

# Amazon-Web-Services

## Exam Questions SAA-C02

AWS Certified Solutions Architect - Associate (SAA-C02)



#### NEW QUESTION 1

A solutions architect is tasked with transferring 750 TB of data from a network-attached file system located at a branch office to Amazon S3 Glacier. The solution must avoid saturating the branch office's low-bandwidth internet connection. What is the MOST cost-effective solution?

- A. Create a site-to-site VPN tunnel to an Amazon S3 bucket and transfer the files directly. Create a bucket policy to enforce a VPC endpoint.
- B. Order 10 AWS Snowball appliances and select an S3 Glacier vault as the destination. Create a bucket policy to enforce a VPC endpoint.
- C. Mount the network-attached file system to Amazon S3 and copy the files directly.
- D. Create a lifecycle policy to transition the S3 objects to Amazon S3 Glacier.
- E. Order 10 AWS Snowball appliances and select an Amazon S3 bucket as the destination. Create a lifecycle policy to transition the S3 objects to Amazon S3 Glacier.

**Answer:** D

#### NEW QUESTION 2

A company has deployed an API in a VPC behind an internet-facing Application Load Balancer (ALB). An application that consumes the API as a client is deployed in a second account in private subnets behind a NAT gateway. When requests to the client application increase, the NAT gateway costs are higher than expected. A solutions architect has configured the ALB to be internal. Which combination of architectural changes will reduce the NAT gateway costs? (Select TWO.)

- A. Configure a VPC peering connection between the two VPCs.
- B. Access the API using the private address.
- C. Configure an AWS Direct Connect connection between the two VPCs.
- D. Access the API using the private address.
- E. Configure a ClassicLink connection for the API into the client VPC. Access the API using the ClassicLink address.
- F. Configure a PrivateLink connection for the API into the client VPC.
- G. Access the API using the PrivateLink address.
- H. Configure an AWS Resource Access Manager connection between the two accounts. Access the API using the private address.

**Answer:** DE

#### NEW QUESTION 3

A company's application is running on Amazon EC2 instances within an Auto Scaling group behind an Elastic Load Balancer. Based on the application's history, the company anticipates a spike in traffic during a holiday each year. A solutions architect must design a strategy to ensure that the Auto Scaling group proactively increases capacity to minimize any performance impact on application users. Which solution will meet these requirements?

- A. Create an Amazon CloudWatch alarm to scale up the EC2 instances when CPU utilization exceeds 90%.
- B. Create a recurring scheduled action to scale up the Auto Scaling group before the expected period of peak demand.
- C. Increase the minimum and maximum number of EC2 instances in the Auto Scaling group during the peak demand period.
- D. Configure an Amazon Simple Notification Service (Amazon SNS) notification to send alerts when there are auto scaling EC2\_INSTANCE\_LAUNCH events.

**Answer:** B

#### NEW QUESTION 4

A static website is stored in an Amazon S3 bucket. A solutions architect needs to ensure that the website is available in multiple Availability Zones. Which action will accomplish this?

- A. Enable Amazon S3 versioning.
- B. Enable Amazon S3 Intelligent-Tiering.
- C. Enable an Amazon S3 lifecycle policy.
- D. Enable Amazon S3 cross-Region replication.

**Answer:** A

#### NEW QUESTION 5

A gaming company has multiple Amazon EC2 instances in a single Availability Zone for its multiplayer game that communicates with users on Layer 4. The chief technology officer (CTO) wants to make the architecture highly available and cost-effective. What should a solutions architect do to meet these requirements? (Select TWO.)

- A. Increase the number of EC2 instances.
- B. Decrease the number of EC2 instances.
- C. Configure a Network Load Balancer in front of the EC2 instances.
- D. Configure an Application Load Balancer in front of the EC2 instances.
- E. Configure an Auto Scaling group to add or remove instances in multiple Availability Zones automatically.

**Answer:** CE

#### NEW QUESTION 6

A solutions architect is optimizing a website for an upcoming musical event. Videos of the performances will be streamed in real time and then will be available on demand. The event is expected to attract a global online audience. Which service will improve the performance of both the real-time and on-demand streaming?

- A. Amazon CloudFront
- B. AWS Global Accelerator
- C. Amazon Route 53
- D. Amazon S3 Transfer Acceleration

**Answer:** A

#### NEW QUESTION 7

A company is migrating from an on-premises infrastructure to the AWS Cloud. One of the company's applications stores files on a Windows file server farm that uses Distributed File System Replication (DFSR) to keep data in sync. A solutions architect needs to replace the file server farm. Which service should the solutions architect use?

- A. Amazon EFS
- B. Amazon FSx
- C. Amazon S3
- D. AWS Storage Gateway

**Answer:** B

#### NEW QUESTION 8

A company has on-premises servers running a relational database. The current database serves high read traffic for users in different locations. The company wants to migrate to AWS with the least amount of effort. The database solution should support disaster recovery and 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 hosted on multiple Amazon EC2 instances in different AWS Regions
- D. Use databases hosted on Amazon EC2 instances behind an Application Load Balancer in different Availability Zones

**Answer:** A

#### NEW QUESTION 9

A security team wants to limit access to specific services or actions in all of the team's AWS accounts. All accounts belong to a large organization in AWS Organizations. The solution must be scalable and there must be a single point where permissions can be maintained. What should a solutions architect do to accomplish this?

- A. Create an ACL to provide access to the services or actions.
- B. Create a security group to allow accounts and attach it to user groups.
- C. Create cross-account roles in each account to deny access to the services or actions.
- D. Create a service control policy in the root organizational unit to deny access to the services or actions.

**Answer:** D

#### NEW QUESTION 10

An application running on AWS uses an Amazon Aurora Multi-AZ deployment for its database. When evaluating performance metrics, a solutions architect discovered that the database reads are causing high I/O and adding latency to the write requests against the database. What should the solutions architect do to separate the read requests from the write requests?

- A. Enable read-through caching on the Amazon Aurora database.
- B. Update the application to read from the Multi-AZ standby instance.
- C. Create a read replica and modify the application to use the appropriate endpoint.
- D. Create a second Amazon Aurora database and link it to the primary database as a read replica.

**Answer:** C

#### NEW QUESTION 10

A company's web application is using multiple Linux Amazon EC2 instances and storing data on Amazon EBS volumes. The company is looking for a solution to increase the resiliency of the application in case of a failure and to provide storage that complies with atomicity, consistency, isolation, and durability (ACID). What should a solutions architect do to meet these requirements?

- A. Launch the application on EC2 instances in each Availability Zone.
- B. Attach EBS volumes to each EC2 instance.
- C. Create an Application Load Balancer with Auto Scaling groups across multiple Availability Zones. Mount an instance store on each EC2 instance.
- D. Create an Application Load Balancer with Auto Scaling groups across multiple Availability Zones. Store data on Amazon EFS and mount a target on each instance.
- E. Create an Application Load Balancer with Auto Scaling groups across multiple Availability Zones. Store data using Amazon S3 One Zone-Infrequent Access (S3 One Zone-IA).

**Answer:** C

#### NEW QUESTION 15

A solutions architect is designing a high performance computing (HPC) workload on Amazon EC2. The EC2 instances need to communicate to each other frequently and require network performance with low latency and high throughput. Which EC2 configuration meets these requirements?

- A. Launch the EC2 instances in a cluster placement group in one Availability Zone.
- B. Launch the EC2 instances in a spread placement group in one Availability Zone.
- C. Launch the EC2 instances in an Auto Scaling group in two Regions and peer the VPCs.
- D. Launch the EC2 instances in an Auto Scaling group spanning multiple Availability Zones.

**Answer:** A

#### NEW QUESTION 19

A company has application running on Amazon EC2 instances in a VPC. One of the applications needs to call an Amazon S3 API to store and read objects. The company's security policies restrict any internet-bound traffic from the applications. Which action will fulfill these requirements and maintain security?

- A. Configure an S3 interface endpoint.
- B. Configure an S3 gateway endpoint.
- C. Create an S3 bucket in a private subnet.
- D. Create an S3 bucket in the same Region as the EC2 instance.

**Answer: C**

#### NEW QUESTION 23

An Amazon EC2 administrator created the following policy associated with an IAM group containing several users.

What is the effect of this policy?

- A. Users can terminate an EC2 instance in any AWS Region except us-east-1.
- B. Users can terminate an EC2 instance with the IP address 10.100. 1001 in the us-east-1 Region
- C. Users can terminate an EC2 instance in the us-east-1 Region when the user's source IP is 10.100.100.254
- D. Users cannot terminate an EC2 instance in the us-east-1 Region when the user's source IP is 10.100. 100. 254

**Answer: C**

#### NEW QUESTION 26

A company must generate sales reports at the beginning of every month. The reporting process launches 20 Amazon EC2 instances on the first of the month. The process runs for 7 days and cannot be interrupted. The company wants to minimize costs. Which pricing model should the company choose?

- A. Reserved Instances
- B. Spot Block Instances
- C. On-Demand Instances
- D. Scheduled Reserved Instances D18912E1457D5D1DDCBD40AB3BF70D5D

**Answer: C**

#### NEW QUESTION 27

An application hosted on AWS is experiencing performance problems, and the application vendor wants to perform an analysis of the log file to troubleshoot further. The log file is stored on Amazon S3 and is 10 GB in size. The application owner will make the log file available to the vendor for a limited time. What is the MOST secure way to do this?

- A. Enable public read on the S3 object and provide the link to the vendor.
- B. Upload the file to Amazon WorkDocs and share the public link with the vendor.
- C. Generate a presigned URL and have the vendor download the log file before it expires.
- D. Create an IAM user for the vendor to provide access to the S3 bucket and the applicatio
- E. Enforce multifactor authentication.

**Answer: C**

#### NEW QUESTION 29

A company's legacy application is currently relying on a single-instance Amazon RDS MySQL database without encryption. Due to new compliance requirements, all existing and new data in this database must be encrypted. How should this be accomplished?

- A. Create an Amazon S3 bucket with server-side encryption enabled. Move all the data to Amazon S3. Delete the RDS instance.
- B. Enable RDS Multi-AZ mode with encryption at rest enabled. Perform a failover to the standby instance to delete the original instance.
- C. Take a snapshot of the RDS instance. Create an encrypted copy of the snapshot. Restore the RDS instance from the encrypted snapshot.
- D. Create an RDS read replica with encryption at rest enabled. Promote the read replica to master and switch the application over to the new master. Delete the old RDS instance.

**Answer:** C

#### NEW QUESTION 32

A solutions architect has created a new AWS account and must secure AWS account root user access. Which combination of actions will accomplish this? (Select TWO.)

- A. Ensure the root user uses a strong password
- B. Enable multi-factor authentication to the root user
- C. Store root user access keys in an encrypted Amazon S3 bucket
- D. Add the root user to a group containing administrative permissions.
- E. Apply the required permissions to the root user with an inline policy document

**Answer:** AB

#### Explanation:

[https://docs.aws.amazon.com/IAM/latest/UserGuide/id\\_root-user.html](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_root-user.html)

#### NEW QUESTION 34

A solutions architect is designing the cloud architecture for a new application being deployed on AWS. The process should run in parallel while adding and removing application nodes as needed based on the number of jobs to be processed. The processor application is stateless. The solutions architect must ensure that the application is loosely coupled and the job items are durably stored. Which design should the solutions architect use?

- A. Create an Amazon SNS topic to send the jobs that need to be processed. Create an Amazon Machine Image (AMI) that consists of the processor application. Create a launch configuration that uses the AMI. Create an Auto Scaling group using the launch configuration. Set the scaling policy for the Auto Scaling group to add and remove nodes based on CPU usage.
- B. Create an Amazon SQS queue to hold the jobs that need to be processed. Create an Amazon Machine Image (AMI) that consists of the processor application. Create a launch configuration that uses the AMI. Create an Auto Scaling group using the launch configuration. Set the scaling policy for the Auto Scaling group to add and remove nodes based on network usage.
- C. Create an Amazon SQS queue to hold the jobs that need to be processed. Create an Amazon Machine Image (AMI) that consists of the processor application. Create a launch template that uses the AMI. Create an Auto Scaling group using the launch template. Set the scaling policy for the Auto Scaling group to add and remove nodes based on the number of items in the SQS queue.
- D. Create an Amazon SNS topic to send the jobs that need to be processed. Create an Amazon Machine Image (AMI) that consists of the processor application. Create a launch template that uses the AMI. Create an Auto Scaling group using the launch template. Set the scaling policy for the Auto Scaling group to add and remove nodes based on the number of messages published to the SNS topic.

**Answer:** C

#### NEW QUESTION 36

A company's application is running on Amazon EC2 instances in a single Region. In the event of a disaster, a solutions architect needs to ensure that the resources can also be deployed to a second Region. Which combination of actions should the solutions architect take to accomplish this? (Select TWO.)

- A. Detach a volume on an EC2 instance and copy it to Amazon S3.
- B. Launch a new EC2 instance from an Amazon Machine Image (AMI) in a new Region.
- C. Launch a new EC2 instance in a new Region and copy a volume from Amazon S3 to the new instance.
- D. Copy an Amazon Machine Image (AMI) of an EC2 instance and specify a different Region for the destination.
- E. Copy an Amazon Elastic Block Store (Amazon EBS) volume from Amazon S3 and launch an EC2 instance in the destination Region using that EBS volume.

**Answer:** BD

#### NEW QUESTION 37

A company wants to host a scalable web application on AWS. The application will be accessed by users from different geographic regions of the world. Application users will be able to download and upload unique data up to gigabytes in size. The development team wants a cost-effective solution to minimize upload and download latency and maximize performance. What should a solutions architect do to accomplish this?

- A. Use Amazon S3 with Transfer Acceleration to host the application.
- B. Use Amazon S3 with CacheControl headers to host the application. D18912E1457D5D1DDCBD40AB3BF70D5D
- C. Use Amazon EC2 with Auto Scaling and Amazon CloudFront to host the application.
- D. Use Amazon EC2 with Auto Scaling and Amazon ElastiCache to host the application.

**Answer:** C

#### NEW QUESTION 40

A company has a three-tier image-sharing application. It uses an Amazon EC2 instance for the front-end layer, another for the backend tier, and a third for the MySQL database. A solutions architect has been tasked with designing a solution that is highly available and requires the least amount of changes to the application. Which solution meets these requirements?

- A. Use Amazon S3 to host the front-end layer and AWS Lambda functions for the backend layer. Move the database to an Amazon DynamoDB table and use Amazon S3 to store and serve users' images.
- B. Use load-balanced Multi-AZ AWS Elastic Beanstalk environments for the front-end and backend layers. Move the database to an Amazon RDS instance with multiple read replicas to store and serve users' images.
- C. Use Amazon S3 to host the front-end layer and a fleet of Amazon EC2 instances in an Auto Scaling group for the backend layer. Move the database to a memory-optimized instance type to store and serve users' images.
- D. Use load-balanced Multi-AZ AWS Elastic Beanstalk environments for the front-end and backend layers. Move the database to an Amazon RDS instance with a Multi-AZ deployment. Use Amazon S3 to store and serve users' images.



**Answer:** D

#### NEW QUESTION 43

A solutions architect is designing a new service behind Amazon API Gateway. The request patterns for the service will be unpredictable and can change suddenly from 0 requests to over 500 per second. The total size of the data that needs to be persisted in a backend database is currently less than 1 GB with unpredictable future growth. Data can be queried using simple key-value requests. Which combination of AWS services would meet these requirements? (Select TWO)

- A. AWS Fargate
- B. AWS Lambda
- C. Amazon DynamoDB
- D. Amazon EC2 Auto Scaling
- E. MySQL-compatible Amazon Aurora

**Answer:** BC

#### NEW QUESTION 47

A company has been storing analytics data in an Amazon RDS instance for the past few years. The company asked a solutions architect to find a solution that allows users to access this data using an API. The expectation is that the application will experience periods of inactivity but could receive bursts of traffic within seconds.

Which solution should the solutions architect suggest?

- A. Set up an Amazon API Gateway and use Amazon ECS.
- B. Set up an Amazon API Gateway and use AWS Elastic Beanstalk.
- C. Set up an Amazon API Gateway and use AWS Lambda functions.
- D. Set up an Amazon API Gateway and use Amazon EC2 with Auto Scaling.

**Answer:** C

#### NEW QUESTION 52

Organizers for a global event want to put daily reports online as static HTML pages. The pages are expected to generate millions of views from users around the world. The files are stored in an Amazon S3 bucket. A solutions architect has been asked to design an efficient and effective solution.

Which action should the solutions architect take to accomplish this?

- A. Generate presigned URLs for the files.
- B. Use cross-Region replication to all Regions.
- C. Use the geoproximity feature of Amazon Route 53.
- D. Use Amazon CloudFront with the S3 bucket as its origin.

**Answer:** D

#### NEW QUESTION 54

A company is migrating a three-tier application to AWS. The application requires a MySQL database. In the past, the application users reported poor application performance when creating new entries. These performance issues were caused by users generating different real-time reports from the application during working hours.

Which solution will improve the performance of the application when it is moved to AWS?

- A. Import the data into an Amazon DynamoDB table with provisioned capacity.
- B. Refactor the application to use DynamoDB for reports.
- C. Create the database on a compute-optimized Amazon EC2 instance.
- D. Ensure compute resources exceed the on-premises database.
- E. Create an Amazon Aurora MySQL Multi-AZ DB cluster with multiple read replicas.
- F. Configure the application reader endpoint for reports.
- G. Create an Amazon Aurora MySQL Multi-AZ DB cluster.
- H. Configure the application to use the backup instance of the cluster as an endpoint for the reports.

**Answer:** B

#### NEW QUESTION 58

A company is performing an AWS Well-Architected Framework review of an existing workload deployed on AWS. The review identified a public-facing website running on the same Amazon EC2 instance as a Microsoft Active Directory domain controller that was installed recently to support other AWS services. A solutions architect needs to recommend a new design that would improve the security of the architecture and minimize the administrative demand on IT staff.

What should the solutions architect recommend?

- A. Use AWS Directory Service to create a managed Active Directory.
- B. Uninstall Active Directory on the current EC2 instance.
- C. Create another EC2 instance in the same subnet and reinstall Active Directory on it.
- D. Uninstall Active Directory.
- E. Use AWS Directory Service to create an Active Directory connector.
- F. Proxy Active Directory requests to the Active domain controller running on the current EC2 instance.
- G. Enable AWS Single Sign-On (AWS SSO) with Security Assertion Markup Language (SAML) 2.0 federation with the current Active Directory controller.
- H. Modify the EC2 instance's security group to deny public access to Active Directory.

**Answer:** C

#### NEW QUESTION 63

A solutions architect is implementing a document review application using an Amazon S3 bucket for storage.

The solution must prevent accidental deletion of the documents and ensure that all versions of the documents are available. Users must be able to download, modify, and upload documents.

Which combination of actions should be taken to meet these requirements? (Select TWO )

- A. Enable a read-only bucket ACL
- B. Enable versioning on the bucket
- C. Attach an IAM policy to the bucket
- D. Enable MFA Delete on the bucket
- E. Encrypt the bucket using AWS KMS

**Answer:** BD

#### NEW QUESTION 65

A company is hosting a web application on AWS using a single Amazon EC2 instance that stores user-uploaded documents in an Amazon EBS volume. For better scalability and availability, the company duplicated the architecture and created a second EC2 instance and EBS volume in another Availability Zone, placing both behind an Application Load Balancer. After completing this change, users reported that each time they refreshed the website, they could see one subset of their documents or the other but never all of the documents at the same time. What should a solutions architect propose to ensure users see all of their documents at once?

- A. Copy the data so both EBS volumes contain all the documents
- B. Configure the Application Load Balancer to direct a user to the server with the documents
- C. Copy the data from both EBS volumes to Amazon EFS. Modify the application to save new documents to Amazon EFS
- D. Configure the Application Load Balancer to send the request to both servers. Return each document from the correct server

**Answer:** C

#### NEW QUESTION 66

A company runs a multi-tier web application that hosts news content. The application runs on Amazon EC2 instances behind an Application Load Balancer. The instances run in an EC2 Auto Scaling group across multiple Availability Zones and use an Amazon Aurora database. A solutions architect needs to make the application more resilient to periodic increases in request rates.

Which architecture should the solutions architect implement? (Select TWO )

- A. Add AWS Shield.
- B. Add Aurora Replicas
- C. Add AWS Direct Connect
- D. Add AWS Global Accelerator.
- E. Add an Amazon CloudFront distribution in front of the Application Load Balancer

**Answer:** DE

#### NEW QUESTION 69

A company built a food ordering application that captures user data and stores it for future analysis. The application's static front end is deployed on an Amazon EC2 instance. The front-end application sends the requests to the backend application running on a separate EC2 instance. The backend application then stores the data in Amazon RDS.

What should a solutions architect do to decouple the architecture and make it scalable?

- A. Use Amazon S3 to serve the front-end application, which sends requests to Amazon EC2 to execute the backend application. The backend application will process and store the data in Amazon RDS.
- B. Use Amazon S3 to serve the front-end application and write requests to an Amazon Simple Notification Service (Amazon SNS) topic. Subscribe Amazon EC2 instances to the HTTP/HTTPS endpoint of the topic and process and store the data in Amazon RDS.
- C. Use an EC2 instance to serve the front end and write requests to an Amazon SQS queue. Place the backend instance in an Auto Scaling group and scale based on the queue depth to process and store the data in Amazon RDS.
- D. Use Amazon S3 to serve the static front-end application and send requests to Amazon API Gateway, which writes the requests to an Amazon SQS queue. Place the backend instances in an Auto Scaling group and scale based on the queue depth to process and store the data in Amazon RDS.

**Answer:** D

#### NEW QUESTION 74

A company runs an internal browser-based application. The application runs on Amazon EC2 instances behind an Application Load Balancer. The instances run in an Amazon EC2 Auto Scaling group across multiple Availability Zones. The Auto Scaling group scales up to 20 instances during work hours, but scales down to 2 instances overnight. Staff are complaining that the application is very slow when the day begins, although it runs well by mid-morning.

How should the scaling be changed to address the staff complaints and keep costs to a minimum?

- A. Implement a scheduled action that sets the desired capacity to 20 shortly before the office opens.
- B. Implement a step scaling action triggered at a lower CPU threshold, and decrease the cooldown period.
- C. Implement a target tracking action triggered at a lower CPU threshold and decrease the cooldown period.
- D. Implement a scheduled action that sets the minimum and maximum capacity to 20 shortly before the office opens.

**Answer:** B

#### NEW QUESTION 75

A company allows its developers to attach existing IAM policies to existing IAM roles to enable faster experimentation and agility. However, the security operations team is concerned that the developers could attach the existing administrator policy, which would allow the developers to circumvent any other security policies. How should a solutions architect address this issue?

- A. Create an Amazon SNS topic to send an alert every time a developer creates a new policy.
- B. Use service control policies to disable IAM activity across all accounts in the organizational unit.
- C. Prevent the developers from attaching any policies and assign all IAM duties to the security operations team.

D. Set an IAM permissions boundary on the developer 1AM role that explicitly denies attaching the administrator policy

**Answer:** D

**Explanation:**

[https://docs.aws.amazon.com/IAM/latest/UserGuide/access\\_policies\\_boundaries.html](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_boundaries.html)

**NEW QUESTION 77**

.....



## 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-C02 Practice Exam Features:

- \* SAA-C02 Questions and Answers Updated Frequently
- \* SAA-C02 Practice Questions Verified by Expert Senior Certified Staff
- \* SAA-C02 Most Realistic Questions that Guarantee you a Pass on Your First Try
- \* SAA-C02 Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The SAA-C02 Practice Test Here](#)**