Question #: 75

A company wants to move a multi-tiered application from on premises to the AWS Cloud to improve the application's performance. The application consists of application tiers that communicate with each other by way of RESTful services. Transactions are dropped when one tier becomes overloaded. A solutions architect must design a solution that resolves these issues and modernizes the application.Which solution meets these requirements and is the MOST operationally efficient?

A**. Use Amazon API Gateway and direct transactions to the AWS Lambda functions as the application layer. Use Amazon Simple Queue Service (Amazon SQS) as the communication layer between application services.**

B. Use Amazon CloudWatch metrics to analyze the application performance history to determine the servers' peak utilization during the performance failures. Increase the size of the application server's Amazon EC2 instances to meet the peak requirements.

C. Use Amazon Simple Notification Service (Amazon SNS) to handle the messaging between application servers running on Amazon EC2 in an Auto Scaling group. Use Amazon CloudWatch to monitor the SNS queue length and scale up and down as required.

D. Use Amazon Simple Queue Service (Amazon SQS) to handle the messaging between application servers running on Amazon EC2 in an Auto Scaling group. Use Amazon CloudWatch to monitor the SQS queue length and scale up when communication failures are detected.

Question #: 90

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.

Question #: 134

A company wants to move its application to a serverless solution. The serverless solution needs to analyze existing and new data by using SL. The company stores the data in an Amazon S3 bucket. The data requires encryption and must be replicated to a different AWS Region.Which solution will meet these requirements with the LEAST operational overhead?

A. Create a new S3 bucket. Load the data into the new S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with AWS KMS multi-Region kays (SSE-KMS). Use Amazon Athena to query the data.

**B. Create a new S3 bucket. Load the data into the new S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with AWS KMS multi-Region keys (SSE-KMS). Use Amazon RDS to query the data.**

C. Load the data into the existing S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with Amazon S3 managed encryption keys (SSE-S3). Use Amazon Athena to query the data.

D. Load the data into the existing S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with Amazon S3 managed encryption keys (SSE-S3). Use Amazon RDS to query the data.

Question #: 113

A company uses 50 TB of data for reporting. The company wants to move this data from on premises to AWS. A custom application in the company’s data center runs a weekly data transformation job. The company plans to pause the application until the data transfer is complete and needs to begin the transfer process as soon as possible.The data center does not have any available network bandwidth for additional workloads. A solutions architect must transfer the data and must configure the transformation job to continue to run in the AWS Cloud.

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

A. Use AWS DataSync to move the data. Create a custom transformation job by using AWS Glue.

B. Order an AWS Snowcone device to move the data. Deploy the transformation application to the device.

**C. Order an AWS Snowball Edge Storage Optimized device. Copy the data to the device. Create a custom transformation job by using AWS Glue.**

D. Order an AWS Snowball Edge Storage Optimized device that includes Amazon EC2 compute. Copy the data to the device. Create a new EC2 instance on AWS to run the transformation application.

Question #: 18

An application development team is designing a microservice that will convert large images to smaller, compressed images. When a user uploads an image through the web interface, the microservice should store the image in an Amazon S3 bucket, process and compress the image with an AWS Lambda function, and store the image in its compressed form in a different S3 bucket.

A solutions architect needs to design a solution that uses durable, stateless components to process the images automatically.

Which combination of actions will meet these requirements? (Choose two.)

**A. Create an Amazon Simple Queue Service (Amazon SQS) queue. Configure the S3 bucket to send a notification to the SQS queue when an image is uploaded to the S3 bucket.**

**B. Configure the Lambda function to use the Amazon Simple Queue Service (Amazon SQS) queue as the invocation source. When the SQS message is successfully processed, delete the message in the queue.**

C. Configure the Lambda function to monitor the S3 bucket for new uploads. When an uploaded image is detected, write the file name to a text file in memory and use the text file to keep track of the images that were processed.

D. Launch an Amazon EC2 instance to monitor an Amazon Simple Queue Service (Amazon SQS) queue. When items are added to the queue, log the file name in a text file on the EC2 instance and invoke the Lambda function.

E. Configure an Amazon EventBridge (Amazon CloudWatch Events) event to monitor the S3 bucket. When an image is uploaded, send an alert to an Amazon ample Notification Service (Amazon SNS) topic with the application owner's email address for further processing.

A company collects data for temperature, humidity, and atmospheric pressure in cities across multiple continents. The average volume of data that the company collects from each site daily is 500 GB. Each site has a high-speed Internet connection.

Question #1

The company wants to aggregate the data from all these global sites as quickly as possible in a single Amazon S3 bucket. The solution must minimize operational complexity.

Which solution meets these requirements?

**A. Turn on S3 Transfer Acceleration on the destination S3 bucket. Use multipart uploads to directly upload site data to the destination S3 bucket.**

B. Upload the data from each site to an S3 bucket in the closest Region. Use S3 Cross-Region Replication to copy objects to the destination S3 bucket. Then remove the data from the origin S3 bucket.

C. Schedule AWS Snowball Edge Storage Optimized device jobs daily to transfer data from each site to the closest Region. Use S3 Cross-Region Replication to copy objects to the destination S3 bucket.

D. Upload the data from each site to an Amazon EC2 instance in the closest Region. Store the data in an Amazon Elastic Block Store (Amazon EBS) volume. At regular intervals, take an EBS snapshot and copy it to the Region that contains the destination S3 bucket. Restore the EBS volume in that Region.

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.

Question #2

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

Question #3

A company uses AWS Organizations to manage multiple AWS accounts for different departments. 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. Add the aws:PrincipalOrgPaths global condition key to the S3 bucket policy.

C. Use AWS CloudTrail to monitor the CreateAccount, InviteAccountToOrganization, LeaveOrganization, and RemoveAccountFromOrganization events. Update the S3 bucket policy accordingly.

D. Tag each user that needs access to the S3 bucket. Add the aws:PrincipalTag global condition key to the S3 bucket policy.

An application runs on an Amazon EC2 instance in a VPC. The application processes logs that are stored in an Amazon S3 bucket. The EC2 instance needs to access the S3 bucket without connectivity to the internet.

Question #4

Which solution will provide private network connectivity to Amazon S3?

**A. Create a gateway VPC endpoint to the S3 bucket.**

B. Stream the logs to Amazon CloudWatch Logs. Export the logs to the S3 bucket.

C. Create an instance profile on Amazon EC2 to allow S3 access.

D. Create an Amazon API Gateway API with a private link to access the S3 endpoint.

Question #: 73

A company recently launched Linux-based application instances on Amazon EC2 in a private subnet and launched a Linux-based bastion host on an Amazon EC2 instance in a public subnet of a VPC. A solutions architect needs to connect from the on-premises network, through the company's internet connection, to the bastion host, and to the application servers. The solutions architect must make sure that the security groups of all the EC2 instances will allow that access.

Which combination of steps should the solutions architect take to meet these requirements? (Choose two.)

A. Replace the current security group of the bastion host with one that only allows inbound access from the application instances.

B. Replace the current security group of the bastion host with one that only allows inbound access from the internal IP range for the company.

**C. Replace the current security group of the bastion host with one that only allows inbound access from the external IP range for the company.**

**D. Replace the current security group of the application instances with one that allows inbound SSH access from only the private IP address of the bastion host.**

E. Replace the current security group of the application instances with one that allows inbound SSH access from only the public IP address of the bastion host.

Question #: 74

A solutions architect is designing a two-tier web application. The application consists of a public-facing web tier hosted on Amazon EC2 in public subnets. The database tier consists of Microsoft SQL Server running on Amazon EC2 in a private subnet. Security is a high priority for the company.

How should security groups be configured in this situation? (Choose two.)

**A. Configure the security group for the web tier to allow inbound traffic on port 443 from 0.0.0.0/0.**

B. Configure the security group for the web tier to allow outbound traffic on port 443 from 0.0.0.0/0.

**C. Configure the security group for the database tier to allow inbound traffic on port 1433 from the security group for the web tier.**

D. Configure the security group for the database tier to allow outbound traffic on ports 443 and 1433 to the security group for the web tier.

E. Configure the security group for the database tier to allow inbound traffic on ports 443 and 1433 from the security group for the web tier.

Question #: 138

A company runs its ecommerce application on AWS. Every new order is published as a massage 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 MQ. Create a Multi-AZ Auto Scaling group for EC2 instances that host the application. Create another Multi-AZ Auto Scaling group for EC2 instances that host the PostgreSQL database.

B. Migrate the queue to a redundant pair (active/standby) of RabbitMQ instances on Amazon MQ. Create a Multi-AZ Auto Scaling group for EC2 instances that host the application. Migrate the database to run on a Multi-AZ deployment of Amazon RDS for PostgreSQL.

C. Create a Multi-AZ Auto Scaling group for EC2 instances that host the RabbitMQ queue. Create another Multi-AZ Auto Scaling group for EC2 instances that host the application. Migrate the database to run on a Multi-AZ deployment of Amazon RDS for PostgreSQL.

D. Create a Multi-AZ Auto Scaling group for EC2 instances that host the RabbitMQ queue. Create another Multi-AZ Auto Scaling group for EC2 instances that host the application. Create a third Multi-AZ Auto Scaling group for EC2 instances that host the PostgreSQL database

Exam question from Amazon's [AWS Certified Solutions Architect - Associate SAA-C03](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

Question #: 134

A company wants to move its application to a serverless solution. The serverless solution needs to analyze existing and new data by using SL. The company stores the data in an Amazon S3 bucket. The data requires encryption and must be replicated to a different AWS Region.

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

A. Create a new S3 bucket. Load the data into the new S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with AWS KMS multi-Region kays (SSE-KMS). Use Amazon Athena to query the data.

B. Create a new S3 bucket. Load the data into the new S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with AWS KMS multi-Region keys (SSE-KMS). Use Amazon RDS to query the data.

**C. Load the data into the existing S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with Amazon S3 managed encryption keys (SSE-S3). Use Amazon Athena to query the data.**

D. Load the data into the existing S3 bucket. Use S3 Cross-Region Replication (CRR) to replicate encrypted objects to an S3 bucket in another Region. Use server-side encryption with Amazon S3 managed encryption keys (SSE-S3). Use Amazon RDS to query the data.

Question #: 82

A company hosts its web applications in the AWS Cloud. The company configures Elastic Load Balancers to use certificates that are imported into AWS Certificate Manager (ACM). The company's security team must be notified 30 days before the expiration of each certificate.

What should a solutions architect recommend to meet this requirement?

A. Add a rule in ACM to publish a custom message to an Amazon Simple Notification Service (Amazon SNS) topic every day, beginning 30 days before any certificate will expire.

**B. Create an AWS Config rule that checks for certificates that will expire within 30 days. Configure Amazon EventBridge (Amazon CloudWatch Events) to invoke a custom alert by way of Amazon Simple Notification Service (Amazon SNS) when AWS Config reports a noncompliant resource.**

C. Use AWS Trusted Advisor to check for certificates that will expire within 30 days. Create an Amazon CloudWatch alarm that is based on Trusted Advisor metrics for check status changes. Configure the alarm to send a custom alert by way of Amazon Simple Notification Service (Amazon SNS).

D. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to detect any certificates that will expire within 30 days. Configure the rule to invoke an AWS Lambda function. Configure the Lambda function to send a custom alert by way of Amazon Simple Notification Service (Amazon SNS).

Question #: 80

A company recently signed a contract with an AWS Managed Service Provider (MSP) Partner for help with an application migration initiative. A solutions architect needs ta share an Amazon Machine Image (AMI) from an existing AWS account with the MSP Partner's AWS account. The AMI is backed by Amazon Elastic Block Store (Amazon EBS) and uses an AWS Key Management Service (AWS KMS) customer managed key to encrypt EBS volume snapshots.

What is the MOST secure way for the solutions architect to share the AMI with the MSP Partner's AWS account?

A. Make the encrypted AMI and snapshots publicly available. Modify the key policy to allow the MSP Partner's AWS account to use the key.

**B. Modify the launchPermission property of the AMI. Share the AMI with the MSP Partner's AWS account only. Modify the key policy to allow the MSP Partner's AWS account to use the key.**

C. Modify the launchPermission property of the AMI. Share the AMI with the MSP Partner's AWS account only. Modify the key policy to trust a new KMS key that is owned by the MSP Partner for encryption.

D. Export the AMI from the source account to an Amazon S3 bucket in the MSP Partner's AWS account, Encrypt the S3 bucket with a new KMS key that is owned by the MSP Partner. Copy and launch the AMI in the MSP Partner's AWS account.

Question #: 66

A company has an application that generates a large number of files, each approximately 5 MB in size. The files are stored in Amazon S3. Company policy requires the files to be stored for 4 years before they can be deleted. Immediate accessibility is always required as the files contain critical business data that is not easy to reproduce. The files are frequently accessed in the first 30 days of the object creation but are rarely accessed after the first 30 days.

Which storage solution is MOST cost-effective?

A. Create an S3 bucket lifecycle policy to move files from S3 Standard to S3 Glacier 30 days from object creation. Delete the files 4 years after object creation.

B. Create an S3 bucket lifecycle policy to move files from S3 Standard to S3 One Zone-Infrequent Access (S3 One Zone-IA) 30 days from object creation. Delete the files 4 years after object creation.

**C. Create an S3 bucket lifecycle policy to move files from S3 Standard to S3 Standard-Infrequent Access (S3 Standard-IA) 30 days from object creation. Delete the files 4 years after object creation.**

D. Create an S3 bucket lifecycle policy to move files from S3 Standard to S3 Standard-Infrequent Access (S3 Standard-IA) 30 days from object creation. Move the files to S3 Glacier 4 years after object creation.

Question #: 118

A company is building a web-based application running on Amazon EC2 instances in multiple Availability Zones. The web application will provide access to a repository of text documents totaling about 900 TB in size. The company anticipates that the web application will experience periods of high demand. A solutions architect must ensure that the storage component for the text documents can scale to meet the demand of the application at all times. The company is concerned about the overall cost of the solution.

Which storage solution meets these requirements MOST cost-effectively?

A. Amazon Elastic Block Store (Amazon EBS)

B. Amazon Elastic File System (Amazon EFS)

C. Amazon OpenSearch Service (Amazon Elasticsearch Service)

**D. Amazon S3**

Question #: 117

A company stores its application logs in an Amazon CloudWatch Logs log group. A new policy requires the company to store all application logs in Amazon OpenSearch Service (Amazon Elasticsearch Service) in near-real time.

Which solution will meet this requirement with the LEAST operational overhead?

**A. Configure a CloudWatch Logs subscription to stream the logs to Amazon OpenSearch Service (Amazon Elasticsearch Service).**

B. Create an AWS Lambda function. Use the log group to invoke the function to write the logs to Amazon OpenSearch Service (Amazon Elasticsearch Service).

C. Create an Amazon Kinesis Data Firehose delivery stream. Configure the log group as the delivery streams sources. Configure Amazon OpenSearch Service (Amazon Elasticsearch Service) as the delivery stream's destination.

D. Install and configure Amazon Kinesis Agent on each application server to deliver the logs to Amazon Kinesis Data Streams. Configure Kinesis Data Streams to deliver the logs to Amazon OpenSearch Service (Amazon Elasticsearch Service).

Question #: 154

A company needs to save the results from a medical trial to an Amazon S3 repository. The repository must allow a few scientists to add new files and must restrict all other users to read-only access. No users can have the ability to modify or delete any files in the repository. The company must keep every file in the repository for a minimum of 1 year after its creation date.

Which solution will meet these requirements?

A. Use S3 Object Lock in governance mode with a legal hold of 1 year.

**B. Use S3 Object Lock in compliance mode with a retention period of 365 days.**

C. Use an IAM role to restrict all users from deleting or changing objects in the S3 bucket. Use an S3 bucket policy to only allow the IAM role.

D. Configure the S3 bucket to invoke an AWS Lambda function every time an object is added. Configure the function to track the hash of the saved object so that modified objects can be marked accordingly.

Question #: 44

A company has an Amazon S3 bucket that contains critical data. The company must protect the data from accidental deletion.

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

* **A. Enable versioning on the S3 bucket.**
* **B. Enable MFA Delete on the S3 bucket.**
* C. Create a bucket policy on the S3 bucket.
* D. Enable default encryption on the S3 bucket.
* E. Create a lifecycle policy for the objects in the S3 bucket.

Question #: 43

A company has an on-premises application that generates a large amount of time-sensitive data that is backed up to Amazon S3. The application has grown and there are user complaints about internet bandwidth limitations. A solutions architect needs to design a long-term solution that allows for both timely backups to Amazon S3 and with minimal impact on internet connectivity for internal users.

Which solution meets these requirements?

* A. Establish AWS VPN connections and proxy all traffic through a VPC gateway endpoint.
* **B. Establish a new AWS Direct Connect connection and direct backup traffic through this new connection.**
* C. Order daily AWS Snowball devices. Load the data onto the Snowball devices and return the devices to AWS each day.
* D. Submit a support ticket through the AWS Management Console. Request the removal of S3 service limits from the account.

Question #: 42

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.

Question #: 111

A company recently migrated a message processing system to AWS. The system receives messages into an ActiveMQ queue running on an Amazon EC2 instance. Messages are processed by a consumer application running on Amazon EC2. The consumer application processes the messages and writes results to a MySQL database running on Amazon EC2. The company wants this application to be highly available with low operational complexity.

Which architecture offers the HIGHEST availability?

* A. Add a second ActiveMQ server to another Availability Zone. Add an additional consumer EC2 instance in another Availability Zone. Replicate the MySQL database to another Availability Zone.
* B. Use Amazon MQ with active/standby brokers configured across two Availability Zones. Add an additional consumer EC2 instance in another Availability Zone. Replicate the MySQL database to another Availability Zone.
* C. Use Amazon MQ with active/standby brokers configured across two Availability Zones. Add an additional consumer EC2 instance in another Availability Zone. Use Amazon RDS for MySQL with Multi-AZ enabled.
* **D. Use Amazon MQ with active/standby brokers configured across two Availability Zones. Add an Auto Scaling group for the consumer EC2 instances across two Availability Zones. Use Amazon RDS for MySQL with Multi-AZ enabled.**

Question #: 140

A solutions architect needs to help a company optimize the cost of running an application on AWS. The application will use Amazon EC2 instances, AWS Fargate, and AWS Lambda for compute within the architecture.

The EC2 instances will run the data ingestion layer of the application. EC2 usage will be sporadic and unpredictable. Workloads that run on EC2 instances can be interrupted at any time. The application front end will run on Fargate, and Lambda will serve the API layer. The front-end utilization and API layer utilization will be predictable over the course of the next year.

Which combination of purchasing options will provide the MOST cost-effective solution for hosting this application? (Choose two.)

* A. Use Spot Instances for the data ingestion layer
* B. Use On-Demand Instances for the data ingestion layer
* C. Purchase a 1-year Compute Savings Plan for the front end and API layer.
* D. Purchase 1-year All Upfront Reserved instances for the data ingestion layer.
* E. Purchase a 1-year EC2 instance Savings Plan for the front end and API layer.

Question #: 107

A bicycle sharing company is developing a multi-tier architecture to track the location of its bicycles during peak operating hours. The company wants to use these data points in its existing analytics platform. A solutions architect must determine the most viable multi-tier option to support this architecture. The data points must be accessible from the REST API.

Which action meets these requirements for storing and retrieving location data?

* A. Use Amazon Athena with Amazon S3.
* **B. Use Amazon API Gateway with AWS Lambda.**
* C. Use Amazon QuickSight with Amazon Redshift.
* D. Use Amazon API Gateway with Amazon Kinesis Data Analytics.

Question #: 148

A company has a data ingestion workflow that includes the following components:

An Amazon Simple Notification Service (Amazon SNS) topic that receives notifications about new data deliveries

An AWS Lambda function that processes and stores the data

The ingestion workflow occasionally fails because of network connectivity issues. When failure occurs, the corresponding data is not ingested unless the company manually reruns the job.

What should a solutions architect do to ensure that all notifications are eventually processed?

* A. Configure the Lambda function for deployment across multiple Availability Zones.
* B. Modify the Lambda function's configuration to increase the CPU and memory allocations for the function.
* C. Configure the SNS topic’s retry strategy to increase both the number of retries and the wait time between retries.
* D. Configure an Amazon Simple Queue Service (Amazon SQS) queue as the on-failure destination. Modify the Lambda function to process messages in the queue.

Question #: 141

A company runs a web-based portal that provides users with global breaking news, local alerts, and weather updates. The portal delivers each user a personalized view by using mixture of static and dynamic content. Content is served over HTTPS through an API server running on an Amazon EC2 instance behind an Application Load Balancer (ALB). The company wants the portal to provide this content to its users across the world as quickly as possible.

How should a solutions architect design the application to ensure the LEAST amount of latency for all users?

* **A. Deploy the application stack in a single AWS Region. Use Amazon CloudFront to serve all static and dynamic content by specifying the ALB as an origin.**
* B. Deploy the application stack in two AWS Regions. Use an Amazon Route 53 latency routing policy to serve all content from the ALB in the closest Region.
* C. Deploy the application stack in a single AWS Region. Use Amazon CloudFront to serve the static content. Serve the dynamic content directly from the ALB.
* D. Deploy the application stack in two AWS Regions. Use an Amazon Route 53 geolocation routing policy to serve all content from the ALB in the closest Region.

Question #: 7

A company has an application that ingests incoming messages. Dozens of other applications and microservices then quickly consume these messages. The number of messages varies drastically and sometimes increases suddenly to 100,000 each second. The company wants to decouple the solution and increase scalability.

Which solution meets these requirements?

* A. Persist the messages to Amazon Kinesis Data Analytics. Configure the consumer applications to read and process the messages.
* B. Deploy the ingestion application on Amazon EC2 instances in an Auto Scaling group to scale the number of EC2 instances based on CPU metrics.
* C. Write the messages to Amazon Kinesis Data Streams with a single shard. Use an AWS Lambda function to preprocess messages and store them in Amazon DynamoDB. Configure the consumer applications to read from DynamoDB to process the messages.
* **D. Publish the messages to an Amazon Simple Notification Service (Amazon SNS) topic with multiple Amazon Simple Queue Service (Amazon SOS) subscriptions. Configure the consumer applications to process the messages from the queues.**

Question #: 6

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company uses NFS to store large video files in on-premises network attached storage. Each video file ranges in size from 1 MB 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. Use the AWS CLI to copy all files locally to the S3 bucket.
* **B. Create an AWS Snowball Edge job. Receive a Snowball Edge device on premises. Use the Snowball Edge client to transfer data to the device. Return the device so that AWS can import the data into Amazon S3.**
* C. Deploy an S3 File Gateway on premises. 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. Transfer the data from the existing NFS file share to the S3 File Gateway.
* D. Set up an AWS Direct Connect connection between the on-premises network and AWS. Deploy an S3 File Gateway on premises. Create a public virtual interface (VIF) 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. Transfer the data from the existing NFS file share to the S3 File Gateway.

Question #: 14

A company runs an ecommerce application 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 based on CPU utilization metrics. The ecommerce application stores the transaction data in a MySQL 8.0 database that is hosted on a large EC2 instance.

The database's performance degrades quickly as application load increases. The application handles more read requests than write transactions. The company wants a solution that will automatically scale the database to meet the demand of unpredictable read workloads while maintaining high availability.

Which solution will meet these requirements?

* A. Use Amazon Redshift with a single node for leader and compute functionality.
* B. Use Amazon RDS with a Single-AZ deployment Configure Amazon RDS to add reader instances in a different Availability Zone.
* **C. Use Amazon Aurora with a Multi-AZ deployment. Configure Aurora Auto Scaling with Aurora Replicas.**
* D. Use Amazon ElastiCache for Memcached with EC2 Spot Instances.

Question #: 156

A company produces batch data that comes from different databases. The company also produces live stream data from network sensors and application APIs. The company needs to consolidate all the data into one place for business analytics. The company needs to process the incoming data and then stage the data in different Amazon S3 buckets. Teams will later run one-time queries and import the data into a business intelligence tool to show key performance indicators (KPIs).

Which combination of steps will meet these requirements with the LEAST operational overhead? (Choose two.)

* **A. Use Amazon Athena for one-time queries. Use Amazon QuickSight to create dashboards for KPIs**.
* B. Use Amazon Kinesis Data Analytics for one-time queries. Use Amazon QuickSight to create dashboards for KPIs.
* C. Create custom AWS Lambda functions to move the individual records from the databases to an Amazon Redshift cluster.
* D. Use an AWS Glue extract, transform, and load (ETL) job to convert the data into JSON format. Load the data into multiple Amazon OpenSearch Service (Amazon Elasticsearch Service) clusters.
* **E. Use blueprints in AWS Lake Formation to identify the data that can be ingested into a data lake. Use AWS Glue to crawl the source, extract the data, and load the data into Amazon S3 in Apache Parquet format.**

Question #: 36

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. Create an S3 bucket in each Region. Configure replication between the S3 buckets. Configure the application to use the KMS key with client-side encryption.**
* C. 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.
* D. 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.

Question #: 152

A company uses a three-tier web application to provide training to new employees. The application is accessed for only 12 hours every day. The company is using an Amazon RDS for MySQL DB instance to store information and wants to minimize costs.

What should a solutions architect do to meet these requirements?

* **A. Configure an IAM policy for AWS Systems Manager Session Manager. Create an IAM role for the policy. Update the trust relationship of the role. Set up automatic start and stop for the DB instance.**
* B. Create an Amazon ElastiCache for Redis cache cluster that gives users the ability to access the data from the cache when the DB instance is stopped. Invalidate the cache after the DB instance is started.
* C. Launch an Amazon EC2 instance. Create an IAM role that grants access to Amazon RDS. Attach the role to the EC2 instance. Configure a cron job to start and stop the EC2 instance on the desired schedule.
* D. Create AWS Lambda functions to start and stop the DB instance. Create Amazon EventBridge (Amazon CloudWatch Events) scheduled rules to invoke the Lambda functions. Configure the Lambda functions as event targets for the rules.

Question #: 151

A company wants to migrate its on-premises data center to AWS. According to the company's compliance requirements, the company can use only the ap-northeast-3 Region. Company administrators are not permitted to connect VPCs to the internet.

Which solutions will meet these requirements? (Choose two.)

* **A. Use AWS Control Tower to implement data residency guardrails to deny internet access and deny access to all AWS Regions except ap-northeast-3.**
* B. Use rules in AWS WAF to prevent internet access. Deny access to all AWS Regions except ap-northeast-3 in the AWS account settings.
* **C. Use AWS Organizations to configure service control policies (SCPS) that prevent VPCs from gaining internet access. Deny access to all AWS Regions except ap-northeast-3.**
* D. Create an outbound rule for the network ACL in each VPC to deny all traffic from 0.0.0.0/0. Create an IAM policy for each user to prevent the use of any AWS Region other than ap-northeast-3.
* E. Use AWS Config to activate managed rules to detect and alert for internet gateways and to detect and alert for new resources deployed outside of ap-northeast-3.

Question #: 29

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. Associate the target group with the Auto Scaling group. Use the NLB as an AWS Global Accelerator endpoint in each Region.**
* B. Deploy an Application Load Balancer (ALB) and an associated target group. Associate the target group with the Auto Scaling group. Use the ALB as an AWS Global Accelerator endpoint in each Region.
* C. Deploy a Network Load Balancer (NLB) and an associated target group. Associate the target group with the Auto Scaling group. Create an Amazon Route 53 latency record that points to aliases for each NLB. Create an Amazon CloudFront distribution that uses the latency record as an origin.
* D. Deploy an Application Load Balancer (ALB) and an associated target group. Associate the target group with the Auto Scaling group. Create an Amazon Route 53 weighted record that points to aliases for each ALB. Deploy an Amazon CloudFront distribution that uses the weighted record as an origin.

Question #: 145

A company hosts a website analytics application on a single Amazon EC2 On-Demand Instance. The analytics software is written in PHP and uses a MySQL database. The analytics software, the web server that provides PHP, and the database server are all hosted on the EC2 instance. The application is showing signs of performance degradation during busy times and is presenting 5xx errors. The company needs to make the application scale seamlessly.

Which solution will meet these requirements MOST cost-effectively?

* **A. Migrate the database to an Amazon RDS for MySQL DB instance. Create an AMI of the web application. Use the AMI to launch a second EC2 On-Demand Instance. Use an Application Load Balancer to distribute the load to each EC2 instance.**
* B. Migrate the database to an Amazon RDS for MySQL DB instance. Create an AMI of the web application. Use the AMI to launch a second EC2 On-Demand Instance. Use Amazon Route 53 weighted routing to distribute the load across the two EC2 instances.
* C. Migrate the database to an Amazon Aurora MySQL DB instance. Create an AWS Lambda function to stop the EC2 instance and change the instance type. Create an Amazon CloudWatch alarm to invoke the Lambda function when CPU utilization surpasses 75%.
* D. Migrate the database to an Amazon Aurora MySQL DB instance. Create an AMI of the web application. Apply the AMI to a launch template. Create an Auto Scaling group with the launch template Configure the launch template to use a Spot Fleet. Attach an Application Load Balancer to the Auto Scaling group.

Question #: 143

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 Amplify. Connect the application to an Amazon API Gateway API that is integrated with AWS Lambda.
* C. Host the application on Amazon EC2 instances. Set up an Application Load Balancer with EC2 instances in an Auto Scaling group as targets.
* D. Host the application on Amazon Elastic Container Service (Amazon ECS). Set up an Application Load Balancer with Amazon ECS as the target.

Question #: 139

A reporting team receives files each day in an Amazon S3 bucket. The reporting team manually reviews and copies the files from this initial S3 bucket to an analysis S3 bucket each day at the same time to use with Amazon QuickSight. Additional teams are starting to send more files in larger sizes to the initial S3 bucket.

The reporting team wants to move the files automatically analysis S3 bucket as the files enter the initial S3 bucket. The reporting team also wants to use AWS Lambda functions to run pattern-matching code on the copied data. In addition, the reporting team wants to send the data files to a pipeline in Amazon SageMaker Pipelines.

What should a solutions architect do to meet these requirements with the LEAST operational overhead?

* A. Create a Lambda function to copy the files to the analysis S3 bucket. Create an S3 event notification for the analysis S3 bucket. Configure Lambda and SageMaker Pipelines as destinations of the event notification. Configure s3:ObjectCreated:Put as the event type.
* B. Create a Lambda function to copy the files to the analysis S3 bucket. Configure the analysis S3 bucket to send event notifications to Amazon EventBridge (Amazon CloudWatch Events). Configure an ObjectCreated rule in EventBridge (CloudWatch Events). Configure Lambda and SageMaker Pipelines as targets for the rule.
* C. Configure S3 replication between the S3 buckets. Create an S3 event notification for the analysis S3 bucket. Configure Lambda and SageMaker Pipelines as destinations of the event notification. Configure s3:ObjectCreated:Put as the event type.
* **D. Configure S3 replication between the S3 buckets. Configure the analysis S3 bucket to send event notifications to Amazon EventBridge (Amazon CloudWatch Events). Configure an ObjectCreated rule in EventBridge (CloudWatch Events). Configure Lambda and SageMaker Pipelines as targets for the rule.**

Question #: 136

A company is migrating its on-premises PostgreSQL database to Amazon Aurora PostgreSQL. The on-premises database must remain online and accessible during the migration. The Aurora database must remain synchronized with the on-premises database.

Which combination of actions must a solutions architect take to meet these requirements? (Choose two.)

* **A. Create an ongoing replication task.**
* B. Create a database backup of the on-premises database.
* **C. Create an AWS Database Migration Service (AWS DMS) replication server.**
* D. Convert the database schema by using the AWS Schema Conversion Tool (AWS SCT).
* E. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to monitor the database synchronization.

Question #: 133

A company runs an Oracle database on premises. As part of the company’s migration to AWS, the company wants to upgrade the database to the most recent available version. The company also wants to set up disaster recovery (DR) for the database. The company needs to minimize the operational overhead for normal operations and DR setup. The company also needs to maintain access to the database's underlying operating system.

Which solution will meet these requirements?

* A. Migrate the Oracle database to an Amazon EC2 instance. Set up database replication to a different AWS Region.
* B. Migrate the Oracle database to Amazon RDS for Oracle. Activate Cross-Region automated backups to replicate the snapshots to another AWS Region.
* **C. Migrate the Oracle database to Amazon RDS Custom for Oracle. Create a read replica for the database in another AWS Region.**
* D. Migrate the Oracle database to Amazon RDS for Oracle. Create a standby database in another Availability Zone.

Question #: 128

A company wants to run applications in containers in the AWS Cloud. These applications are stateless and can tolerate disruptions within the underlying infrastructure. The company needs a solution that minimizes cost and operational overhead.

What should a solutions architect do to meet these requirements?

* A. Use Spot Instances in an Amazon EC2 Auto Scaling group to run the application containers.
* **B. Use Spot Instances in an Amazon Elastic Kubernetes Service (Amazon EKS) managed node group.**
* C. Use On-Demand Instances in an Amazon EC2 Auto Scaling group to run the application containers.
* D. Use On-Demand Instances in an Amazon Elastic Kubernetes Service (Amazon EKS) managed node group.

Question #: 127

A media company is evaluating the possibility of moving its systems to the AWS Cloud. The company needs at least 10 TB of storage with the maximum possible I/O performance for video processing, 300 TB of very durable storage for storing media content, and 900 TB of storage to meet requirements for archival media that is not in use anymore.

Which set of services should a solutions architect recommend to meet these requirements?

* A. Amazon EBS for maximum performance, Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage
* B. Amazon EBS for maximum performance, Amazon EFS for durable data storage, and Amazon S3 Glacier for archival storage
* C. Amazon EC2 instance store for maximum performance, Amazon EFS for durable data storage, and Amazon S3 for archival storage
* **D. Amazon EC2 instance store for maximum performance, Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage**

Question #: 125

A company runs its 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 DB instance. The EC2 instances and the RDS 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? (Choose 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.

Question #: 123

A company has a dynamic web application hosted on two Amazon EC2 instances. The company has its own SSL certificate, which is on each instance to perform SSL termination.

There has been an increase in traffic recently, and the operations team determined that SSL encryption and decryption is causing the compute capacity of the web servers to reach their maximum limit.

What should a solutions architect do to increase the application's performance?

* A. Create a new SSL certificate using AWS Certificate Manager (ACM). Install the ACM certificate on each instance.
* B. Create an Amazon S3 bucket Migrate the SSL certificate to the S3 bucket. Configure the EC2 instances to reference the bucket for SSL termination.
* C. Create another EC2 instance as a proxy server. Migrate the SSL certificate to the new instance and configure it to direct connections to the existing EC2 instances.
* **D. Import the SSL certificate into AWS Certificate Manager (ACM). Create an Application Load Balancer with an HTTPS listener that uses the SSL certificate from ACM.**

Question #: 120

A company has implemented a self-managed DNS solution on three Amazon EC2 instances behind a Network Load Balancer (NLB) in the us-west-2 Region. Most of the company's users are located in the United States and Europe. The company wants to improve the performance and availability of the solution. The company launches and configures three EC2 instances in the eu-west-1 Region and adds the EC2 instances as targets for a new NLB.

Which solution can the company use to route traffic to all the EC2 instances?

* A. Create an Amazon Route 53 geolocation routing policy to route requests to one of the two NLBs. Create an Amazon CloudFront distribution. Use the Route 53 record as the distribution’s origin.
* **B. Create a standard accelerator in AWS Global Accelerator. Create endpoint groups in us-west-2 and eu-west-1. Add the two NLBs as endpoints for the endpoint groups.**
* C. Attach Elastic IP addresses to the six EC2 instances. Create an Amazon Route 53 geolocation routing policy to route requests to one of the six EC2 instances. Create an Amazon CloudFront distribution. Use the Route 53 record as the distribution's origin.
* D. Replace the two NLBs with two Application Load Balancers (ALBs). Create an Amazon Route 53 latency routing policy to route requests to one of the two ALBs. Create an Amazon CloudFront distribution. Use the Route 53 record as the distribution’s origin.

Question #: 116

A company uses a popular content management system (CMS) for its corporate website. However, the required patching and maintenance are burdensome. The company is redesigning its website and wants anew solution. The website will be updated four times a year and does not need to have any dynamic content available. The solution must provide high scalability and enhanced security.

Which combination of changes will meet these requirements with the LEAST operational overhead? (Choose two.)

* A. Configure Amazon CloudFront in front of the website to use HTTPS functionality.
* B. Deploy an AWS WAF web ACL in front of the website to provide HTTPS functionality.
* C. Create and deploy an AWS Lambda function to manage and serve the website content.
* D. Create the new website and an Amazon S3 bucket. Deploy the website on the S3 bucket with static website hosting enabled.
* E. Create the new website. Deploy the website by using an Auto Scaling group of Amazon EC2 instances behind an Application Load Balancer.

Question #: 114

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 meats these requirements?

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

Question #: 113

A company uses 50 TB of data for reporting. The company wants to move this data from on premises to AWS. A custom application in the company’s data center runs a weekly data transformation job. The company plans to pause the application until the data transfer is complete and needs to begin the transfer process as soon as possible.

The data center does not have any available network bandwidth for additional workloads. A solutions architect must transfer the data and must configure the transformation job to continue to run in the AWS Cloud.

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

* A. Use AWS DataSync to move the data. Create a custom transformation job by using AWS Glue.
* B. Order an AWS Snowcone device to move the data. Deploy the transformation application to the device.
* **C. Order an AWS Snowball Edge Storage Optimized device. Copy the data to the device. Create a custom transformation job by using AWS Glue.**
* D. Order an AWS Snowball Edge Storage Optimized device that includes Amazon EC2 compute. Copy the data to the device. Create a new EC2 instance on AWS to run the transformation application.

Question #: 112

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. Use an Application Load Balancer to distribute the incoming requests.**

B. Use two Amazon EC2 instances to host the containerized web application. Use an Application Load Balancer to distribute the incoming requests.

C. Use AWS Lambda with a new code that uses one of the supported languages. Create multiple Lambda functions to support the load. Use Amazon API Gateway as an entry point to the Lambda functions.

D. 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.

Question #: 110

A social media company allows users to upload images to its website. The website runs on Amazon EC2 instances. During upload requests, the website resizes the images to a standard size and stores the resized images in Amazon S3. Users are experiencing slow upload requests to the website.

The company needs to reduce coupling within the application and improve website performance. A solutions architect must design the most operationally efficient process for image uploads.

Which combination of actions should the solutions architect take to meet these requirements? (Choose two.)

* A. Configure the application to upload images to S3 Glacier.
* **B. Configure the web server to upload the original images to Amazon S3.**
* C. Configure the application to upload images directly from each user's browser to Amazon S3 through the use of a presigned URL
* D. Configure S3 Event Notifications to invoke an AWS Lambda function when an image is uploaded. Use the function to resize the image.
* E. Create an Amazon EventBridge (Amazon CloudWatch Events) rule that invokes an AWS Lambda function on a schedule to resize uploaded images.

Question #: 108

A company has an automobile sales website that stores its listings in a database on Amazon RDS. When an automobile is sold, the listing needs to be removed from the website and the data must be sent to multiple target systems.

Which design should a solutions architect recommend?

* A. Create an AWS Lambda function triggered when the database on Amazon RDS is updated to send the information to an Amazon Simple Queue Service (Amazon SQS) queue for the targets to consume.
* B. Create an AWS Lambda function triggered when the database on Amazon RDS is updated to send the information to an Amazon Simple Queue Service (Amazon SQS) FIFO queue for the targets to consume.
* C. Subscribe to an RDS event notification and send an Amazon Simple Queue Service (Amazon SQS) queue fanned out to multiple Amazon Simple Notification Service (Amazon SNS) topics. Use AWS Lambda functions to update the targets.
* **D. Subscribe to an RDS event notification and send an Amazon Simple Notification Service (Amazon SNS) topic fanned out to multiple Amazon Simple Queue Service (Amazon SQS) queues. Use AWS Lambda functions to update the targets.**

Question #: 70

A company's HTTP application is behind a Network Load Balancer (NLB). The NLB's target group is configured to use an Amazon EC2 Auto Scaling group with multiple EC2 instances that run the web service.

The company notices that the NLB is not detecting HTTP errors for the application. These errors require a manual restart of the EC2 instances that run the web service. The company needs to improve the application's availability without writing custom scripts or code.

What should a solutions architect do to meet these requirements?

* A. Enable HTTP health checks on the NLB, supplying the URL of the company's application.
* B. Add a cron job to the EC2 instances to check the local application's logs once each minute. If HTTP errors are detected. the application will restart.
* **C. Replace the NLB with an Application Load Balancer. Enable HTTP health checks by supplying the URL of the company's application. Configure an Auto Scaling action to replace unhealthy instances.**
* D. Create an Amazon Cloud Watch alarm that monitors the UnhealthyHostCount metric for the NLB. Configure an Auto Scaling action to replace unhealthy instances when the alarm is in the ALARM state.

Question #: 104

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? (Choose 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.

Question #: 20

A company wants to improve its ability to clone large amounts of production data into a test environment in the same AWS Region. The data is stored in Amazon EC2 instances on Amazon Elastic Block Store (Amazon EBS) volumes. Modifications to the cloned data must not affect the production environment. The software that accesses this data requires consistently high I/O performance.

A solutions architect needs to minimize the time that is required to clone the production data into the test environment.

Which solution will meet these requirements?

* A. Take EBS snapshots of the production EBS volumes. Restore the snapshots onto EC2 instance store volumes in the test environment.
* B. Configure the production EBS volumes to use the EBS Multi-Attach feature. Take EBS snapshots of the production EBS volumes. Attach the production EBS volumes to the EC2 instances in the test environment.
* C. Take EBS snapshots of the production EBS volumes. Create and initialize new EBS volumes. Attach the new EBS volumes to EC2 instances in the test environment before restoring the volumes from the production EBS snapshots.
* **D. Take EBS snapshots of the production EBS volumes. Turn on the EBS fast snapshot restore feature on the EBS snapshots. Restore the snapshots into new EBS volumes. Attach the new EBS volumes to EC2 instances in the test environment.**

Question #: 96

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 10.100.100.1 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.

Question #: 119

A global company is using Amazon API Gateway to design REST APIs for its loyalty club users in the us-east-1 Region and the ap-southeast-2 Region. A solutions architect must design a solution to protect these API Gateway managed REST APIs across multiple accounts from SQL injection and cross-site scripting attacks.

Which solution will meet these requirements with the LEAST amount of administrative effort?

* A. Set up AWS WAF in both Regions. Associate Regional web ACLs with an API stage.
* B. Set up AWS Firewall Manager in both Regions. Centrally configure AWS WAF rules.
* C. Set up AWS Shield in bath Regions. Associate Regional web ACLs with an API stage.
* D. Set up AWS Shield in one of the Regions. Associate Regional web ACLs with an API stage.

Question #: 54

A company runs multiple Windows workloads on AWS. The company's employees use Windows file shares that are hosted on two Amazon EC2 instances. The file shares synchronize data between themselves and maintain duplicate copies. The company wants a highly available and durable storage solution that preserves how users currently access the files.

What should a solutions architect do to meet these requirements?

* A. Migrate all the data to Amazon S3. Set up IAM authentication for users to access files.
* B. Set up an Amazon S3 File Gateway. Mount the S3 File Gateway on the existing EC2 instances.
* **C. Extend the file share environment to Amazon FSx for Windows File Server with a Multi-AZ configuration. Migrate all the data to FSx for Windows File Server.**
* D. Extend the file share environment to Amazon Elastic File System (Amazon EFS) with a Multi-AZ configuration. Migrate all the data to Amazon EFS.

Question #: 8

A company is migrating a distributed application to AWS. The application serves variable workloads. The legacy platform consists of a primary server that coordinates jobs across multiple compute nodes. The company wants to modernize the application with a solution that maximizes resiliency and scalability.

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

* A. Configure an Amazon Simple Queue Service (Amazon SQS) queue as a destination for the jobs. Implement the compute nodes with Amazon EC2 instances that are managed in an Auto Scaling group. Configure EC2 Auto Scaling to use scheduled scaling.
* **B. Configure an Amazon Simple Queue Service (Amazon SQS) queue as a destination for the jobs. Implement the compute nodes with Amazon EC2 instances that are managed in an Auto Scaling group. Configure EC2 Auto Scaling based on the size of the queue.**
* C. Implement the primary server and the compute nodes with Amazon EC2 instances that are managed in an Auto Scaling group. Configure AWS CloudTrail as a destination for the jobs. Configure EC2 Auto Scaling based on the load on the primary server.
* D. Implement the primary server and the compute nodes with Amazon EC2 instances that are managed in an Auto Scaling group. Configure Amazon EventBridge (Amazon CloudWatch Events) as a destination for the jobs. Configure EC2 Auto Scaling based on the load on the compute nodes.

Question #: 77

A company needs to configure a real-time data ingestion architecture for its application. The company needs an API, a process that transforms data as the data is streamed, and a storage solution for the data.

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

* A. Deploy an Amazon EC2 instance to host an API that sends data to an Amazon Kinesis data stream. Create an Amazon Kinesis Data Firehose delivery stream that uses the Kinesis data stream as a data source. Use AWS Lambda functions to transform the data. Use the Kinesis Data Firehose delivery stream to send the data to Amazon S3.
* B. Deploy an Amazon EC2 instance to host an API that sends data to AWS Glue. Stop source/destination checking on the EC2 instance. Use AWS Glue to transform the data and to send the data to Amazon S3.
* **C. Configure an Amazon API Gateway API to send data to an Amazon Kinesis data stream. Create an Amazon Kinesis Data Firehose delivery stream that uses the Kinesis data stream as a data source. Use AWS Lambda functions to transform the data. Use the Kinesis Data Firehose delivery stream to send the data to Amazon S3.**
* D. Configure an Amazon API Gateway API to send data to AWS Glue. Use AWS Lambda functions to transform the data. Use AWS Glue to send the data to Amazon S3.

Question #: 101

A solutions architect is designing a VPC with public and private subnets. The VPC and subnets use IPv4 CIDR blocks. There is one public subnet and one private subnet in each of three Availability Zones (AZs) for high availability. An internet gateway is used to provide internet access for the public subnets. The private subnets require access to the internet to allow Amazon EC2 instances to download software updates.

What should the solutions architect do to enable Internet access for the private subnets?

* A. Create three NAT gateways, one for each public subnet in each AZ. Create a private route table for each AZ that forwards non-VPC traffic to the NAT gateway in its AZ.
* B. Create three NAT instances, one for each private subnet in each AZ. Create a private route table for each AZ that forwards non-VPC traffic to the NAT instance in its AZ.
* C. Create a second internet gateway on one of the private subnets. Update the route table for the private subnets that forward non-VPC traffic to the private internet gateway.
* D. Create an egress-only internet gateway on one of the public subnets. Update the route table for the private subnets that forward non-VPC traffic to the egress-only Internet gateway.

Question #: 100

A company's containerized application runs on an Amazon EC2 instance. The application needs to download security certificates before it can communicate with other business applications. The company wants a highly secure solution to encrypt and decrypt the certificates in near real time. The solution also needs to store data in highly available storage after the data is encrypted.

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

* A. Create AWS Secrets Manager secrets for encrypted certificates. Manually update the certificates as needed. Control access to the data by using fine-grained IAM access.
* B. Create an AWS Lambda function that uses the Python cryptography library to receive and perform encryption operations. Store the function in an Amazon S3 bucket.
* **C. Create an AWS Key Management Service (AWS KMS) customer managed key. Allow the EC2 role to use the KMS key for encryption operations. Store the encrypted data on Amazon S3.**
* D. Create an AWS Key Management Service (AWS KMS) customer managed key. Allow the EC2 role to use the KMS key for encryption operations. Store the encrypted data on Amazon Elastic Block Store (Amazon EBS) volumes.

Question #: 98

An image-processing company has a web application that users use to upload images. The application uploads the images into an Amazon S3 bucket. The company has set up S3 event notifications to publish the object creation events to an Amazon Simple Queue Service (Amazon SQS) standard queue. The SQS queue serves as the event source for an AWS Lambda function that processes the images and sends the results to users through email.

Users report that they are receiving multiple email messages for every uploaded image. A solutions architect determines that SQS messages are invoking the Lambda function more than once, resulting in multiple email messages.

What should the solutions architect do to resolve this issue with the LEAST operational overhead?

* A. Set up long polling in the SQS queue by increasing the ReceiveMessage wait time to 30 seconds.
* B. Change the SQS standard queue to an SQS FIFO queue. Use the message deduplication ID to discard duplicate messages.
* **C. Increase the visibility timeout in the SQS queue to a value that is greater than the total of the function timeout and the batch window timeout.**
* D. Modify the Lambda function to delete each message from the SQS queue immediately after the message is read before processing.

Question #: 90

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.

Question #: 88

A survey company has gathered data for several years from areas in the United States. The company hosts the data in an Amazon S3 bucket that is 3 TB in size and growing. The company has started to share the data with a European marketing firm that has S3 buckets. The company wants to ensure that its data transfer costs remain as low as possible.

Which solution will meet these requirements?

* **A. Configure the Requester Pays feature on the company's S3 bucket.**
* B. Configure S3 Cross-Region Replication from the company's S3 bucket to one of the marketing firm's S3 buckets.
* C. Configure cross-account access for the marketing firm so that the marketing firm has access to the company's S3 bucket.
* D. Configure the company's S3 bucket to use S3 Intelligent-Tiering. Sync the S3 bucket to one of the marketing firm's S3 buckets.

Question #: 87

A company hosts an application on AWS Lambda functions that are invoked by an Amazon API Gateway API. The Lambda functions save customer data to an Amazon Aurora MySQL database. Whenever the company upgrades the database, the Lambda functions fail to establish database connections until the upgrade is complete. The result is that customer data is not recorded for some of the event.

A solutions architect needs to design a solution that stores customer data that is created during database upgrades.

Which solution will meet these requirements?

* A. Provision an Amazon RDS proxy to sit between the Lambda functions and the database. Configure the Lambda functions to connect to the RDS proxy.
* B. Increase the run time of the Lambda functions to the maximum. Create a retry mechanism in the code that stores the customer data in the database.
* C. Persist the customer data to Lambda local storage. Configure new Lambda functions to scan the local storage to save the customer data to the database.
* **D. Store the customer data in an Amazon Simple Queue Service (Amazon SQS) FIFO queue. Create a new Lambda function that polls the queue and stores the customer data in the database.**

Question #: 62

A company is deploying a new public web application to AWS. The application will run behind an Application Load Balancer (ALB). The application needs to be encrypted at the edge with an SSL/TLS certificate that is issued by an external certificate authority (CA). The certificate must be rotated each year before the certificate expires.

What should a solutions architect do to meet these requirements?

* A. Use AWS Certificate Manager (ACM) to issue an SSL/TLS certificate. Apply the certificate to the ALB. Use the managed renewal feature to automatically rotate the certificate.
* B. Use AWS Certificate Manager (ACM) to issue an SSL/TLS certificate. Import the key material from the certificate. Apply the certificate to the ALUse the managed renewal feature to automatically rotate the certificate.
* C. Use AWS Certificate Manager (ACM) Private Certificate Authority to issue an SSL/TLS certificate from the root CA. Apply the certificate to the ALB. Use the managed renewal feature to automatically rotate the certificate.
* **D. Use AWS Certificate Manager (ACM) to import an SSL/TLS certificate. Apply the certificate to the ALB. Use Amazon EventBridge (Amazon CloudWatch Events) to send a notification when the certificate is nearing expiration. Rotate the certificate manually.**

Question #: 37

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company recently launched a variety of new workloads on Amazon EC2 instances in its AWS account. The company needs to create a strategy to access and administer the instances remotely and securely. The company needs to implement a repeatable process that works with native AWS services and follows the AWS Well-Architected Framework.

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

* A. Use the EC2 serial console to directly access the terminal interface of each instance for administration.
* **B. Attach the appropriate IAM role to each existing instance and new instance. Use AWS Systems Manager Session Manager to establish a remote SSH session.**
* C. Create an administrative SSH key pair. Load the public key into each EC2 instance. Deploy a bastion host in a public subnet to provide a tunnel for administration of each instance.
* D. Establish an AWS Site-to-Site VPN connection. Instruct administrators to use their local on-premises machines to connect directly to the instances by using SSH keys across the VPN tunnel.

Question #: 51

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is developing an application that provides order shipping statistics for retrieval by a REST API. The company wants to extract the shipping statistics, organize the data into an easy-to-read HTML format, and send the report to several email addresses at the same time every morning.

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

* A. Configure the application to send the data to Amazon Kinesis Data Firehose.
* B. Use Amazon Simple Email Service (Amazon SES) to format the data and to send the report by email.
* C. Create an Amazon EventBridge (Amazon CloudWatch Events) scheduled event that invokes an AWS Glue job to query the application's API for the data.
* D. Create an Amazon EventBridge (Amazon CloudWatch Events) scheduled event that invokes an AWS Lambda function to query the application's API for the data.
* E. Store the application data in Amazon S3. Create an Amazon Simple Notification Service (Amazon SNS) topic as an S3 event destination to send the report by email.

Question #: 19

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 VPConfigure 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**

Question #: 50

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has a production workload that runs on 1,000 Amazon EC2 Linux instances. The workload is powered by third-party software. The company needs to patch the third-party software on all EC2 instances as quickly as possible to remediate a critical security vulnerability.

What should a solutions architect do to meet these requirements?

* A. Create an AWS Lambda function to apply the patch to all EC2 instances.
* B. Configure AWS Systems Manager Patch Manager to apply the patch to all EC2 instances.
* C. Schedule an AWS Systems Manager maintenance window to apply the patch to all EC2 instances.
* **D. Use AWS Systems Manager Run Command to run a custom command that applies the patch to all EC2 instances.**

Question #: 48

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company's website uses an Amazon EC2 instance store for its catalog of items. The company wants to make sure that the catalog is highly available and that the catalog is stored in a durable location.

What should a solutions architect do to meet these requirements?

* A. Move the catalog to Amazon ElastiCache for Redis.
* B. Deploy a larger EC2 instance with a larger instance store.
* C. Move the catalog from the instance store to Amazon S3 Glacier Deep Archive.
* **D. Move the catalog to an Amazon Elastic File System (Amazon EFS) file system.**

Question #: 45

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has a data ingestion workflow that consists of the following:

• An Amazon Simple Notification Service (Amazon SNS) topic for notifications about new data deliveries

• An AWS Lambda function to process the data and record metadata

The company observes that the ingestion workflow fails occasionally because of network connectivity issues. When such a failure occurs, the Lambda function does not ingest the corresponding data unless the company manually reruns the job.

Which combination of actions should a solutions architect take to ensure that the Lambda function ingests all data in the future? (Choose two.)

* A. Deploy the Lambda function in multiple Availability Zones.
* **B. Create an Amazon Simple Queue Service (Amazon SQS) queue, and subscribe it to the SNS topic.**
* C. Increase the CPU and memory that are allocated to the Lambda function.
* D. Increase provisioned throughput for the Lambda function.
* **E. Modify the Lambda function to read from an Amazon Simple Queue Service (Amazon SQS) queue.**

Question #: 41

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company's application integrates with multiple software-as-a-service (SaaS) sources for data collection. The company runs Amazon EC2 instances to receive the data and to upload the data to an Amazon S3 bucket for analysis. The same EC2 instance that receives and uploads the data also sends a notification to the user when an upload is complete. The company has noticed slow application performance and wants to improve the performance as much as possible.

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

* A. Create an Auto Scaling group so that EC2 instances can scale out. Configure an S3 event notification to send events to an Amazon Simple Notification Service (Amazon SNS) topic when the upload to the S3 bucket is complete.
* **B. Create an Amazon AppFlow flow to transfer data between each SaaS source and the S3 bucket. Configure an S3 event notification to send events to an Amazon Simple Notification Service (Amazon SNS) topic when the upload to the S3 bucket is complete.**
* C. Create an Amazon EventBridge (Amazon CloudWatch Events) rule for each SaaS source to send output data. Configure the S3 bucket as the rule's target. Create a second EventBridge (Cloud Watch Events) rule to send events when the upload to the S3 bucket is complete. Configure an Amazon Simple Notification Service (Amazon SNS) topic as the second rule's target.
* D. Create a Docker container to use instead of an EC2 instance. Host the containerized application on Amazon Elastic Container Service (Amazon ECS). Configure Amazon CloudWatch Container Insights to send events to an Amazon Simple Notification Service (Amazon SNS) topic when the upload to the S3 bucket is complete.

Question #: 39

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company maintains a searchable repository of items on its website. The data is stored in an Amazon RDS for MySQL database table that contains more than 10 million rows. The database has 2 TB of General Purpose SSD storage. There are millions of updates against this data every day through the company's website.

The company has noticed that some insert operations are taking 10 seconds or longer. The company has determined that the database storage performance is the problem.

Which solution addresses this performance issue?

* **A. Change the storage type to Provisioned IOPS SSD.**
* B. Change the DB instance to a memory optimized instance class.
* C. Change the DB instance to a burstable performance instance class.
* D. Enable Multi-AZ RDS read replicas with MySQL native asynchronous replication.

Question #: 27

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 solutions 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. Enter the product manager's email address, and complete the sharing steps. Provide a shareable link for the dashboard to the product manager.**
* B. Create an IAM user specifically for the product manager. Attach the CloudWatchReadOnlyAccess AWS managed policy to the user. Share the new login credentials with the product manager. Share the browser URL of the correct dashboard with the product manager.
* C. Create an IAM user for the company's employees. Attach the ViewOnlyAccess AWS managed policy to the IAM user. Share the new login credentials with the product manager. Ask the product manager to navigate to the CloudWatch console and locate the dashboard by name in the Dashboards section.
* D. Deploy a bastion server in a public subnet. When the product manager requires access to the dashboard, start the server and share the RDP credentials. 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.

Question #: 24

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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.

Question #: 17

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is implementing a new business application. The application runs on two Amazon EC2 instances and uses an Amazon S3 bucket for document storage. A solutions architect needs to ensure that the EC2 instances can access the S3 bucket.

What should the solutions architect do to meet this requirement?

* **A. Create an IAM role that grants access to the S3 bucket. Attach the role to the EC2 instances.**
* B. Create an IAM policy that grants access to the S3 bucket. Attach the policy to the EC2 instances.
* C. Create an IAM group that grants access to the S3 bucket. Attach the group to the EC2 instances.
* D. Create an IAM user that grants access to the S3 bucket. Attach the user account to the EC2 instances.

Question #: 16

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company hosts a data lake on AWS. The data lake consists of data in Amazon S3 and Amazon RDS for PostgreSQL. The company needs a reporting solution that provides data visualization and includes all the data sources within the data lake. Only the company's management team should have full access to all the visualizations. The rest of the company should have only limited access.

Which solution will meet these requirements?

* A. Create an analysis in Amazon QuickSight. Connect all the data sources and create new datasets. Publish dashboards to visualize the data. Share the dashboards with the appropriate IAM roles.
* **B. Create an analysis in Amazon QuickSight. Connect all the data sources and create new datasets. Publish dashboards to visualize the data. Share the dashboards with the appropriate users and groups.**
* C. Create an AWS Glue table and crawler for the data in Amazon S3. Create an AWS Glue extract, transform, and load (ETL) job to produce reports. Publish the reports to Amazon S3. Use S3 bucket policies to limit access to the reports.
* D. Create an AWS Glue table and crawler for the data in Amazon S3. Use Amazon Athena Federated Query to access data within Amazon RDS for PostgreSQL. Generate reports by using Amazon Athena. Publish the reports to Amazon S3. Use S3 bucket policies to limit access to the reports.

Question #: 12

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 Configure Route 53 to route traffic to the CloudFront distribution.
* C. 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.
* D. 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. Create two domain names. 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.

Question #: 10

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is building an ecommerce web application on AWS. The application sends information about new orders to an Amazon API Gateway REST API to process. The company wants to ensure that orders are processed in the order that they are received.

Which solution will meet these requirements?

* A. Use an API Gateway integration to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic when the application receives an order. Subscribe an AWS Lambda function to the topic to perform processing.
* **B. Use an API Gateway integration to send a message to an Amazon Simple Queue Service (Amazon SQS) FIFO queue when the application receives an order. Configure the SQS FIFO queue to invoke an AWS Lambda function for processing.**
* C. Use an API Gateway authorizer to block any requests while the application processes an order.
* D. Use an API Gateway integration to send a message to an Amazon Simple Queue Service (Amazon SQS) standard queue when the application receives an order. Configure the SQS standard queue to invoke an AWS Lambda function for processing.

Question #: 9

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is running an SMB file server in its data center. The file server stores large files that are accessed frequently for the first few days after the files are created. After 7 days the files are rarely accessed.

The total data size is increasing and is close to the company's total storage capacity. A solutions architect must increase the company's available storage space without losing low-latency access to the most recently accessed files. The solutions architect must also provide file lifecycle management to avoid future storage issues.

Which solution will meet these requirements?

* A. Use AWS DataSync to copy data that is older than 7 days from the SMB file server to AWS.
* **B. Create an Amazon S3 File Gateway to extend the company's storage space. Create an S3 Lifecycle policy to transition the data to S3 Glacier Deep Archive after 7 days.**
* C. Create an Amazon FSx for Windows File Server file system to extend the company's storage space.
* D. Install a utility on each user's computer to access Amazon S3. Create an S3 Lifecycle policy to transition the data to S3 Glacier Flexible Retrieval after 7 days.

Question #: 34

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company hosts its multi-tier applications on AWS. For compliance, governance, auditing, and security, the company must track configuration changes on its AWS resources and record a history of API calls made to these resources.

What should a solutions architect do to meet these requirements?

* A. Use AWS CloudTrail to track configuration changes and AWS Config to record API calls.
* **B. Use AWS Config to track configuration changes and AWS CloudTrail to record API calls.**
* C. Use AWS Config to track configuration changes and Amazon CloudWatch to record API calls.
* D. Use AWS CloudTrail to track configuration changes and Amazon CloudWatch to record API calls.

Question #: 33

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs an online marketplace web application on AWS. The application serves hundreds of thousands of users during peak hours. The company needs a scalable, near-real-time solution to share the details of millions of financial transactions with several other internal applications. Transactions also need to be processed to remove sensitive data before being stored in a document database for low-latency retrieval.

What should a solutions architect recommend to meet these requirements?

* A. Store the transactions data into Amazon DynamoDB. Set up a rule in DynamoDB to remove sensitive data from every transaction upon write. Use DynamoDB Streams to share the transactions data with other applications.
* B. Stream the transactions data into Amazon Kinesis Data Firehose to store data in Amazon DynamoDB and Amazon S3. Use AWS Lambda integration with Kinesis Data Firehose to remove sensitive data. Other applications can consume the data stored in Amazon S3.
* **C. Stream the transactions data into Amazon Kinesis Data Streams. Use AWS Lambda integration to remove sensitive data from every transaction and then store the transactions data in Amazon DynamoDB. Other applications can consume the transactions data off the Kinesis data stream.**
* D. Store the batched transactions data in Amazon S3 as files. Use AWS Lambda to process every file and remove sensitive data before updating the files in Amazon S3. The Lambda function then stores the data in Amazon DynamoDB. Other applications can consume transaction files stored in Amazon S3.

Question #: 76

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company receives 10 TB of instrumentation data each day from several machines located at a single factory. The data consists of JSON files stored on a storage area network (SAN) in an on-premises data center located within the factory. The company wants to send this data to Amazon S3 where it can be accessed by several additional systems that provide critical near-real-time analytics. A secure transfer is important because the data is considered sensitive.

Which solution offers the MOST reliable data transfer?

* A. AWS DataSync over public internet
* **B. AWS DataSync over AWS Direct Connect**
* C. AWS Database Migration Service (AWS DMS) over public internet
* D. AWS Database Migration Service (AWS DMS) over AWS Direct Connect

Question #: 72

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs a photo processing application that needs to frequently upload and download pictures from Amazon S3 buckets that are located in the same AWS Region. A solutions architect has noticed an increased cost in data transfer fees and needs to implement a solution to reduce these costs.

How can the solutions architect meet this requirement?

* A. Deploy Amazon API Gateway into a public subnet and adjust the route table to route S3 calls through it.
* B. Deploy a NAT gateway into a public subnet and attach an endpoint policy that allows access to the S3 buckets.
* C. Deploy the application into a public subnet and allow it to route through an internet gateway to access the S3 buckets.
* **D. Deploy an S3 VPC gateway endpoint into the VPC and attach an endpoint policy that allows access to the S3 buckets.**

Question #: 28

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is migrating applications to AWS. The applications are deployed in different accounts. The company manages the accounts centrally by using AWS Organizations. The company's security team needs a single sign-on (SSO) solution across all the company's accounts. The company must continue managing the users and groups in its on-premises self-managed Microsoft Active Directory.

Which solution will meet these requirements?

* A. Enable AWS Single Sign-On (AWS SSO) from the AWS SSO console. Create a one-way forest trust or a one-way domain trust to connect the company's self-managed Microsoft Active Directory with AWS SSO by using AWS Directory Service for Microsoft Active Directory.
* **B. Enable AWS Single Sign-On (AWS SSO) from the AWS SSO console. Create a two-way forest trust to connect the company's self-managed Microsoft Active Directory with AWS SSO by using AWS Directory Service for Microsoft Active Directory.**
* C. Use AWS Directory Service. Create a two-way trust relationship with the company's self-managed Microsoft Active Directory.
* D. Deploy an identity provider (IdP) on premises. Enable AWS Single Sign-On (AWS SSO) from the AWS SSO console.

Question #: 71

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs a shopping application that uses Amazon DynamoDB to store customer information. In case of data corruption, a solutions architect needs to design a solution that meets a recovery point objective (RPO) of 15 minutes and a recovery time objective (RTO) of 1 hour.

What should the solutions architect recommend to meet these requirements?

* A. Configure DynamoDB global tables. For RPO recovery, point the application to a different AWS Region.
* **B. Configure DynamoDB point-in-time recovery. For RPO recovery, restore to the desired point in time.**
* C. Export the DynamoDB data to Amazon S3 Glacier on a daily basis. For RPO recovery, import the data from S3 Glacier to DynamoDB.
* D. Schedule Amazon Elastic Block Store (Amazon EBS) snapshots for the DynamoDB table every 15 minutes. For RPO recovery, restore the DynamoDB table by using the EBS snapshot.

Question #: 64

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has more than 5 TB of file data on Windows file servers that run on premises. Users and applications interact with the data each day.

The company is moving its Windows workloads to AWS. As the company continues this process, the company requires access to AWS and on-premises file storage with minimum latency. The company needs a solution that minimizes operational overhead and requires no significant changes to the existing file access patterns. The company uses an AWS Site-to-Site VPN connection for connectivity to AWS.

What should a solutions architect do to meet these requirements?

* A. Deploy and configure Amazon FSx for Windows File Server on AWS. Move the on-premises file data to FSx for Windows File Server. Reconfigure the workloads to use FSx for Windows File Server on AWS.
* B. Deploy and configure an Amazon S3 File Gateway on premises. Move the on-premises file data to the S3 File Gateway. Reconfigure the on-premises workloads and the cloud workloads to use the S3 File Gateway.
* C. Deploy and configure an Amazon S3 File Gateway on premises. Move the on-premises file data to Amazon S3. Reconfigure the workloads to use either Amazon S3 directly or the S3 File Gateway. depending on each workload's location.
* **D. Deploy and configure Amazon FSx for Windows File Server on AWS. Deploy and configure an Amazon FSx File Gateway on premises. Move the on-premises file data to the FSx File Gateway. Configure the cloud workloads to use FSx for Windows File Server on AWS. Configure the on-premises workloads to use the FSx File Gateway.**

Question #: 61

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is developing a two-tier web application on AWS. The company's developers have deployed the application on an Amazon EC2 instance that connects directly to a backend Amazon RDS database. The company must not hardcode database credentials in the application. The company must also implement a solution to automatically rotate the database credentials on a regular basis.

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

* A. Store the database credentials in the instance metadata. Use Amazon EventBridge (Amazon CloudWatch Events) rules to run a scheduled AWS Lambda function that updates the RDS credentials and instance metadata at the same time.
* B. Store the database credentials in a configuration file in an encrypted Amazon S3 bucket. Use Amazon EventBridge (Amazon CloudWatch Events) rules to run a scheduled AWS Lambda function that updates the RDS credentials and the credentials in the configuration file at the same time. Use S3 Versioning to ensure the ability to fall back to previous values.
* **C. Store the database credentials as a secret in AWS Secrets Manager. Turn on automatic rotation for the secret. Attach the required permission to the EC2 role to grant access to the secret.**
* D. Store the database credentials as encrypted parameters in AWS Systems Manager Parameter Store. Turn on automatic rotation for the encrypted parameters. Attach the required permission to the EC2 role to grant access to the encrypted parameters.

Question #: 59

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company hosts more than 300 global websites and applications. The company requires a platform to analyze more than 30 TB of clickstream data each day.

What should a solutions architect do to transmit and process the clickstream data?

* A. Design an AWS Data Pipeline to archive the data to an Amazon S3 bucket and run an Amazon EMR cluster with the data to generate analytics.
* B. Create an Auto Scaling group of Amazon EC2 instances to process the data and send it to an Amazon S3 data lake for Amazon Redshift to use for analysis.
* C. Cache the data to Amazon CloudFront. Store the data in an Amazon S3 bucket. When an object is added to the S3 bucket. run an AWS Lambda function to process the data for analysis.
* **D. Collect the data from Amazon Kinesis Data Streams. Use Amazon Kinesis Data Firehose to transmit the data to an Amazon S3 data lake. Load the data in Amazon Redshift for analysis.**

Question #: 56

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has registered its domain name with Amazon Route 53. The company uses Amazon API Gateway in the ca-central-1 Region as a public interface for its backend microservice APIs. Third-party services consume the APIs securely. The company wants to design its API Gateway URL with the company's domain name and corresponding certificate so that the third-party services can use HTTPS.

Which solution will meet these requirements?

* A. Create stage variables in API Gateway with Name="Endpoint-URL" and Value="Company Domain Name" to overwrite the default URL. Import the public certificate associated with the company's domain name into AWS Certificate Manager (ACM).
* B. Create Route 53 DNS records with the company's domain name. Point the alias record to the Regional API Gateway stage endpoint. Import the public certificate associated with the company's domain name into AWS Certificate Manager (ACM) in the us-east-1 Region.
* **C. Create a Regional API Gateway endpoint. Associate the API Gateway endpoint with the company's domain name. Import the public certificate associated with the company's domain name into AWS Certificate Manager (ACM) in the same Region. Attach the certificate to the API Gateway endpoint. Configure Route 53 to route traffic to the API Gateway endpoint.**
* D. Create a Regional API Gateway endpoint. Associate the API Gateway endpoint with the company's domain name. Import the public certificate associated with the company's domain name into AWS Certificate Manager (ACM) in the us-east-1 Region. Attach the certificate to the API Gateway APIs. Create Route 53 DNS records with the company's domain name. Point an A record to the company's domain name.

Question #: 53

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company needs to store its accounting records in Amazon S3. The records must be immediately accessible for 1 year and then must be archived for an additional 9 years. No one at the company, including administrative users and root users, can be able to delete the records during the entire 10-year period. The records must be stored with maximum resiliency.

Which solution will meet these requirements?

* A. Store the records in S3 Glacier for the entire 10-year period. Use an access control policy to deny deletion of the records for a period of 10 years.
* B. Store the records by using S3 Intelligent-Tiering. Use an IAM policy to deny deletion of the records. After 10 years, change the IAM policy to allow deletion.
* **C. Use an S3 Lifecycle policy to transition the records from S3 Standard to S3 Glacier Deep Archive after 1 year. Use S3 Object Lock in compliance mode for a period of 10 years.**
* D. Use an S3 Lifecycle policy to transition the records from S3 Standard to S3 One Zone-Infrequent Access (S3 One Zone-IA) after 1 year. Use S3 Object Lock in governance mode for a period of 10 years.

Question #: 52

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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. Use Amazon Elastic File System (Amazon EFS) for storage.**
* D. Migrate the application to Amazon EC2 instances in a Multi-AZ Auto Scaling group. Use Amazon Elastic Block Store (Amazon EBS) for storage.

Question #: 49

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company stores call transcript files on a monthly basis. Users access the files randomly within 1 year of the call, but users access the files infrequently after 1 year. The company wants to optimize its solution by giving users the ability to query and retrieve files that are less than 1-year-old as quickly as possible. A delay in retrieving older files is acceptable.

Which solution will meet these requirements MOST cost-effectively?

* A. Store individual files with tags in Amazon S3 Glacier Instant Retrieval. Query the tags to retrieve the files from S3 Glacier Instant Retrieval.
* B. Store individual files in Amazon S3 Intelligent-Tiering. Use S3 Lifecycle policies to move the files to S3 Glacier Flexible Retrieval after 1 year. Query and retrieve the files that are in Amazon S3 by using Amazon Athena. Query and retrieve the files that are in S3 Glacier by using S3 Glacier Select.
* C. Store individual files with tags in Amazon S3 Standard storage. Store search metadata for each archive in Amazon S3 Standard storage. Use S3 Lifecycle policies to move the files to S3 Glacier Instant Retrieval after 1 year. Query and retrieve the files by searching for metadata from Amazon S3.
* D. Store individual files in Amazon S3 Standard storage. Use S3 Lifecycle policies to move the files to S3 Glacier Deep Archive after 1 year. Store search metadata in Amazon RDS. Query the files from Amazon RDS. Retrieve the files from S3 Glacier Deep Archive.

Question #: 137

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company uses AWS Organizations to create dedicated AWS accounts for each business unit to manage each business unit's account independently upon request. The root email recipient missed a notification that was sent to the root user email address of one account. The company wants to ensure that all future notifications are not missed. Future notifications must be limited to account administrators.

Which solution will meet these requirements?

* A. Configure the company’s email server to forward notification email messages that are sent to the AWS account root user email address to all users in the organization.
* **B. Configure all AWS account root user email addresses as distribution lists that go to a few administrators who can respond to alerts. Configure AWS account alternate contacts in the AWS Organizations console or programmatically.**
* C. Configure all AWS account root user email messages to be sent to one administrator who is responsible for monitoring alerts and forwarding those alerts to the appropriate groups.
* D. Configure all existing AWS accounts and all newly created accounts to use the same root user email address. Configure AWS account alternate contacts in the AWS Organizations console or programmatically.

Question #: 124

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has a highly dynamic batch processing job that uses many Amazon EC2 instances to complete it. The job is stateless in nature, can be started and stopped at any given time with no negative impact, and typically takes upwards of 60 minutes total to complete. The company has asked a solutions architect to design a scalable and cost-effective solution that meets the requirements of the job.

What should the solutions architect recommend?

* **A. Implement EC2 Spot Instances.**
* B. Purchase EC2 Reserved Instances.
* C. Implement EC2 On-Demand Instances.
* D. Implement the processing on AWS Lambda.

Question #: 150

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is migrating an application from on-premises servers to Amazon EC2 instances. As part of the migration design requirements, a solutions architect must implement infrastructure metric alarms. The company does not need to take action if CPU utilization increases to more than 50% for a short burst of time. However, if the CPU utilization increases to more than 50% and read IOPS on the disk are high at the same time, the company needs to act as soon as possible. The solutions architect also must reduce false alarms.

What should the solutions architect do to meet these requirements?

* **A. Create Amazon CloudWatch composite alarms where possible.**
* B. Create Amazon CloudWatch dashboards to visualize the metrics and react to issues quickly.
* C. Create Amazon CloudWatch Synthetics canaries to monitor the application and raise an alarm.
* D. Create single Amazon CloudWatch metric alarms with multiple metric thresholds where possible.

Question #: 85

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has a production web application in which users upload documents through a web interface or a mobile app. According to a new regulatory requirement. new documents cannot be modified or deleted after they are stored.

What should a solutions architect do to meet this requirement?

* **A. Store the uploaded documents in an Amazon S3 bucket with S3 Versioning and S3 Object Lock enabled.**
* B. Store the uploaded documents in an Amazon S3 bucket. Configure an S3 Lifecycle policy to archive the documents periodically.
* C. Store the uploaded documents in an Amazon S3 bucket with S3 Versioning enabled. Configure an ACL to restrict all access to read-only.
* D. Store the uploaded documents on an Amazon Elastic File System (Amazon EFS) volume. Access the data by mounting the volume in read-only mode.

Question #: 135

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs workloads on AWS. The company needs to connect to a service from an external provider. The service is hosted in the provider's VPC. According to the company’s security team, the connectivity must be private and must be restricted to the target service. The connection must be initiated only from the company’s VPC.

Which solution will mast these requirements?

* A. Create a VPC peering connection between the company's VPC and the provider's VPC. Update the route table to connect to the target service.
* B. Ask the provider to create a virtual private gateway in its VPC. Use AWS PrivateLink to connect to the target service.
* C. Create a NAT gateway in a public subnet of the company’s VPUpdate the route table to connect to the target service.
* **D. Ask the provider to create a VPC endpoint for the target service. Use AWS PrivateLink to connect to the target service.**

Question #: 131

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is developing a file-sharing application that will use an Amazon S3 bucket for storage. The company wants to serve all the files through an Amazon CloudFront distribution. The company does not want the files to be accessible through direct navigation to the S3 URL.

What should a solutions architect do to meet these requirements?

* A. Write individual policies for each S3 bucket to grant read permission for only CloudFront access.
* B. Create an IAM user. Grant the user read permission to objects in the S3 bucket. Assign the user to CloudFront.
* C. Write an S3 bucket policy that assigns the CloudFront distribution ID as the Principal and assigns the target S3 bucket as the Amazon Resource Name (ARN).
* **D. Create an origin access identity (OAI). Assign the OAI to the CloudFront distribution. Configure the S3 bucket permissions so that only the OAI has read permission.**

Question #: 122

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company wants to build a scalable key management infrastructure to support developers who need to encrypt data in their applications.

What should a solutions architect do to reduce the operational burden?

* A. Use multi-factor authentication (MFA) to protect the encryption keys.
* **B. Use AWS Key Management Service (AWS KMS) to protect the encryption keys.**
* C. Use AWS Certificate Manager (ACM) to create, store, and assign the encryption keys.
* D. Use an IAM policy to limit the scope of users who have access permissions to protect the encryption keys.

Question #: 121

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is running an online transaction processing (OLTP) workload on AWS. This workload uses an unencrypted Amazon RDS DB instance in a Multi-AZ deployment. Daily database snapshots are taken from this instance.

What should a solutions architect do to ensure the database and snapshots are always encrypted moving forward?

* **A. Encrypt a copy of the latest DB snapshot. Replace existing DB instance by restoring the encrypted snapshot.**
* B. Create a new encrypted Amazon Elastic Block Store (Amazon EBS) volume and copy the snapshots to it. Enable encryption on the DB instance.
* C. Copy the snapshots and enable encryption using AWS Key Management Service (AWS KMS) Restore encrypted snapshot to an existing DB instance.
* D. Copy the snapshots to an Amazon S3 bucket that is encrypted using server-side encryption with AWS Key Management Service (AWS KMS) managed keys (SSE-KMS).

Question #: 95

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

An application allows users at a company's headquarters to access product data. The product data is stored in an Amazon RDS MySQL DB instance. The operations team has isolated an application performance slowdown and wants to separate read traffic from write traffic. A solutions architect needs to optimize the application's performance quickly.

What should the solutions architect recommend?

* A. Change the existing database to a Multi-AZ deployment. Serve the read requests from the primary Availability Zone.
* B. Change the existing database to a Multi-AZ deployment. Serve the read requests from the secondary Availability Zone.
* C. Create read replicas for the database. Configure the read replicas with half of the compute and storage resources as the source database.
* **D. Create read replicas for the database. Configure the read replicas with the same compute and storage resources as the source database.**

Question #: 92

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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? (Choose two.)

* **A. Configure a VPC gateway endpoint for 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.

Question #: 83

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company's dynamic website is hosted using on-premises servers in the United States. The company is launching its product in Europe, and it wants to optimize site loading times for new European users. The site's backend must remain in the United States. The product is being launched in a few days, and an immediate solution is needed.

What should the solutions architect recommend?

* A. Launch an Amazon EC2 instance in us-east-1 and migrate the site to it.
* B. Move the website to Amazon S3. Use Cross-Region Replication between Regions.
* **C. Use Amazon CloudFront with a custom origin pointing to the on-premises servers.**
* D. Use an Amazon Route 53 geoproximity routing policy pointing to on-premises servers.

Question #: 46

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has an application that provides marketing services to stores. The services are based on previous purchases by store customers. The stores upload transaction data to the company through SFTP, and the data is processed and analyzed to generate new marketing offers. Some of the files can exceed 200 GB in size.

Recently, the company discovered that some of the stores have uploaded files that contain personally identifiable information (PII) that should not have been included. The company wants administrators to be alerted if PII is shared again. The company also wants to automate remediation.

What should a solutions architect do to meet these requirements with the LEAST development effort?

* A. Use an Amazon S3 bucket as a secure transfer point. Use Amazon Inspector to scan the objects in the bucket. If objects contain PII, trigger an S3 Lifecycle policy to remove the objects that contain PII.
* **B. Use an Amazon S3 bucket as a secure transfer point. Use Amazon Macie to scan the objects in the bucket. If objects contain PII, use Amazon Simple Notification Service (Amazon SNS) to trigger a notification to the administrators to remove the objects that contain PII.**
* C. Implement custom scanning algorithms in an AWS Lambda function. Trigger the function when objects are loaded into the bucket. If objects contain PII, use Amazon Simple Notification Service (Amazon SNS) to trigger a notification to the administrators to remove the objects that contain PII.
* D. Implement custom scanning algorithms in an AWS Lambda function. Trigger the function when objects are loaded into the bucket. If objects contain PII, use Amazon Simple Email Service (Amazon SES) to trigger a notification to the administrators and trigger an S3 Lifecycle policy to remove the meats that contain PII.

Question #: 109

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 10 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.**

Question #: 5

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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

Question #: 106

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 keys (SSE-KMS) with manual rotation
* **D. Server-side encryption with AWS KMS keys (SSE-KMS) with automatic rotation**

Question #: 40

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has thousands of edge devices that collectively generate 1 TB of status alerts each day. Each alert is approximately 2 KB in size. A solutions architect needs to implement a solution to ingest and store the alerts for future analysis.

The company wants a highly available solution. However, the company needs to minimize costs and does not want to manage additional infrastructure. Additionally, the company wants to keep 14 days of data available for immediate analysis and archive any data older than 14 days.

What is the MOST operationally efficient solution that meets these requirements?

* **A. Create an Amazon Kinesis Data Firehose delivery stream to ingest the alerts. Configure the Kinesis Data Firehose stream to deliver the alerts to an Amazon S3 bucket. Set up an S3 Lifecycle configuration to transition data to Amazon S3 Glacier after 14 days.**
* B. Launch Amazon EC2 instances across two Availability Zones and place them behind an Elastic Load Balancer to ingest the alerts. Create a script on the EC2 instances that will store the alerts in an Amazon S3 bucket. Set up an S3 Lifecycle configuration to transition data to Amazon S3 Glacier after 14 days.
* C. Create an Amazon Kinesis Data Firehose delivery stream to ingest the alerts. Configure the Kinesis Data Firehose stream to deliver the alerts to an Amazon OpenSearch Service (Amazon Elasticsearch Service) cluster. Set up the Amazon OpenSearch Service (Amazon Elasticsearch Service) cluster to take manual snapshots every day and delete data from the cluster that is older than 14 days.
* D. Create an Amazon Simple Queue Service (Amazon SQS) standard queue to ingest the alerts, and set the message retention period to 14 days. Configure consumers to poll the SQS queue, check the age of the message, and analyze the message data as needed. If the message is 14 days old, the consumer should copy the message to an Amazon S3 bucket and delete the message from the SQS queue.

Question #: 105

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is preparing to deploy a new serverless workload. A solutions architect must use the principle of least privilege to configure permissions that will be used to run an AWS Lambda function. An Amazon EventBridge (Amazon CloudWatch Events) rule will invoke the function.

Which solution meets these requirements?

* A. Add an execution role to the function with lambda:InvokeFunction as the action and \* as the principal.
* B. Add an execution role to the function with lambda:InvokeFunction as the action and Service: lambda.amazonaws.com as the principal.
* C. Add a resource-based policy to the function with lambda:\* as the action and Service: events.amazonaws.com as the principal.
* **D. Add a resource-based policy to the function with lambda:InvokeFunction as the action and Service: events.amazonaws.com as the principal.**

Question #: 103

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has an AWS Glue extract, transform, and load (ETL) job that runs every day at the same time. The job processes XML data that is in an Amazon S3 bucket. New data is added to the S3 bucket every day. A solutions architect notices that AWS Glue is processing all the data during each run.

What should the solutions architect do to prevent AWS Glue from reprocessing old data?

* **A. Edit the job to use job bookmarks.**
* B. Edit the job to delete data after the data is processed.
* C. Edit the job by setting the NumberOfWorkers field to 1.
* D. Use a FindMatches machine learning (ML) transform.

Question #: 102

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company wants to migrate an on-premises data center to AWS. The data center hosts an SFTP server that stores its data on an NFS-based file system. The server holds 200 GB of data that needs to be transferred. The server must be hosted on an Amazon EC2 instance that uses an Amazon Elastic File System (Amazon EFS) file system.

Which combination of steps should a solutions architect take to automate this task? (Choose two.)

* **A. Launch the EC2 instance into the same Availability Zone as the EFS file system.**
* **B. Install an AWS DataSync agent in the on-premises data center.**
* C. Create a secondary Amazon Elastic Block Store (Amazon EBS) volume on the EC2 instance for the data.
* D. Manually use an operating system copy command to push the data to the EC2 instance.
* E. Use AWS DataSync to create a suitable location configuration for the on-premises SFTP server.

Question #: 99

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is implementing a shared storage solution for a gaming application that is hosted in an on-premises data center. The company needs the ability to use Lustre clients to access data. The solution must be fully managed.

Which solution meets these requirements?

* A. Create an AWS Storage Gateway file gateway. Create a file share that uses the required client protocol. Connect the application server to the file share.
* B. Create an Amazon EC2 Windows instance. Install and configure a Windows file share role on the instance. Connect the application server to the file share.
* C. Create an Amazon Elastic File System (Amazon EFS) file system, and configure it to support Lustre. Attach the file system to the origin server. Connect the application server to the file system.
* **D. Create an Amazon FSx for Lustre file system. Attach the file system to the origin server. Connect the application server to the file system.**

Question #: 89

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company uses Amazon S3 to store its confidential audit documents. The S3 bucket uses bucket policies to restrict access to audit team IAM user credentials according to the principle of least privilege. Company managers are worried about accidental deletion of documents in the S3 bucket and want a more secure solution.

What should a solutions architect do to secure the audit documents?

* **A. Enable the versioning and MFA Delete features on the S3 bucket.**
* B. Enable multi-factor authentication (MFA) on the IAM user credentials for each audit team IAM user account.
* C. Add an S3 Lifecycle policy to the audit team's IAM user accounts to deny the s3:DeleteObject action during audit dates.
* D. Use AWS Key Management Service (AWS KMS) to encrypt the S3 bucket and restrict audit team IAM user accounts from accessing the KMS key.

Question #: 63

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs its infrastructure on AWS and has a registered base of 700,000 users for its document management application. The company intends to create a product that converts large .pdf files to .jpg image files. The .pdf files average 5 MB in size. The company needs to store the original files and the converted files. A solutions architect must design a scalable solution to accommodate demand that will grow rapidly over time.

Which solution meets these requirements MOST cost-effectively?

* **A. Save the .pdf files to Amazon S3. Configure an S3 PUT event to invoke an AWS Lambda function to convert the files to .jpg format and store them back in Amazon S3.**
* B. Save the .pdf files to Amazon DynamoDUse the DynamoDB Streams feature to invoke an AWS Lambda function to convert the files to .jpg format and store them back in DynamoDB.
* C. Upload the .pdf files to an AWS Elastic Beanstalk application that includes Amazon EC2 instances, Amazon Elastic Block Store (Amazon EBS) storage, and an Auto Scaling group. Use a program in the EC2 instances to convert the files to .jpg format. Save the .pdf files and the .jpg files in the EBS store.
* D. Upload the .pdf files to an AWS Elastic Beanstalk application that includes Amazon EC2 instances, Amazon Elastic File System (Amazon EFS) storage, and an Auto Scaling group. Use a program in the EC2 instances to convert the file to .jpg format. Save the .pdf files and the .jpg files in the EBS store.

Question #: 58

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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 these 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).

Question #: 57

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is running a popular social media website. The website gives users the ability to upload images to share with other users. The company wants to make sure that the images do not contain inappropriate content. The company needs a solution that minimizes development effort.

What should a solutions architect do to meet these requirements?

* A. Use Amazon Comprehend to detect inappropriate content. Use human review for low-confidence predictions.
* **B. Use Amazon Rekognition to detect inappropriate content. Use human review for low-confidence predictions.**
* C. Use Amazon SageMaker to detect inappropriate content. Use ground truth to label low-confidence predictions.
* D. Use AWS Fargate to deploy a custom machine learning model to detect inappropriate content. Use ground truth to label low-confidence predictions.

Question #: 11

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has an application that runs on Amazon EC2 instances and uses an Amazon Aurora database. The EC2 instances connect to the database by using user names and passwords that are stored locally in a file. The company wants to minimize the operational overhead of credential management.

What should a solutions architect do to accomplish this goal?

* **A. Use AWS Secrets Manager. Turn on automatic rotation.**
* B. Use AWS Systems Manager Parameter Store. Turn on automatic rotation.
* C. Create an Amazon S3 bucket to store objects that are encrypted with an AWS Key Management Service (AWS KMS) encryption key. Migrate the credential file to the S3 bucket. Point the application to the S3 bucket.
* D. Create an encrypted Amazon Elastic Block Store (Amazon EBS) volume for each EC2 instance. Attach the new EBS volume to each EC2 instance. Migrate the credential file to the new EBS volume. Point the application to the new EBS volume.

Question #: 23

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is storing backup files by using Amazon S3 Standard storage. The files are accessed frequently for 1 month. However, the files are not accessed after 1 month. The company must keep the files indefinitely.

Which storage solution will meet these requirements MOST cost-effectively?

* A. Configure S3 Intelligent-Tiering to automatically migrate objects.
* **B. Create an S3 Lifecycle configuration to transition objects from S3 Standard to S3 Glacier Deep Archive after 1 month.**
* C. Create an S3 Lifecycle configuration to transition objects from S3 Standard to S3 Standard-Infrequent Access (S3 Standard-IA) after 1 month.
* D. Create an S3 Lifecycle configuration to transition objects from S3 Standard to S3 One Zone-Infrequent Access (S3 One Zone-IA) after 1 month.

Question #: 22

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A solutions architect is using Amazon S3 to design the storage architecture of a new digital media application. The media files must be resilient to the loss of an Availability Zone. Some files are accessed frequently while other files are rarely accessed in an unpredictable pattern. The solutions architect must minimize the costs of storing and retrieving the media files.

Which storage option meets these requirements?

* A. S3 Standard
* **B. S3 Intelligent-Tiering**
* C. S3 Standard-Infrequent Access (S3 Standard-IA)
* D. S3 One Zone-Infrequent Access (S3 One Zone-IA)

Question #: 21

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

An ecommerce company wants to launch a one-deal-a-day website on AWS. Each day will feature exactly one product on sale for 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. 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.**

Question #: 18

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

An application development team is designing a microservice that will convert large images to smaller, compressed images. When a user uploads an image through the web interface, the microservice should store the image in an Amazon S3 bucket, process and compress the image with an AWS Lambda function, and store the image in its compressed form in a different S3 bucket.

A solutions architect needs to design a solution that uses durable, stateless components to process the images automatically.

Which combination of actions will meet these requirements? (Choose two.)

* **A. Create an Amazon Simple Queue Service (Amazon SQS) queue. Configure the S3 bucket to send a notification to the SQS queue when an image is uploaded to the S3 bucket.**
* **B. Configure the Lambda function to use the Amazon Simple Queue Service (Amazon SQS) queue as the invocation source. When the SQS message is successfully processed, delete the message in the queue.**
* C. Configure the Lambda function to monitor the S3 bucket for new uploads. When an uploaded image is detected, write the file name to a text file in memory and use the text file to keep track of the images that were processed.
* D. Launch an Amazon EC2 instance to monitor an Amazon Simple Queue Service (Amazon SQS) queue. When items are added to the queue, log the file name in a text file on the EC2 instance and invoke the Lambda function.
* E. Configure an Amazon EventBridge (Amazon CloudWatch Events) event to monitor the S3 bucket. When an image is uploaded, send an alert to an Amazon ample Notification Service (Amazon SNS) topic with the application owner's email address for further processing.

Question #: 15

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company recently migrated to AWS and wants to implement a solution to protect the traffic that flows in and out of the production VPC. The company had an inspection server in its on-premises data center. The inspection server performed specific operations such as traffic flow inspection and traffic filtering. The company wants to have the same functionalities in the AWS Cloud.

Which solution will meet these requirements?

* A. Use Amazon GuardDuty for traffic inspection and traffic filtering in the production VPC.
* B. Use Traffic Mirroring to mirror traffic from the production VPC for traffic inspection and filtering.
* **C. Use AWS Network Firewall to create the required rules for traffic inspection and traffic filtering for the production VPC.**
* D. Use AWS Firewall Manager to create the required rules for traffic inspection and traffic filtering for the production VPC.

Question #: 13

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company performs monthly maintenance on its AWS infrastructure. During these maintenance activities, the company needs to rotate the credentials for its Amazon RDS for MySQL databases across multiple AWS Regions.

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

* **A. Store the credentials as secrets in AWS Secrets Manager. Use multi-Region secret replication for the required Regions. Configure Secrets Manager to rotate the secrets on a schedule.**
* B. Store the credentials as secrets in AWS Systems Manager by creating a secure string parameter. Use multi-Region secret replication for the required Regions. Configure Systems Manager to rotate the secrets on a schedule.
* C. Store the credentials in an Amazon S3 bucket that has server-side encryption (SSE) enabled. Use Amazon EventBridge (Amazon CloudWatch Events) to invoke an AWS Lambda function to rotate the credentials.
* D. Encrypt the credentials as secrets by using AWS Key Management Service (AWS KMS) multi-Region customer managed keys. Store the secrets in an Amazon DynamoDB global table. Use an AWS Lambda function to retrieve the secrets from DynamoDB. Use the RDS API to rotate the secrets.

Question #: 86

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has several web servers that need to frequently access a common Amazon RDS MySQL Multi-AZ DB instance. The company wants a secure method for the web servers to connect to the database while meeting a security requirement to rotate user credentials frequently.

Which solution meets these requirements?

**A. Store the database user credentials in AWS Secrets Manager. Grant the necessary IAM permissions to allow the web servers to access AWS Secrets Manager.**

B. Store the database user credentials in AWS Systems Manager OpsCenter. Grant the necessary IAM permissions to allow the web servers to access OpsCenter.

C. Store the database user credentials in a secure Amazon S3 bucket. Grant the necessary IAM permissions to allow the web servers to retrieve credentials and access the database.

D. Store the database user credentials in files encrypted with AWS Key Management Service (AWS KMS) on the web server file system. The web server should be able to decrypt the files and access the database.

Question #: 78

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company needs to keep user transaction data in an Amazon DynamoDB table. The company must retain the data for 7 years.

What is the MOST operationally efficient solution that meets these requirements?

* A. Use DynamoDB point-in-time recovery to back up the table continuously.
* **B. Use AWS Backup to create backup schedules and retention policies for the table.**
* C. Create an on-demand backup of the table by using the DynamoDB console. Store the backup in an Amazon S3 bucket. Set an S3 Lifecycle configuration for the S3 bucket.
* D. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to invoke an AWS Lambda function. Configure the Lambda function to back up the table and to store the backup in an Amazon S3 bucket. Set an S3 Lifecycle configuration for the S3 bucket.

Question #: 79

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is planning to use an Amazon DynamoDB table for data storage. The company is concerned about cost optimization. The table will not be used on most mornings. In the evenings, the read and write traffic will often be unpredictable. When traffic spikes occur, they will happen very quickly.

What should a solutions architect recommend?

* **A. Create a DynamoDB table in on-demand capacity mode.**
* B. Create a DynamoDB table with a global secondary index.
* C. Create a DynamoDB table with provisioned capacity and auto scaling.
* D. Create a DynamoDB table in provisioned capacity mode, and configure it as a global table.

Question #: 93

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company runs an on-premises application that is powered by a MySQL database. The company is migrating the application to AWS to increase the application's elasticity and availability.

The current architecture shows heavy read activity on the database during times of normal operation. Every 4 hours, the company's development team pulls a full export of the production database to populate a database in the staging environment. During this period, users experience unacceptable application latency. The development team is unable to use the staging environment until the procedure completes.

A solutions architect must recommend replacement architecture that alleviates the application latency issue. The replacement architecture also must give the development team the ability to continue using the staging environment without delay.

Which solution meets these requirements?

* A. Use Amazon Aurora MySQL with Multi-AZ Aurora Replicas for production. Populate the staging database by implementing a backup and restore process that uses the mysqldump utility.
* **B. Use Amazon Aurora MySQL with Multi-AZ Aurora Replicas for production. Use database cloning to create the staging database on-demand.**
* C. Use Amazon RDS for MySQL with a Multi-AZ deployment and read replicas for production. Use the standby instance for the staging database.
* D. Use Amazon RDS for MySQL with a Multi-AZ deployment and read replicas for production. Populate the staging database by implementing a backup and restore process that uses the mysqldump utility.

Question #: 30

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A development team runs monthly resource-intensive tests on its general purpose Amazon RDS for MySQL DB instance with Performance Insights enabled. The testing lasts for 48 hours once a month and is the only process that uses the database. The team wants to reduce the cost of running the tests without reducing the compute and memory attributes of the DB instance.

Which solution meets these requirements MOST cost-effectively?

* A. Stop the DB instance when tests are completed. Restart the DB instance when required.
* B. Use an Auto Scaling policy with the DB instance to automatically scale when tests are completed.
* **C. Create a snapshot when tests are completed. Terminate the DB instance and restore the snapshot when required.**
* D. Modify the DB instance to a low-capacity instance when tests are completed. Modify the DB instance again when required.

Question #: 91

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has applications that run on Amazon EC2 instances in a VPC. One of the applications needs to call the Amazon S3 API to store and read objects. According to the company's security regulations, no traffic from the applications is allowed to travel across the internet.

Which solution will meet these requirements?

* **A. Configure an S3 gateway endpoint.**
* B. Create an S3 bucket in a private subnet.
* C. Create an S3 bucket in the same AWS Region as the EC2 instances.
* D. Configure a NAT gateway in the same subnet as the EC2 instances.

Question #: 84

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company wants to reduce the cost of its existing three-tier web architecture. The web, application, and database servers are running on Amazon EC2 instances for the development, test, and production environments. The EC2 instances average 30% CPU utilization during peak hours and 10% CPU utilization during non-peak hours.

The production EC2 instances run 24 hours a day. The development and test EC2 instances run for at least 8 hours each day. The company plans to implement automation to stop the development and test EC2 instances when they are not in use.

Which EC2 instance purchasing solution will meet the company's requirements MOST cost-effectively?

* A. Use Spot Instances for the production EC2 instances. Use Reserved Instances for the development and test EC2 instances.
* **B. Use Reserved Instances for the production EC2 instances. Use On-Demand Instances for the development and test EC2 instances.**
* C. Use Spot blocks for the production EC2 instances. Use Reserved Instances for the development and test EC2 instances.
* D. Use On-Demand Instances for the production EC2 instances. Use Spot blocks for the development and test EC2 instances.

Question #: 31

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company that hosts its web application on AWS wants to ensure all Amazon EC2 instances. Amazon RDS DB instances. and Amazon Redshift clusters are configured with tags. The company wants to minimize the effort of configuring and operating this check.

What should a solutions architect do to accomplish this?

* **A. Use AWS Config rules to define and detect resources that are not properly tagged.**
* B. Use Cost Explorer to display resources that are not properly tagged. Tag those resources manually.
* C. Write API calls to check all resources for proper tag allocation. Periodically run the code on an EC2 instance.
* D. Write API calls to check all resources for proper tag allocation. Schedule an AWS Lambda function through Amazon CloudWatch to periodically run the code.

Question #: 1

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company collects data for temperature, humidity, and atmospheric pressure in cities across multiple continents. The average volume of data that the company collects from each site daily is 500 GB. Each site has a high-speed Internet connection.

The company wants to aggregate the data from all these global sites as quickly as possible in a single Amazon S3 bucket. The solution must minimize operational complexity.

Which solution meets these requirements?

* **A. Turn on S3 Transfer Acceleration on the destination S3 bucket. Use multipart uploads to directly upload site data to the destination S3 bucket.**
* B. Upload the data from each site to an S3 bucket in the closest Region. Use S3 Cross-Region Replication to copy objects to the destination S3 bucket. Then remove the data from the origin S3 bucket.
* C. Schedule AWS Snowball Edge Storage Optimized device jobs daily to transfer data from each site to the closest Region. Use S3 Cross-Region Replication to copy objects to the destination S3 bucket.
* D. Upload the data from each site to an Amazon EC2 instance in the closest Region. Store the data in an Amazon Elastic Block Store (Amazon EBS) volume. At regular intervals, take an EBS snapshot and copy it to the Region that contains the destination S3 bucket. Restore the EBS volume in that Region.

Question #: 26

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

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. Configure Amazon EventBridge (Amazon Cloud Watch Events).

Question #: 25

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is designing an application. The application uses an AWS Lambda function to receive information through Amazon API Gateway and to store the information in an Amazon Aurora PostgreSQL database.

During the proof-of-concept stage, the company has to increase the Lambda quotas significantly to handle the high volumes of data that the company needs to load into the database. A solutions architect must recommend a new design to improve scalability and minimize the configuration effort.

Which solution will meet these requirements?

* A. Refactor the Lambda function code to Apache Tomcat code that runs on Amazon EC2 instances. Connect the database by using native Java Database Connectivity (JDBC) drivers.
* B. Change the platform from Aurora to Amazon DynamoDProvision a DynamoDB Accelerator (DAX) cluster. Use the DAX client SDK to point the existing DynamoDB API calls at the DAX cluster.
* C. Set up two Lambda functions. Configure one function to receive the information. Configure the other function to load the information into the database. Integrate the Lambda functions by using Amazon Simple Notification Service (Amazon SNS).
* **D. Set up two Lambda functions. Configure one function to receive the information. Configure the other function to load the information into the database. Integrate the Lambda functions by using an Amazon Simple Queue Service (Amazon SQS) queue.**

Question #: 47

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company needs guaranteed Amazon EC2 capacity in three specific Availability Zones in a specific AWS Region for an upcoming event that will last 1 week.

What should the company do to guarantee the EC2 capacity?

* A. Purchase Reserved Instances that specify the Region needed.
* B. Create an On-Demand Capacity Reservation that specifies the Region needed.
* C. Purchase Reserved Instances that specify the Region and three Availability Zones needed.
* **D. Create an On-Demand Capacity Reservation that specifies the Region and three Availability Zones needed.**

Question #: 69

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is running a business-critical web application on Amazon EC2 instances behind an Application Load Balancer. The EC2 instances are in an Auto Scaling group. The application uses an Amazon Aurora PostgreSQL database that is deployed in a single Availability Zone. The company wants the application to be highly available with minimum downtime and minimum loss of data.

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

* A. Place the EC2 instances in different AWS Regions. Use Amazon Route 53 health checks to redirect traffic. Use Aurora PostgreSQL Cross-Region Replication.
* **B. Configure the Auto Scaling group to use multiple Availability Zones. Configure the database as Multi-AZ. Configure an Amazon RDS Proxy instance for the database.**
* C. Configure the Auto Scaling group to use one Availability Zone. Generate hourly snapshots of the database. Recover the database from the snapshots in the event of a failure.
* D. Configure the Auto Scaling group to use multiple AWS Regions. Write the data from the application to Amazon S3. Use S3 Event Notifications to launch an AWS Lambda function to write the data to the database.

Question #: 68

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A solutions architect is designing a new hybrid architecture to extend a company's on-premises infrastructure to AWS. The company requires a highly available connection with consistent low latency to an AWS Region. The company needs to minimize costs and is willing to accept slower traffic if the primary connection fails.

What should the solutions architect do to meet these requirements?

* **A. Provision an AWS Direct Connect connection to a Region. Provision a VPN connection as a backup if the primary Direct Connect connection fails.**
* B. Provision a VPN tunnel connection to a Region for private connectivity. Provision a second VPN tunnel for private connectivity and as a backup if the primary VPN connection fails.
* C. Provision an AWS Direct Connect connection to a Region. Provision a second Direct Connect connection to the same Region as a backup if the primary Direct Connect connection fails.
* D. Provision an AWS Direct Connect connection to a Region. Use the Direct Connect failover attribute from the AWS CLI to automatically create a backup connection if the primary Direct Connect connection fails.

Question #: 67

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company hosts an application on multiple Amazon EC2 instances. The application processes messages from an Amazon SQS queue, writes to an Amazon RDS table, and deletes the message from the queue. Occasional duplicate records are found in the RDS table. The SQS queue does not contain any duplicate messages.

What should a solutions architect do to ensure messages are being processed once only?

* A. Use the CreateQueue API call to create a new queue.
* B. Use the AddPermission API call to add appropriate permissions.
* C. Use the ReceiveMessage API call to set an appropriate wait time.
* **D. Use the ChangeMessageVisibility API call to increase the visibility timeout.**

Question #: 55

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A solutions architect is developing a VPC architecture that includes multiple subnets. The architecture will host applications that use Amazon EC2 instances and Amazon RDS DB instances. The architecture consists of six subnets in two Availability Zones. Each Availability Zone includes a public subnet, a private subnet, and a dedicated subnet for databases. Only EC2 instances that run in the private subnets can have access to the RDS databases.

Which solution will meet these requirements?

* A. Create a new route table that excludes the route to the public subnets' CIDR blocks. Associate the route table with the database subnets.
* B. Create a security group that denies inbound traffic from the security group that is assigned to instances in the public subnets. Attach the security group to the DB instances.
* **C. Create a security group that allows inbound traffic from the security group that is assigned to instances in the private subnets. Attach the security group to the DB instances.**
* D. Create a new peering connection between the public subnets and the private subnets. Create a different peering connection between the private subnets and the database subnets.

Question #: 38

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is hosting a static website on Amazon S3 and is using Amazon Route 53 for DNS. The website is experiencing increased demand from around the world. The company must decrease latency for users who access the website.

Which solution meets these requirements MOST cost-effectively?

* A. Replicate the S3 bucket that contains the website to all AWS Regions. Add Route 53 geolocation routing entries.
* B. Provision accelerators in AWS Global Accelerator. Associate the supplied IP addresses with the S3 bucket. Edit the Route 53 entries to point to the IP addresses of the accelerators.
* **C. Add an Amazon CloudFront distribution in front of the S3 bucket. Edit the Route 53 entries to point to the CloudFront distribution.**
* D. Enable S3 Transfer Acceleration on the bucket. Edit the Route 53 entries to point to the new endpoint.

Question #: 35

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company is preparing to launch a public-facing web application in the AWS Cloud. The architecture consists of Amazon EC2 instances within a VPC behind an Elastic Load Balancer (ELB). A third-party service is used for the DNS. The company's solutions architect must recommend a solution to detect and protect against large-scale DDoS attacks.

Which solution meets these requirements?

* A. Enable Amazon GuardDuty on the account.
* B. Enable Amazon Inspector on the EC2 instances.
* C. Enable AWS Shield and assign Amazon Route 53 to it.
* **D. Enable AWS Shield Advanced and assign the ELB to it.**

Question #: 32

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A development team needs to host a website that will be accessed by other teams. The website contents consist of HTML, CSS, client-side JavaScript, and images.

Which method is the MOST cost-effective for hosting the website?

* A. Containerize the website and host it in AWS Fargate.
* **B. Create an Amazon S3 bucket and host the website there.**
* C. Deploy a web server on an Amazon EC2 instance to host the website.
* D. Configure an Application Load Balancer with an AWS Lambda target that uses the Express.js framework.

Question #: 60

Topic #: 1

[[All AWS Certified Solutions Architect - Associate SAA-C03 Questions]](https://www.examtopics.com/exams/amazon/aws-certified-solutions-architect-associate-saa-c03/)

A company has a website hosted on AWS. The website is behind an Application Load Balancer (ALB) that is configured to handle HTTP and HTTPS separately. The company wants to forward all requests to the website so that the requests will use HTTPS.

What should a solutions architect do to meet this requirement?

* A. Update the ALB's network ACL to accept only HTTPS traffic.
* B. Create a rule that replaces the HTTP in the URL with HTTPS.
* **C. Create a listener rule on the ALB to redirect HTTP traffic to HTTPS.**
* D. Replace the ALB with a Network Load Balancer configured to use Server Name Indication (SNI).