBS Multi-Attach
- C. Use a cluster placement group
- D. Create shared file systems across the instances by using Amazon Elastic File System (Amazon EFS)
- E. Use a partition placement group
- F. Create shared tile systems across the instances by using Amazon Elastic File System (Amazon EFS).
- G. Use a spread placement group
- H. Attach a single Provisioned IOPS SSD Amazon Elastic Block Store (Amazon EBS) volume to all the instances by using Amazon EBS Multi-Attach

**Answer:** A

#### NEW QUESTION 33

A gaming company is moving its public scoreboard from a data center to the AWS Cloud. The company uses Amazon EC2 Windows Server instances behind an Application Load Balancer to host its dynamic application. The company needs a highly available storage solution for the application. The application consists of static files and dynamic server-side code. Which combination of steps should a solutions architect take to meet these requirements? (Select TWO.)

- A. Store the static files on Amazon S3. Use Amazon
- B. CloudFront to cache objects at the edge.
- C. Store the static files on Amazon S3. Use Amazon ElastiCache to cache objects at the edge.
- D. Store the server-side code on Amazon Elastic File System (Amazon EFS). Mount the EFS volume on each EC2 instance to share the files.
- E. Store the server-side code on Amazon FSx for Windows File Server
- F. Mount the FSx for Windows File Server volume on each EC2 instance to share the files.
- G. Store the server-side code on a General Purpose SSD (gp2) Amazon Elastic Block Store (Amazon EBS) volume
- H. Mount the EBS volume on each EC2 instance to share the files.

**Answer:** AE

#### NEW QUESTION 36

A company is storing sensitive user information in an Amazon S3 bucket. The company wants to provide secure access to this bucket from the application tier running on Amazon EC2 instances inside a VPC. Which combination of steps should a solutions architect take to accomplish this? (Select TWO.)

- A. Configure a VPC gateway endpoint (or Amazon S3 within the VPC)
- B. Create a bucket policy to make the objects in the S3 bucket public
- C. Create a bucket policy that limits access to only the application tier running in the VPC
- D. Create an IAM user with an S3 access policy and copy the IAM credentials to the EC2 instance
- E. Create a NAT instance and have the EC2 instances use the NAT instance to access the S3 bucket

**Answer:** BD

#### NEW QUESTION 39

An image hosting company uploads its large assets to Amazon S3 Standard buckets. The company uses multipart upload in parallel by using S3 APIs and overwrites if the same object is uploaded again. For the first 30 days after upload, the objects will be accessed frequently. The objects will be used less frequently after 30 days, but the access patterns for each object will be inconsistent. The company must optimize its S3 storage costs while maintaining high availability and resiliency of stored assets. Which combination of actions should a solutions architect recommend to meet these requirements? (Select TWO.)

- A. Move assets to S3 Intelligent-Tiering after 30 days.
- B. Configure an S3 Lifecycle policy to clean up incomplete multipart uploads.
- C. Configure an S3 Lifecycle policy to clean up expired object delete markers.
- D. Move assets to S3 Standard-Infrequent Access (S3 Standard-IA) after 30 days.
- E. Move assets to S3 One Zone-Infrequent Access (S3 One Zone-IA) after 30 days.

**Answer:** CD

#### NEW QUESTION 42

A company has an on-premises MySQL database that handles transactional data. The company is migrating the database to the AWS Cloud. The migrated database must maintain compatibility with the company's applications that use the database. The migrated database also must scale automatically during periods of increased demand.

Which migration solution will meet these requirements?

- A. Use native MySQL tools to migrate the database to Amazon RDS for MySQL. Configure elastic storage scaling.
- B. Migrate the database to Amazon Redshift by using the mysqldump utility. Turn on Auto Scaling for the Amazon Redshift cluster.
- C. Use AWS Database Migration Service (AWS DMS) to migrate the database to Amazon Aurora. Turn on Aurora Auto Scaling.
- D. Use AWS Database Migration Service (AWS DMS) to migrate the database to Amazon DynamoDB. Configure an Auto Scaling policy.

**Answer: C**

#### NEW QUESTION 47

A solution architect is creating a new Amazon CloudFront distribution for an application. Some of the information submitted by users is sensitive. The application uses HTTPS but needs another layer of security. The sensitive information should be protected throughout the entire application stack. End access to the information should be restricted to certain applications.

Which action should the solutions architect take?

- A. Configure a CloudFront signed URL.
- B. Configure a CloudFront signed cookie.
- C. Configure a CloudFront field-level encryption profile.
- D. Configure CloudFront and set the Origin Protocol Policy setting to HTTPS Only for the Viewer Protocol Policy.

**Answer: C**

#### NEW QUESTION 48

A company has a three-tier web application that is deployed on AWS. The web servers are deployed in a public subnet in a VPC. The application servers and database servers are deployed in private subnets in the same VPC. The company has deployed a third-party virtual firewall appliance from AWS Marketplace in an inspection VPC. The appliance is configured with an IP interface that can accept IP packets.

A solutions architect needs to integrate the web application with the appliance to inspect all traffic to the application before the traffic reaches the web server.

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

- A. Create a Network Load Balancer in the public subnet of the application's VPC to route the traffic to the appliance for packet inspection.
- B. Create an Application Load Balancer in the public subnet of the application's VPC to route the traffic to the appliance for packet inspection.
- C. Deploy a transit gateway in the inspection VPC. Configure route tables to route the incoming packets through the transit gateway.
- D. Deploy a Gateway Load Balancer in the inspection VPC. Create a Gateway Load Balancer endpoint to receive the incoming packets and forward the packets to the appliance.

**Answer: D**

#### NEW QUESTION 50

A company's website handles millions of requests each day and the number of requests continues to increase. A solutions architect needs to improve the response time of the web application. The solutions architect determines that the application needs to decrease latency when retrieving product details from the Amazon DynamoDB table.

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

- A. Set up a DynamoDB Accelerator (DAX) cluster. Route all read requests through DAX.
- B. Set up Amazon ElastiCache for Redis between the DynamoDB table and the web application. Route all read requests through Redis.
- C. Set up Amazon ElastiCache for Memcached between the DynamoDB table and the web application. Route all read requests through Memcached.
- D. Set up Amazon DynamoDB streams on the table and have AWS Lambda read from the table and populate Amazon ElastiCache. Route all read requests through ElastiCache.

**Answer: A**

#### NEW QUESTION 51

A gaming company has a web application that displays scores. The application runs on Amazon EC2 instances behind an Application Load Balancer. The application stores data in an Amazon RDS for MySQL database. Users are starting to experience long delays and interruptions that are caused by database read performance. The company wants to improve the user experience while minimizing changes to the application's architecture.

What should a solutions architect do to meet these requirements?

- A. Use Amazon ElastiCache in front of the database.
- B. Use RDS Proxy between the application and the database.
- C. Migrate the application from EC2 instances to AWS Lambda.
- D. Migrate the database from Amazon RDS for MySQL to Amazon DynamoDB.

**Answer: C**

#### NEW QUESTION 55

A company is using a SQL database to store movie data that is publicly accessible. The database runs on an Amazon RDS Single-AZ DB instance. A script runs queries at random intervals each day to record the number of new movies that have been added to the database. The script must report a final total during business hours. The company's development team notices that the database performance is inadequate for development tasks when the script is running. A solutions architect must recommend a solution to resolve this issue. Which solution will meet this requirement with the LEAST operational overhead?

- A. Modify the DB instance to be a Multi-AZ deployment.
- B. Create a read replica of the database. Configure the script to query only the read replica.
- C. Instruct the development team to manually export the entries in the database at the end of each day.



D. Use Amazon ElastiCache to cache the common queries that the script runs against the database

**Answer:** B

#### NEW QUESTION 58

A company needs to store data in Amazon S3 and must prevent the data from being changed. The company wants new objects that are uploaded to Amazon S3 to remain unchangeable for a nonspecific amount of time until the company decides to modify the objects. Only specific users in the company's AWS account can have the ability to delete the objects. What should a solutions architect do to meet these requirements?

- A. Create an S3 Glacier vault Apply a write-once, read-many (WORM) vault lock policy to the objects
- B. Create an S3 bucket with S3 Object Lock enabled Enable versioning Set a retention period of 100 years Use governance mode as the S3 bucket's default retention mode for new objects
- C. Create an S3 bucket Use AWS CloudTrail to track any S3 API events that modify the objects Upon notification, restore the modified objects from any backup versions that the company has
- D. Create an S3 bucket with S3 Object Lock enabled Enable versioning Add a legal hold to the objects Add the s3 PutObjectLegalHold permission to the IAM policies of users who need to delete the objects

**Answer:** D

#### NEW QUESTION 61

A company has a stateless asynchronous application that runs in an Apache Hadoop cluster The application is invoked on demand to run extract, transform and load (ETL) jobs several times a day

A solutions architect needs to migrate this application to the AWS Cloud by designing an Amazon EMR cluster for the workload. The cluster must be available immediately to process jobs.

Which implementation meets these requirements MOST cost-effectively?

- A. Use zonal Reserved Instances for the master nodes and the slave nodes Use a Spot Fleet for the task nodes
- B. Use zonal Reserved Instances for the master nodes Use Spot instances for the core nodes and the task nodes
- C. Use regional Reserved Instances for the master nodes Use a Spot Fleet for the core nodes and the task nodes
- D. Use regional Reserved Instances for the master node
- E. Use On-Demand Capacity Reservations for the core nodes and the task nodes.

**Answer:** A

#### NEW QUESTION 64

A company's web application consists of an Amazon API Gateway API in front of an AWS Lambda function and an Amazon DynamoDB database. The Lambda function

handles the business logic, and the DynamoDB table hosts the data. The application uses Amazon Cognito user pools to identify the individual users of the application. A solutions architect needs to update the application so that only users who have a subscription can access premium content.

- A. Enable API caching and throttling on the API Gateway API
- B. Set up AWS WAF on the API Gateway API Create a rule to filter users who have a subscription
- C. Apply fine-grained IAM permissions to the premium content in the DynamoDB table
- D. Implement API usage plans and API keys to limit the access of users who do not have a subscription.

**Answer:** C

#### NEW QUESTION 68

A company is building an ecommerce application and needs to store sensitive customer information. The company needs to give customers the ability to complete purchase transactions on the website. The company also needs to ensure that sensitive customer data is protected, even from database administrators.

Which solution meets these requirements?

- A. Store sensitive data in an Amazon Elastic Block Store (Amazon EBS) volume
- B. Use EBS encryption to encrypt the data
- C. Use an IAM instance role to restrict access.
- D. Store sensitive data in Amazon RDS for MySQL
- E. Use AWS Key Management Service (AWS KMS) client-side encryption to encrypt the data.
- F. Store sensitive data in Amazon S3. Use AWS Key Management Service (AWS KMS) service-side encryption the data
- G. Use S3 bucket policies to restrict access.
- H. Store sensitive data in Amazon FSx for Windows Server
- I. Mount the file share on application servers. Use Windows file permissions to restrict access.

**Answer:** C

#### NEW QUESTION 69

A company has on-premises servers that run a relational database The database serves high-read traffic for users in different locations The company wants to migrate the database to AWS with the least amount of effort The database solution must support high availability and must not affect the company's current traffic flow

Which solution meets these requirements?

- A. Use a database in Amazon RDS with Multi-AZ and at least one read replica.
- B. Use a database in Amazon RDS with Multi-AZ and at least one standby replica.
- C. Use databases that are hosted on multiple Amazon EC2 instances in different AWS Regions.
- D. Use databases that are hosted on Amazon EC2 instances behind an Application Load Balancer in different Availability Zones

**Answer:** A

**Explanation:**



<https://aws.amazon.com/blogs/database/implementing-a-disaster-recovery-strategy-with-amazon-rds/>

#### NEW QUESTION 72

A company uses an Amazon Aurora PostgreSQL DB cluster in the us-east-1 Region. The company wants to develop a disaster recovery plan to recover the database in the us-west-1 Region. The company has a recovery time objective (RTO) of 5 minutes and has a recovery point objective (RPO) of 1 minute.

What should a solutions architect do to meet these requirements?

- A. Create a read replica in us-west-1. Set the DB cluster to automatically fail over to the read replica if the primary instance is not responding.
- B. Create an Aurora global database. Set us-west-1 as the secondary Region. Update connections to use the writer and reader endpoints as appropriate.
- C. Set up a second Aurora DB cluster in us-west-1. Use logical replication to keep the databases synchronized. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to change the database endpoint if the primary DB cluster does not respond.
- D. Use Aurora automated snapshots to store data in an Amazon S3 bucket. Enable S3 Versioning.
- E. Configure S3 Cross-Region Replication to us-west-1. Create a second Aurora DB cluster in us-west-1. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to restore the snapshot if the primary DB cluster does not respond.

**Answer: B**

#### NEW QUESTION 75

A company has a business-critical application that runs on Amazon EC2 instances. The application stores data in an Amazon DynamoDB table. The company must be able to revert the table to any point within the last 24 hours. Which solution meets these requirements with the LEAST operational overhead?

- A. Configure point-in-time recovery for the table.
- B. Use AWS Backup for the table.
- C. Use an AWS Lambda function to make an on-demand backup of the table every hour.
- D. Turn on streams on the table to capture a log of all changes to the table in the last 24 hours.
- E. Store a copy of the stream in an Amazon S3 bucket.

**Answer: A**

#### NEW QUESTION 77

A company has an application that loads documents into an Amazon S3 bucket and converts the documents into another format. The application stores the converted documents in another S3 bucket and saves the document name and URLs in an Amazon DynamoDB table. The DynamoDB entries are used during subsequent days to access the documents. The company uses a DynamoDB Accelerator (DAX) cluster in front of the table. Recently, traffic to the application has increased. Document processing tasks are timing out during the scheduled DAX maintenance window. A solutions architect must ensure that the documents continue to load during the maintenance window. What should the solutions architect do to accomplish this goal?

- A. Modify the application to write to the DAX cluster. Configure the DAX cluster to write to the DynamoDB table when the maintenance window is complete.
- B. Enable Amazon DynamoDB Streams for the DynamoDB table.
- C. Modify the application to write to the stream. Configure the stream to load the data when the maintenance window is complete.
- D. Convert the application to an AWS Lambda function. Configure the Lambda function runtime to be longer than the maintenance window. Create an Amazon CloudWatch alarm to monitor Lambda timeouts.
- E. Modify the application to write the document name and URLs to an Amazon Simple Queue Service (Amazon SQS) queue. Create an AWS Lambda function to read the SQS queue and write to DynamoDB.

**Answer: C**

#### NEW QUESTION 82

A hospital wants to create digital copies for its large collection of historical written records. The hospital will continue to add hundreds of new documents each day. The hospital's data team will scan the documents and will upload the documents to the AWS Cloud. A solutions architect must implement a solution to analyze the documents: extract the medical information, and store the documents so that an application can run SQL queries on the data. The solution must maximize scalability and operational efficiency. Which combination of steps should the solutions architect take to meet these requirements? (Select TWO.)

- A. Write the document information to an Amazon EC2 instance that runs a MySQL database.
- B. Write the document information to an Amazon S3 bucket. Use Amazon Athena to query the data.
- C. Create an Auto Scaling group of Amazon EC2 instances to run a custom application that processes the scanned files and extracts the medical information.
- D. Create an AWS Lambda function that runs when new documents are uploaded. Use Amazon Rekognition to convert the documents to raw text. Use Amazon Transcribe Medical to detect and extract relevant medical information from the text.
- E. Create an AWS Lambda function that runs when new documents are uploaded. Use Amazon Textract to convert the documents to raw text. Use Amazon Comprehend Medical to detect and extract relevant medical information from the text.

**Answer: BE**

#### NEW QUESTION 86

A company's reporting system delivers hundreds of CSV files to an Amazon S3 bucket each day. The company must convert these files to Apache Parquet format and must store the files in a transformed data bucket. Which solution will meet these requirements with the LEAST development effort?

- A. Create an Amazon EMR cluster with Apache Spark installed. Write a Spark application to transform the data. Use EMR File System (EMRFS) to write files to the transformed data bucket.
- B. Create an AWS Glue crawler to discover the data. Create an AWS Glue extract, transform, and load (ETL) job to transform the data. Specify the transformed data bucket in the output step.
- C. Use AWS Batch to create a job definition with Bash syntax to transform the data and output the data to the transformed data bucket. Use the job definition to submit a job. Specify an array job as the job type.
- D. Create an AWS Lambda function to transform the data and output the data to the transformed data bucket.
- E. Configure an event notification for the S3 bucket.

F. Specify the Lambda function as the destination for the event notification.

**Answer:** D

#### NEW QUESTION 88

An ecommerce company has an order-processing application that uses Amazon API Gateway and an AWS Lambda function. The application stores data in an Amazon Aurora PostgreSQL database. During a recent sales event, a sudden surge in customer orders occurred. Some customers experienced timeouts and the application did not process the orders of those customers. A solutions architect determined that the CPU utilization and memory utilization were high on the database because of a large number of open connections. The solutions architect needs to prevent the timeout errors while making the least possible changes to the application.

Which solution will meet these requirements?

- A. Configure provisioned concurrency for the Lambda function. Modify the database to be a global database in multiple AWS Regions.
- B. Use Amazon RDS Proxy to create a proxy for the database. Modify the Lambda function to use the RDS Proxy endpoint instead of the database endpoint.
- C. Create a read replica for the database in a different AWS Region. Use query string parameters in API Gateway to route traffic to the read replica.
- D. Migrate the data from Aurora PostgreSQL to Amazon DynamoDB by using AWS Database Migration Service (AWS DMS). Modify the Lambda function to use the DynamoDB table.

**Answer:** C

#### NEW QUESTION 90

A company is running several business applications in three separate VPCs within the us-east-1 Region. The applications must be able to communicate between VPCs. The applications also must be able to consistently send hundreds of gigabytes of data each day to a latency-sensitive application that runs in a single on-premises data center.

A solutions architect needs to design a network connectivity solution that maximizes cost-effectiveness. Which solution meets those requirements?

- A. Configure three AWS Site-to-Site VPN connections from the data center to AWS. Establish connectivity by configuring one VPN connection for each VPC.
- B. Launch a third-party virtual network appliance in each VPC. Establish an IPsec VPN tunnel between the data center and each virtual appliance.
- C. Set up three AWS Direct Connect connections from the data center to a Direct Connect gateway in us-east-1. Establish connectivity by configuring each VPC to use one of the Direct Connect connections.
- D. Set up one AWS Direct Connect connection from the data center to AWS.
- E. Create a transit gateway, and attach each VPC to the transit gateway.
- F. Establish connectivity between the Direct Connect connection and the transit gateway.

**Answer:** C

#### NEW QUESTION 94

A company is running a publicly accessible serverless application that uses Amazon API Gateway and AWS Lambda. The application's traffic recently spiked due to fraudulent requests from botnets.

Which steps should a solutions architect take to block requests from unauthorized users? (Select TWO.)

- A. Create a usage plan with an API key that is shared with genuine users only.
- B. Integrate logic within the Lambda function to ignore the requests from fraudulent IP addresses.
- C. Implement an AWS WAF rule to target malicious requests and trigger actions to filter them out.
- D. Convert the existing public API to a private API. Update the DNS records to redirect users to the new API endpoint.
- E. Create an IAM role for each user attempting to access the API. A user will assume the role when making the API call.

**Answer:** CD

#### NEW QUESTION 95

A company is developing a new machine learning (ML) model solution on AWS. The models are developed as independent microservices that fetch approximately 1GB of model data from Amazon S3 at startup and load the data into memory. Users access the models through an asynchronous API. Users can send a request or a batch of requests and specify where the results should be sent.

The company provides models to hundreds of users. The usage patterns for the models are irregular. Some models could be unused for days or weeks. Other models could receive batches of thousands of requests at a time.

Which design should a solutions architect recommend to meet these requirements?

- A. Direct the requests from the API to a Network Load Balancer (NLB). Deploy the models as AWS Lambda functions that are invoked by the NLB.
- B. Direct the requests from the API to an Application Load Balancer (ALB). Deploy the models as Amazon Elastic Container Service (Amazon ECS) services that read from an Amazon Simple Queue Service (Amazon SQS) queue. Use AWS App Mesh to scale the instances of the ECS cluster based on the SQS queue size.
- C. Direct the requests from the API into an Amazon Simple Queue Service (Amazon SQS) queue. Deploy the models as AWS Lambda functions that are invoked by SQS events. Use AWS Auto Scaling to increase the number of vCPUs for the Lambda functions based on the SQS queue size.
- D. Direct the requests from the API into an Amazon Simple Queue Service (Amazon SQS) queue. Deploy the models as Amazon Elastic Container Service (Amazon ECS) services that read from the queue. Enable AWS Auto Scaling on Amazon ECS for both the cluster and copies of the service based on the queue size.

**Answer:** C

#### NEW QUESTION 98

A company is deploying a web portal. The company wants to ensure that only the web portion of the application is publicly accessible. To accomplish this, the VPC was designed with two public subnets and two private subnets. The application will run on several Amazon EC2 instances in an Auto Scaling group. SSL termination must be offloaded from the EC2 instances.

What should a solutions architect do to ensure these requirements are met? Configure a Network Load Balancer in the public subnets. Configure the Auto Scaling

- A. group in the private subnets and associate it with an Application Load Balancer. Configure a Network Load Balancer in the public subnet.
- B. Configure the Auto Scaling group in the public subnets and associate it with an Application Load Balancer.
- C. group in the public subnets and associate it with an Application Load Balancer.
- D. Configure an Application Load Balancer in the public subnet.

- E. Configure the Auto Scaling group in the private subnets and associate it with the Application Load
- F. Balancer, Configure an Application Load Balancer in the private subnet
- G. Configure the Auto Scaling group in the private subnets and associate it with the Application Load Balancer.

**Answer:** C

#### NEW QUESTION 101

A company hosts its web application on AWS using seven Amazon EC2 instances. The company requires that the IP addresses of all healthy EC2 instances be returned in response to DNS queries.  
Which policy should be used to meet this requirement?

- A. Simple routing policy
- B. Latency routing policy
- C. Multivalue routing policy
- D. Geolocation routing policy

**Answer:** C

#### Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/multivalue-versus-simple-policies/>

"Use a multivalue answer routing policy to help distribute DNS responses across multiple resources. For example, use multivalue answer routing when you want to associate your routing records with a Route 53 health check."

<https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html#routing-policy-multivalue>

#### NEW QUESTION 106

A company is launching a new application and will display application metrics on an Amazon CloudWatch dashboard. The company's product manager needs to access this dashboard periodically. The product manager does not have an AWS account. A solution architect must provide access to the product manager by following the principle of least privilege.  
Which solution will meet these requirements?

- A. Share the dashboard from the CloudWatch consol
- B. Enter the product manager's email address, and complete the sharing step
- C. Provide a shareable link for the dashboard to the product manager.
- D. Create an IAM user specifically for the product manage
- E. Attach the CloudWatch Read Only Access managed policy to the use
- F. Share the new login credential with the product manage
- G. Share the browser URL of the correct dashboard with the product manager.
- H. Create an IAM user for the company's employees, Attach the View Only Access AWS managed policy to the IAM use
- I. Share the new login credentials with the product manage
- J. Ask the product manager to navigate to the CloudWatch console and locate the dashboard by name in the Dashboards section.
- K. Deploy a bastion server in a public subne
- L. When the product manager requires access to the dashboard, start the server and share the RDP credential
- M. On the bastion server, ensure that the browser is configured to open the dashboard URL with cached AWS credentials that have appropriate permissions to view the dashboard.

**Answer:** A

#### NEW QUESTION 109

A solutions architect is designing a customer-facing application for a company. The application's database will have a clearly defined access pattern throughout the year and will have a variable number of reads and writes that depend on the time of year. The company must retain audit records for the database for 7 days. The recovery point objective (RPO) must be less than 5 hours. Which solution meets these requirements?

- A. Use Amazon DynamoDB with auto scaling Use on-demand backups and Amazon DynamoDB Streams
- B. Use Amazon Redshif
- C. Configure concurrency scalin
- D. Activate audit login
- E. Perform database snapshots every 4 hours.
- F. Use Amazon RDS with Provisioned IOPS Activate the database auditing parameter Perform database snapshots every 5 hours
- G. Use Amazon Aurora MySQL with auto scalin
- H. Activate the database auditing parameter

**Answer:** B

#### NEW QUESTION 110

A company wants to migrate its existing on-premises monolithic application to AWS.

The company wants to keep as much of the front- end code and the backend code as possible. However, the company wants to break the application into smaller applications. A different team will manage each application. The company needs a highly scalable solution that minimizes operational overhead.  
Which solution will meet these requirements?

- A. Host the application on AWS Lambda Integrate the application with Amazon API Gateway.
- B. Host the application with AWS Amplif
- C. Connect the application to an Amazon API Gateway API that is integrated with AWS Lambda.
- D. Host the application on Amazon EC2 instance
- E. Set up an Application Load Balancer with EC2 instances in an Auto Scaling group as targets.
- F. Host the application on Amazon Elastic Container Service (Amazon ECS) Set up an Application Load Balancer with Amazon ECS as the target.

**Answer:** C



#### NEW QUESTION 111

A company runs us two-tier ecommerce website on AWS The web tier consists of a load balancer that sends traffic to Amazon EC2 instances The database tier uses an Amazon RDS D8 instance The EC2 instances and the ROS DB instance should not be exposed to the public internet The EC2 instances require internet access to complete payment processing of orders through a third-party web service The application must be highly available Which combination of configuration options will meet these requirements? (Select TWO.)

- A. Use an Auto Scaling group to launch the EC2 Instances in private subnets Deploy an RDS Multi-AZ DB instance in private subnets
- B. Configure a VPC with two private subnets and two NAT gateways across two Availability Zones Deploy an Application Load Balancer in the private subnets
- C. Use an Auto Scaling group to launch the EC2 instances in public subnets across two Availability Zones Deploy an RDS Multi-AZ DB instance in private subnets
- D. Configure a VPC with one public subnet, one private subnet, and two NAT gateways across two Availability Zones Deploy an Application Load Balancer in the public subnet
- E. Configure a VPC with two public subnets, two private subnets, and two NAT gateways across two Availability Zones Deploy an Application Load Balancer in the public subnets

**Answer:** AE

#### NEW QUESTION 114

A company needs to develop a repeatable solution to process time-ordered information from websites around the world. The company collects the data from the websites by using Amazon Kinesis Data Streams and stores the data in Amazon S3. The processing logic needs to collect events and handle data from the last 5 years.

The processing logic also must generate results m an S3 bucket so that a business intelligence application can analyze and compare the results. The processing must be repeated multiple times.

What should a solutions architect do to meet these requirements?

- A. Use Amazon S3 to collect event
- B. Create an AWS Lambda function to process the event
- C. Create different Lambda functions to handle repeated processing.
- D. Use Amazon EventBridge (Amazon CloudWatch Events) to collect events Set AWS Lambda as an event target.Use EventBridge (CloudWatch Events) to create an archive for the events and to replay the events.
- E. Use an Amazon Simple Queue Service (Amazon SQS) FIFO queue to collect event
- F. Process the events by using Amazon EC2. Use AWS Step Function to create an archive for the events and to replay the events
- G. Use Amazon Managed Streaming for Apache Kafka (Amazon MSK) to collect event
- H. Process the events by using Amazon Elastic Kubemetes Service (Amazon EKS) Use Amazon MSK to create an archive for the events and to replay the events.

**Answer:** C

#### NEW QUESTION 117

A company uses a legacy application to produce data in CSV format The legacy application stores the output data In Amazon S3 The company is deploying a new commercial off-the-shelf (COTS) application that can perform complex SQL queries to analyze data that is stored Amazon Redshift and Amazon S3 only However the COTS application cannot process the csv files that the legacy application produces The company cannot update the legacy application to produce data in another format The company needs to implement a solution so that the COTS application can use the data that the legacy applicator produces.

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

- A. Create a AWS Glue extract, transform, and load (ETL) job that runs on a schedul
- B. Configure the ETL job to process the .csv files and store the processed data in Amazon Redshit.
- C. Develop a Python script that runs on Amazon EC2 instances to convert th
- D. csv files to sql files invoke the Python script on cron schedule to store the output files in Amazon S3.
- E. Create an AWS Lambda function and an Amazon DynamoDB tabl
- F. Use an S3 event to invoke the Lambda functio
- G. Configure the Lambda function to perform an extract transform, and load (ETL) job to process the .csv files and store the processed data in the DynamoDB table.
- H. Use Amazon EventBridge (Amazon CloudWatch Events) to launch an Amazon EMR cluster on a weekly schedul
- I. Configure the EMR cluster to perform an extract, tractform, and load (ETL) job to process the .csv files and store the processed data in an Amazon Redshift table.

**Answer:** C

#### NEW QUESTION 118

To meet security requirements, a company needs to encrypt all of its application data in transit while communicating with an Amazon RDS MySQL DB instance A recent security audit revealed that encryption al rest is enabled using AWS Key Management Service (AWS KMS). but data in transit Is not enabled

What should a solutions architect do to satisfy the security requirements?

- A. Enable IAM database authentication on the database.
- B. Provide self-signed certificates, Use the certificates in all connections to the RDS instance
- C. Take a snapshot of the RDS instance Restore the snapshot to a new instance with encryption enabled
- D. Download AWS-provided root certificates Provide the certificates in all connections to the RDS instance

**Answer:** C

#### Explanation:

<https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.Encryption.html#Overview.Encryption>.

#### NEW QUESTION 119

A company wants an AWS Lambda function to call a third-party API and save the response to a private Amazon ROS DB instance in the same private subnet What should a solutions architect do to meet these requirements?

- A. Create a NAT gatewa
- B. In the route table for the private subnet, add a route to the NAT gatewa
- C. Attach the Lambda function to the private subne



- D. Create an IAM role that includes the AWSLambdaBasicExecutionRole permissions policy Attach the role to the Lambda function
- E. Create an internet gateway In the route table for the private subnet, add a route to the internet gateway Attach the Lambda function to the private subnet Create an IAM role that includes the AWSLambdaBasicExecutionRole permissions policy Attach the role to the Lambda function
- F. Create a NAT gateway In the route table for the private subnet add a route to the NAT gateway Attach the Lambda function to the private subnet
- G. Create an IAM role that includes the AWS LambdaVPCAccessExecutionRole permissions policy Attach the role to the Lambda function
- H. Create an internet gateway in the route table for the private subnet, add a route to the internet gateway Attach the Lambda function to the private subnet Create an IAM role that includes the AWSLambdaVPCAccessExecutionRole permissions policy Attach the role to the Lambda function

**Answer: B**

#### NEW QUESTION 121

A company runs its ecommerce application on AWS. Every new order is published as a message in a RabbitMQ queue that runs on an Amazon EC2 instance in a single Availability Zone. These messages are processed by a different application that runs on a separate EC2 instance. This application stores the details in a PostgreSQL database on another EC2 instance. All the EC2 instances are in the same Availability Zone.

The company needs to redesign its architecture to provide the highest availability with the least operational overhead.

What should a solutions architect do to meet these requirements?

- A. Migrate the queue to a redundant pair (active/standby) of RabbitMQ instances on Amazon M
- B. Create a Multi-AZ Auto Scaling group (or EC2 instances that host the applicatio
- C. Create another Multi-AZ Auto Scaling group for EC2 instances that host the PostgreSQL database.
- D. Migrate the queue to a redundant pair (active/standby) of RabbitMQ instances on Amazon M
- E. Create a Multi-AZ Auto Scaling group for EC2 instances that host the applicatio
- F. Migrate the database to run on a Multi-AZ deployment of Amazon RDS for PostgreSQL.
- G. Create a Multi-AZ Auto Scaling group for EC2 instances that host the RabbitMQ queu
- H. Create another Multi-AZ Auto Scaling group for EC2 instances that host the applicatio
- I. Migrate the database to run on a Multi-AZ deployment of Amazon RDS for PostgreSQL.
- J. Create a Multi-AZ Auto Scaling group for EC2 instances that host the RabbitMQ queu
- K. Create another Multi-AZ Auto Scaling group for EC2 instances that host the applicatio
- L. Create a third Multi-AZ Auto Scaling group for EC2 instances that host the PostgreSQL database.

**Answer: C**

#### NEW QUESTION 125

A company that primarily runs its application servers on premises has decided to migrate to AWS. The company wants to minimize its need to scale its Internet Small Computer Systems Interface (iSCSI) storage on premises. The company wants only its recently accessed data to remain stored locally

Which AWS solution should the company use to meet these requirements?

- A. Amazon S3 File Gateway
- B. AWS Storage Gateway Tape Gateway
- C. AWS Storage Gateway Volume Gateway stored volumes
- D. AWS Storage Gateway Volume Gateway cached volumes

**Answer: D**

#### NEW QUESTION 130

A company wants to run its critical applications in containers to meet requirements for scalability and availability. The company prefers to focus on maintenance of the critical applications. The company does not want to be responsible for provisioning and managing the underlying infrastructure that runs the containerized workload.

What should a solutions architect do to meet those requirements?

- A. Use Amazon EC2 Instances, and install Docker on the instances
- B. Use Amazon Elastic Container Service (Amazon ECS) on Amazon EC2 worker nodes
- C. Use Amazon Elastic Container Service (Amazon ECS) on AWS Fargate
- D. Use Amazon EC2 instances from an Amazon Elastic Container Service (Amazon ECS)-optimized Amazon Machine Image (AMI).

**Answer: C**

#### Explanation:

using AWS ECS on AWS Fargate since they require no provisioning and management of the underlying infrastructure to run the containerized workload. <https://docs.aws.amazon.com/AmazonECS/latest/userguide/what-is-fargate.html>

#### NEW QUESTION 134

A company that recently started using AWS establishes a Site-to-Site VPN between its on-premises data center and AWS. The company's security mandate states that traffic originating from on-premises should stay within the company's private IP space when communicating with an Amazon Elastic Container Service (Amazon ECS) cluster that is hosting a sample web application.

Which solution meets this requirement?

- A. Configure a gateway endpoint for Amazon EC
- B. Modify the route table to include an entry pointing to the ECS cluster.
- C. Create a Network Load Balancer and AWS PrivateLink endpoint for Amazon ECS in the same VPC that is hosting the ECS cluster.
- D. Create a Network Load Balancer in one VPC and an AWS PrivateLink endpoint for Amazon ECS in another VPC
- E. Connect the two by using VPC peering.
- F. Configure an Amazon Route 53 record with Amazon ECS as the target
- G. Apply a server certificate to Route 53 from AWS Certificate Manager (ACM) for SSL offloading.

**Answer: A**

#### NEW QUESTION 138

A company needs to retain application logs files for a critical application for 10 years. The application team regularly accesses logs from the past month for troubleshooting, but logs older than 1 month are rarely accessed. The application generates more than 10 TB of logs per month. Which storage option meets these requirements MOST cost-effectively?

- A. Store the logs in Amazon S3 Use AWS Backup to move logs more than 1 month old to S3 Glacier Deep Archive
- B. Store the logs in Amazon S3 Use S3 Lifecycle policies to move logs more than 1 month old to S3 Glacier Deep Archive
- C. Store the logs in Amazon CloudWatch Logs Use AWS Backup to move logs more than 1 month old to S3 Glacier Deep Archive
- D. Store the logs in Amazon CloudWatch Logs Use Amazon S3 Lifecycle policies to move logs more than 1 month old to S3 Glacier Deep Archive

**Answer: B**

#### NEW QUESTION 140

An online retail company needs to run near-real-time analytics on website traffic to analyze top-selling products across different locations. The product purchase data and the user location details are sent to a third-party application that runs on premises. The application processes the data and moves the data into the company's analytics engine.

The company needs to implement a cloud-based solution to make the data available for near-real-time analytics.

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

- A. Use Amazon Kinesis Data Streams to ingest the data. Use AWS Lambda to transform the data. Configure Lambda to write the data to Amazon OpenSearch Service (Amazon Elasticsearch Service).
- B. Configure Amazon Kinesis Data Streams to write the data to an Amazon S3 bucket. Schedule an AWS Glue crawler job to enrich the data and update the AWS Glue Data Catalog. Use Amazon Athena for analytics.
- C. Configure Amazon Kinesis Data Streams to write the data to an Amazon S3 bucket. Add an Apache Spark job on Amazon EMR to enrich the data in the S3 bucket and write the data to Amazon OpenSearch Service (Amazon Elasticsearch Service).
- D. Use Amazon Kinesis Data Firehose to ingest the data. Enable Kinesis Data Firehose data transformation with AWS Lambda. Configure Kinesis Data Firehose to write the data to Amazon OpenSearch Service (Amazon Elasticsearch Service).

**Answer: C**

#### NEW QUESTION 141

A company has two VPCs named Management and Production. The Management VPC uses VPNs through a customer gateway to connect to a single device in the data center. The Production VPC uses a virtual private gateway with two attached AWS Direct Connect connections. The Management and Production VPCs both use a single VPC peering connection to allow communication between the applications.

What should a solutions architect do to mitigate any single point of failure in this architecture?

- A. Add a set of VPNs between the Management and Production VPCs.
- B. Add a second virtual private gateway and attach it to the Management VPC.
- C. Add a second set of VPNs to the Management VPC from a second customer gateway device.
- D. Add a second VPC peering connection between the Management VPC and the Production VPC.

**Answer: C**

#### Explanation:

[https://docs.aws.amazon.com/vpn/latest/s2svpn/images/Multiple\\_Gateways\\_diagram.png](https://docs.aws.amazon.com/vpn/latest/s2svpn/images/Multiple_Gateways_diagram.png)

"To protect against a loss of connectivity in case your customer gateway device becomes unavailable, you can set up a second Site-to-Site VPN connection to your VPC and virtual private gateway by using a second customer gateway device." <https://docs.aws.amazon.com/vpn/latest/s2svpn/vpn-redundant-connection.html>

#### NEW QUESTION 143

A company has hired a solutions architect to design a reliable architecture for its application. The application consists of one Amazon RDS DB instance and two manually provisioned Amazon EC2 instances that run web servers. The EC2 instances are located in a single Availability Zone.

What should the solutions architect do to maximize reliability of the application infrastructure?

- A. Delete one EC2 instance and enable termination protection on the other EC2 instance.
- B. Update the DB instance to be Multi-AZ, and enable deletion protection.
- C. Update the DB instance to be Multi-AZ.
- D. and enable deletion protection.
- E. Place the EC2 instances behind an Application Load Balancer, and run them in an EC2 Auto Scaling group across multiple Availability Zones.
- F. Create an additional DB instance along with an Amazon API Gateway and an AWS Lambda function. Configure the application to invoke the Lambda function through API Gateway. Have the Lambda function write the data to the two DB instances.
- G. Place the EC2 instances in an EC2 Auto Scaling group that has multiple subnets located in multiple Availability Zones.
- H. Use Spot Instances instead of On-Demand Instances.
- I. Set up Amazon CloudWatch alarms to monitor the health of the instance.
- J. Update the DB instance to be Multi-AZ, and enable deletion protection.

**Answer: B**

#### Explanation:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-spot-instances.html>

#### NEW QUESTION 146

A global company hosts its web application on Amazon EC2 instances behind an Application Load Balancer (ALB). The web application has static data and dynamic data. The company stores its static data in an Amazon S3 bucket. The company wants to improve performance and reduce latency for the static data and dynamic data. The company is using its own domain name registered with Amazon Route 53.

What should a solutions architect do to meet these requirements?

- A. Create an Amazon CloudFront distribution that has the S3 bucket and the ALB as origins. Configure Route 53 to route traffic to the CloudFront distribution.
- B. Create an Amazon CloudFront distribution that has the ALB as an origin. Create an AWS Global Accelerator standard accelerator that has the S3 bucket as an endpoint.

- C. Configure Route 53 to route traffic to the CloudFront distribution.
- D. Create an Amazon CloudFront distribution that has the S3 bucket as an origin Create an AWS Global Accelerator standard accelerator that has the ALB and the CloudFront distribution as endpoints Create a custom domain name that points to the accelerator DNS name Use the custom domain name as an endpoint for the web application.
- E. Create an Amazon CloudFront distribution that has the ALB as an origin
- F. Create an AWS Global Accelerator standard accelerator that has the S3 bucket as an endpoint Create two domain name
- G. Point one domain name to the CloudFront DNS name for dynamic content, Point the other domain name to the accelerator DNS name for static content Use the domain names as endpoints for the web application.

**Answer:** D

#### NEW QUESTION 151

A company uses NFS to store large video files in on-premises network attached storage. Each video file ranges in size from 1MB to 500 GB. The total storage is 70 TB and is no longer growing. The company decides to migrate the video files to Amazon S3. The company must migrate the video files as soon as possible while using the least possible network bandwidth. Which solution will meet these requirements?

- A. Create an S3 bucket Create an IAM role that has permissions to write to the S3 bucket
- B. Use the AWS CLI to copy all files locally to the S3 bucket.
- C. Create an AWS Snowball Edge job
- D. Receive a Snowball Edge device on premise
- E. Use the Snowball Edge client to transfer data to the device
- F. Return the device so that AWS can import the data into Amazon S3.
- G. Deploy an S3 File Gateway on premise
- H. Create a public service endpoint to connect to the S3 File Gateway Create an S3 bucket Create a new NFS file share on the S3 File Gateway Point the new file share to the S3 bucket
- I. Transfer the data from the existing NFS file share to the S3 File Gateway.
- J. Set up an AWS Direct Connect connection between the on-premises network and AWS
- K. Deploy an S3 File Gateway on premise
- L. Create a public virtual interface (VIF) to connect to the S3 File Gateway
- M. Create an S3 bucket
- N. Create a new NFS file share on the S3 File Gateway
- O. Point the new file share to the S3 bucket
- P. Transfer the data from the existing NFS file share to the S3 File Gateway.

**Answer:** C

#### NEW QUESTION 152

A company wants to create a mobile app that allows users to stream slow-motion video clips on their mobile devices. Currently, the app captures video clips and uploads the video clips in raw format into an Amazon S3 bucket. The app retrieves these video clips directly from the S3 bucket. However the videos are large in their raw format.

Users are experiencing issues with buffering and playback on mobile devices. The company wants to implement solutions to maximize the performance and scalability of the app while minimizing operational overhead.

Which combination of solutions will meet these requirements? (Select TWO.)

- A. Deploy Amazon CloudFront for content delivery and caching
- B. Use AWS DataSync to replicate the video files across AWS Regions in other S3 buckets
- C. Use Amazon Elastic Transcoder to convert the video files to more appropriate formats
- D. Deploy an Auto Scaling group of Amazon EC2 instances in Local Zones for content delivery and caching
- E. Deploy an Auto Scaling group of Amazon EC2 instances to convert the video files to more appropriate formats

**Answer:** CD

#### NEW QUESTION 156

An ecommerce company wants to launch a one-deal-a-day website on AWS. Each day will feature exactly one product on sale (or a period of 24 hours). The company wants to be able to handle millions of requests each hour with millisecond latency during peak hours.

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

- A. Use Amazon S3 to host the full website in different S3 buckets Add Amazon CloudFront distributions Set the S3 buckets as origins for the distributions Store the order data in Amazon S3
- B. Deploy the full website on Amazon EC2 instances that run in Auto Scaling groups across multiple Availability Zones Add an Application Load Balancer (ALB) to distribute the website traffic Add another ALB for the backend APIs Store the data in Amazon RDS for MySQL
- C. Migrate the full application to run in containers Host the containers on Amazon Elastic Kubernetes Service (Amazon EKS) Use the Kubernetes Cluster Autoscaler to increase and decrease the number of pods to process bursts in traffic Store the data in Amazon RDS for MySQL
- D. Use an Amazon S3 bucket to host the website's static content Deploy an Amazon CloudFront distribution
- E. Set the S3 bucket as the origin Use Amazon API Gateway and AWS Lambda functions for the backend APIs Store the data in Amazon DynamoDB

**Answer:** D

#### NEW QUESTION 159

A company is building a solution that will report Amazon EC2 Auto Scaling events across all the applications in an AWS account. The company needs to use a serverless solution to store the EC2 Auto Scaling status data in Amazon S3. The company then will use the data in Amazon S3 to provide near-real time updates in a dashboard. The solution must not affect the speed of EC2 instance launches.

How should the company move the data to Amazon S3 to meet these requirements?

- A. Use an Amazon CloudWatch metric stream to send the EC2 Auto Scaling status data to Amazon Kinesis Data Firehose Store the data in Amazon S3
- B. Launch an Amazon EMR cluster to collect the EC2 Auto Scaling status data and send the data to Amazon Kinesis Data Firehose Store the data in Amazon S3
- C. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to invoke an AWS Lambda function on a schedule Configure the Lambda function to send the EC2 Auto Scaling status data directly to Amazon S3



D. Use a bootstrap script during the launch of an EC2 instance to install Amazon Kinesis Agent Configure Kinesis Agent to collect the EC2 Auto Scaling status data and send the data to Amazon Kinesis Data Firehose Store the data in Amazon S3

**Answer:** B

#### NEW QUESTION 161

A company stores data in an Amazon Aurora PostgreSQL DB cluster. The company must store all the data for 5 years and must delete all the data after 5 years. The company also must indefinitely keep audit logs of actions that are performed within the database. Currently, the company has automated backups configured for Aurora.

Which combination of steps should a solutions architect take to meet these requirements? (Select TWO.)

- A. Take a manual snapshot of the DB cluster.
- B. Create a lifecycle policy for the automated backups.
- C. Configure automated backup retention for 5 years.
- D. Configure an Amazon CloudWatch Logs export for the DB cluster.
- E. Use AWS Backup to take the backups and to keep the backups for 5 years.

**Answer:** AD

#### NEW QUESTION 163

A company wants to migrate a Windows-based application from on premises to the AWS Cloud. The application has three tiers, a business tier, and a database tier with Microsoft SQL Server. The company wants to use specific features of SQL Server such as native backups and Data Quality Services. The company also needs to share files for process between the tiers.

How should a solution architect design the architecture to meet these requirements?

- A. Host all three on Amazon instance
- B. Use Amazon FSx File Gateway for file sharing between tiers.
- C. Host all three on Amazon EC2 instance
- D. Use Amazon FSx for Windows file sharing between the tiers.
- E. Host the application tier and the business tier on Amazon EC2 instance
- F. Host the database tier on Amazon RD
- G. Use Amazon Elastic File system (Amazon EFS) for file sharing between the tiers.
- H. Host the application tier and the business tier on Amazon EC2 instance
- I. Host the database tier on Amazon RD
- J. Use a Provisioned IOPS SSD (io2) Amazon Elastic Block Store (Amazon EBS) volume for file sharing between the tiers.

**Answer:** B

#### NEW QUESTION 167

A company's web application resizes uploaded images for users. The application stores the original images and the resized images in Amazon S3. The company needs to minimize the storage costs for all the images. Original images are viewed frequently, and resized images are viewed infrequently after they are created. Both types of images need to be immediately available.

Which combination of actions should a solutions architect take to meet these requirements? (Select TWO.)

- A. Store the resized images in S3 Standard
- B. Store the original images in S3 Glacier
- C. Store the resized images in S3 Glacier
- D. Store the resized images in S3 One Zone-Infrequent Access (S3 One Zone-IA).

**Answer:** AD

#### NEW QUESTION 172

A company has a document management application that contains PDF documents. The company hosts the application on Amazon EC2 instances. According to regulations, the instances must not have access to the internet. The application must be able to read and write to a persistent storage system that provides native versioning capabilities.

A solutions architect needs to design secure storage that maximizes resiliency and facilitates data sharing across instances.

Which solution meets these requirements?

- A. Place the instances in a public subnet. Use Amazon S3 for storage. Access S3 objects by using URLs.
- B. Place the instances in a private subnet. Use Amazon S3 for storage. Use a VPC endpoint to access S3 objects.
- C. Use the instances with a Provisioned IOPS SSD (io2) Amazon Elastic Block Store (Amazon EBS) volume.
- D. Use Amazon Elastic File System (Amazon EFS) Standard-Infrequent Access (Standard-IA) to store data and provide shared access to the instances.

**Answer:** B

#### NEW QUESTION 176

.....



## Thank You for Trying Our Product

### We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

### SAA-C03 Practice Exam Features:

- \* SAA-C03 Questions and Answers Updated Frequently
- \* SAA-C03 Practice Questions Verified by Expert Senior Certified Staff
- \* SAA-C03 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- \* SAA-C03 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The SAA-C03 Practice Test Here](#)**