



Amazon-Web-Services

Exam Questions SAA-C03

AWS Certified Solutions Architect - Associate (SAA-C03)

NEW QUESTION 1

- (Exam Topic 1)

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
- F. Send an alert to an Amazon Simple Notification Service (Amazon SNS) topic with the application owner's email address for further processing

Answer: AB

Explanation:

➤ Creating an Amazon Simple Queue Service (SQS) queue and configuring the S3 bucket to send a notification to the SQS queue when an image is uploaded to the S3 bucket will ensure that the Lambda function is triggered in a stateless and durable manner.

➤ Configuring the Lambda function to use the SQS queue as the invocation source, and deleting the message in the queue after it is successfully processed will ensure that the Lambda function processes the image in a stateless and durable manner.

Amazon SQS is a fully managed message queuing service that enables you to decouple and scale microservices, distributed systems, and serverless applications. SQS eliminates the complexity and overhead associated with managing and operating message-oriented middleware, and empowers developers to focus on differentiating work. When new images are uploaded to the S3 bucket, SQS will trigger the Lambda function to process the image and compress it. Once the image is processed, the SQS message is deleted, ensuring that the Lambda function is stateless and durable.

NEW QUESTION 2

- (Exam Topic 1)

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

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

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

Answer: C

NEW QUESTION 3

- (Exam Topic 1)

A company performs monthly maintenance on its AWS infrastructure. During these maintenance activities, the company needs to rotate the credentials for its Amazon ROS 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
- B. Use multi-Region secret replication for the required Regions Configure Secrets Manager to rotate the secrets on a schedule
- C. 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
- D. 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
- E. 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.

Answer: A

Explanation:

<https://aws.amazon.com/blogs/security/how-to-replicate-secrets-aws-secrets-manager-multiple-regions/>

NEW QUESTION 4

- (Exam Topic 1)

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
- C. Provision a second VPN tunnel for private connectivity and as a backup if the primary VPN connection fails.
- D. 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.
- E. 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.

Answer: A

Explanation:

"In some cases, this connection alone is not enough. It is always better to guarantee a fallback connection as the backup of DX. There are several options, but implementing it with an AWS Site-To-Site VPN is a real cost-effective solution that can be exploited to reduce costs or, in the meantime, wait for the setup of a second DX."

<https://www.proud2becloud.com/hybrid-cloud-networking-backup-aws-direct-connect-network-connection-with>

NEW QUESTION 5

- (Exam Topic 1)

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

Answer: B

Explanation:

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/PointInTimeRecovery.html>

NEW QUESTION 6

- (Exam Topic 1)

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

Answer: D

Explanation:

<https://docs.aws.amazon.com/lambda/latest/dg/services-rds.html> <https://docs.aws.amazon.com/lambda/latest/dg/with-sns.html>

NEW QUESTION 7

- (Exam Topic 1)

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

Answer: D

Explanation:

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_MySQL.Replication.ReadReplicas.html

NEW QUESTION 8

- (Exam Topic 1)

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

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

Answer: D

Explanation:

"The Object Lock legal hold operation enables you to place a legal hold on an object version. Like setting a retention period, a legal hold prevents an object version from being overwritten or deleted. However, a legal hold doesn't have an associated retention period and remains in effect until removed."
<https://docs.aws.amazon.com/AmazonS3/latest/userguide/batch-ops-legal-hold.html>

NEW QUESTION 9

- (Exam Topic 1)

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 to 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 a customer managed customer master key (CMK) 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
- B. Modify the CMK's key policy to allow the MSP Partner's AWS account to use the key
- C. Modify the launchPermission property of the AMI
- D. Share the AMI with the MSP Partner's AWS account only
- E. Modify the CMK's key policy to allow the MSP Partner's AWS account to use the key.
- F. Modify the launchPermission property of the AMI Share the AMI with the MSP Partner's AWS account only
- G. Modify the CMK's key policy to trust a new CMK that is owned by the MSP Partner for encryption.
- H. 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 CMK that is owned by the MSP Partner Copy and launch the AMI in the MSP Partner's AWS account.

Answer: B

Explanation:

Share the existing KMS key with the MSP external account because it has already been used to encrypt the AMI snapshot.
<https://docs.aws.amazon.com/kms/latest/developerguide/key-policy-modifying-external-accounts.html>

NEW QUESTION 10

- (Exam Topic 1)

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

Answer: A

Explanation:

"Typically, you configure buckets to be Requester Pays buckets when you want to share data but not incur charges associated with others accessing the data. For example, you might use Requester Pays buckets when making available large datasets, such as zip code directories, reference data, geospatial information, or web crawling data." <https://docs.aws.amazon.com/AmazonS3/latest/userguide/RequesterPaysBuckets.html>

NEW QUESTION 10

- (Exam Topic 1)

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 instance
- B. Use Reserved Instances for the development and test EC2 instances.
- C. Use Reserved Instances for the production EC2 instance
- D. Use On-Demand Instances for the development and test EC2 instances.
- E. Use Spot blocks for the production EC2 instance
- F. Use Reserved Instances for the development and test EC2 instances.
- G. Use On-Demand Instances for the production EC2 instance
- H. Use Spot blocks for the development and test EC2 instances.

Answer: B

NEW QUESTION 14

- (Exam Topic 1)

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.

Answer: B

Explanation:

In Static Websites, Web pages are returned by the server which are prebuilt. They use simple languages such as HTML, CSS, or JavaScript.

There is no processing of content on the server (according to the user) in Static Websites. Web pages are returned by the server with no change therefore, static Websites are fast.

There is no interaction with databases.

Also, they are less costly as the host does not need to support server-side processing with different languages.

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In Dynamic Websites, Web pages are returned by the server which are processed during runtime means they are not prebuilt web pages but they are built during runtime according to the user's demand.

These use server-side scripting languages such as PHP, Node.js, ASP.NET and many more supported by the server.

So, they are slower than static websites but updates and interaction with databases are possible.

NEW QUESTION 16

- (Exam Topic 1)

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 the 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.
- C. 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.
- D. Use AWS Trusted Advisor to check for certificates that will expire within 30 days.
- E. 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).
- F. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to detect any certificates that will expire within 30 days.
- G. Configure the rule to invoke an AWS Lambda function.
- H. Configure the Lambda function to send a custom alert by way of Amazon Simple Notification Service (Amazon SNS).

Answer: B

Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/acm-certificate-expiration/>

NEW QUESTION 18

- (Exam Topic 1)

A company provides a Voice over Internet Protocol (VoIP) service that uses UDP connections. The service consists of Amazon EC2 instances that run in an Auto Scaling group. The company has deployments across multiple AWS Regions.

The company needs to route users to the Region with the lowest latency. The company also needs automated failover between Regions.

Which solution will meet these requirements?

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

Answer: D

Explanation:

<https://aws.amazon.com/global-accelerator/faqs/>

HTTP /HTTPS - ALB ; TCP and UDP - NLB; Lowest latency routing and more throughput. Also supports failover, uses Anycast IP addressing - Global Accelerator Caching at Edge Locations – CloudFront

AWS Global Accelerator automatically checks the health of your applications and routes user traffic only to healthy application endpoints. If the health status changes or you make configuration updates, AWS Global Accelerator reacts instantaneously to route your users to the next available endpoint.

NEW QUESTION 23

- (Exam Topic 1)

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? (Select 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.

Answer: AC

Explanation:

"Security groups create an outbound rule for every inbound rule." Not completely right. Stateful does NOT mean that if you create an inbound (or outbound) rule, it will create an outbound (or inbound) rule. What it does mean is: suppose you create an inbound rule on port 443 for the X IP. When a request enters on port 443 from X IP, it will allow traffic out for that request in the port 443. However, if you look at the outbound rules, there will not be any outbound rule on port 443 unless explicitly create it. In ACLs, which are stateless, you would have to create an inbound rule to allow incoming requests and an outbound rule to allow your application responds to those incoming requests.

https://docs.aws.amazon.com/vpc/latest/userguide/VPC_SecurityGroups.html#SecurityGroupRules

NEW QUESTION 24

- (Exam Topic 1)

A solutions architect is developing a multiple-subnet VPC architecture. The solution will consist of six subnets in two Availability Zones. The subnets are defined as public, private, and dedicated for databases. Only the Amazon EC2 instances running in the private subnets should be able to access a database. Which solution meets these requirements?

- A. Create a new route table that excludes the route to the public subnets' CIDR block.
- B. Associate the route table to the database subnets.
- C. Create a security group that denies ingress from the security group used by instances in the public subnet.
- D. Attach the security group to an Amazon RDS DB instance.
- E. Create a security group that allows ingress from the security group used by instances in the private subnet.
- F. Attach the security group to an Amazon RDS DB instance.
- G. Create a new peering connection between the public subnets and the private subnet.
- H. Create a different peering connection between the private subnets and the database subnets.

Answer: C

Explanation:

Security groups are stateful. All inbound traffic is blocked by default. If you create an inbound rule allowing traffic in, that traffic is automatically allowed back out again. You cannot block specific IP addresses using Security groups (instead use Network Access Control Lists).

"You can specify allow rules, but not deny rules." "When you first create a security group, it has no inbound rules. Therefore, no inbound traffic originating from another host to your instance is allowed until you add inbound rules to the security group." Source:

https://docs.aws.amazon.com/vpc/latest/userguide/VPC_SecurityGroups.html#VPCSecurityGroups

NEW QUESTION 26

- (Exam Topic 1)

A company is storing sensitive user information in an Amazon S3 bucket. The company wants to provide secure access to this bucket from the application tier running on Amazon EC2 instances inside a VPC.

Which combination of steps should a solutions architect take to accomplish this? (Select TWO.)

- A. Configure a VPC gateway endpoint 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.

Answer: AC

Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/s3-private-connection-no-authentication/>

NEW QUESTION 27

- (Exam Topic 1)

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.
- B. 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.
- C. Store the database credentials in a configuration file in an encrypted Amazon S3 bucket.
- D. 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.
- E. Use S3 Versioning to ensure the ability to fall back to previous values.
- F. Store the database credentials as a secret in AWS Secrets Manager.
- G. Turn on automatic rotation for the secret.
- H. Attach the required permission to the EC2 role to grant access to the secret.
- I. Store the database credentials as encrypted parameters in AWS Systems Manager Parameter Store.

- J. Turn on automatic rotation for the encrypted parameter
- K. Attach the required permission to the EC2 role to grant access to the encrypted parameters.

Answer: C

Explanation:

https://docs.aws.amazon.com/secretsmanager/latest/userguide/create_database_secret.html

NEW QUESTION 28

- (Exam Topic 1)

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
- B. 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.
- C. Enable AWS Single Sign-On (AWS SSO) from the AWS SSO console
- D. 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.
- E. Use AWS Directory Service
- F. Create a two-way trust relationship with the company's self-managed Microsoft Active Directory.
- G. Deploy an identity provider (IdP) on premise
- H. Enable AWS Single Sign-On (AWS SSO) from the AWS SSO console.

Answer: A

NEW QUESTION 32

- (Exam Topic 1)

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

What should a solutions architect do to meet those requirements?

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

Answer: C

Explanation:

using AWS ECS on AWS Fargate since they requirements are for scalability and availability without having to provision and manage the underlying infrastructure to run the containerized workload. <https://docs.aws.amazon.com/AmazonECS/latest/userguide/what-is-fargate.html>

NEW QUESTION 33

- (Exam Topic 1)

A company needs the ability to analyze the log files of its proprietary application. The logs are stored in JSON format in an Amazon S3 bucket. Queries will be simple and will run on-demand. A solutions architect needs to perform the analysis with minimal changes to the existing architecture.

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

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

Answer: C

Explanation:

Amazon Athena can be used to query JSON in S3

NEW QUESTION 34

- (Exam Topic 1)

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.
- C. Create an S3 Lifecycle policy to transition the data to S3 Glacier Deep Archive after 7 days.
- D. Create an Amazon FSx for Windows File Server file system to extend the company's storage space.
- E. 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.

Answer: A

NEW QUESTION 37

- (Exam Topic 1)

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
- B. 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 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.
- D. Create an Amazon EventBridge (Amazon CloudWatch Events) rule for each SaaS source to send output data
- E. Configure the S3 bucket as the rule's target
- F. Create a second EventBridge (CloudWatch Events) rule to send events when the upload to the S3 bucket is complete
- G. Configure an Amazon Simple Notification Service (Amazon SNS) topic as the second rule's target.
- H. Create a Docker container to use instead of an EC2 instance
- I. 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.

Answer: B

Explanation:

Amazon AppFlow is a fully managed integration service that enables you to securely transfer data between Software-as-a-Service (SaaS) applications like Salesforce, SAP, Zendesk, Slack, and ServiceNow, and AWS services like Amazon S3 and Amazon Redshift, in just a few clicks.
<https://aws.amazon.com/appflow/>

NEW QUESTION 40

- (Exam Topic 1)

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
- D. Store the backup in an Amazon S3 bucket
- E. Set an S3 Lifecycle configuration for the S3 bucket.
- F. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to invoke an AWS Lambda function
- G. Configure the Lambda function to back up the table and to store the backup in an Amazon S3 bucket
- H. Set an S3 Lifecycle configuration for the S3 bucket.

Answer: C

NEW QUESTION 44

- (Exam Topic 1)

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.

Answer: AB

NEW QUESTION 45

- (Exam Topic 1)

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
- B. Use Amazon Simple Queue Service (Amazon SQS) as the communication layer between application services.
- C. Use Amazon CloudWatch metrics to analyze the application performance history to determine the server's peak utilization during the performance failure
- D. Increase the size of the application server's Amazon EC2 instances to meet the peak requirements.
- E. Use Amazon Simple Notification Service (Amazon SNS) to handle the messaging between application servers running on Amazon EC2 in an Auto Scaling group
- F. Use Amazon CloudWatch to monitor the SNS queue length and scale up and down as required.
- G. Use Amazon Simple Queue Service (Amazon SQS) to handle the messaging between application servers running on Amazon EC2 in an Auto Scaling group
- H. Use Amazon CloudWatch to monitor the SQS queue length and scale up when communication failures are detected.

Answer: A

Explanation:

<https://aws.amazon.com/getting-started/hands-on/build-serverless-web-app-lambda-apigateway-s3-dynamodb-c/> Build a Serverless Web Application with AWS Lambda, Amazon API Gateway, AWS Amplify, Amazon DynamoDB, and Amazon Cognito. This example showed similar setup as question: Build a Serverless Web Application with AWS Lambda, Amazon API Gateway, AWS Amplify, Amazon DynamoDB, and Amazon Cognito

NEW QUESTION 50

- (Exam Topic 1)

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 end point 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.

Answer: D

NEW QUESTION 53

- (Exam Topic 1)

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.

Answer: A

NEW QUESTION 58

- (Exam Topic 1)

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

Answer: A

Explanation:

<https://aws.amazon.com/cn/blogs/security/how-to-connect-to-aws-secrets-manager-service-within-a-virtual-private-cloud/> <https://aws.amazon.com/blogs/security/rotate-amazon-rds-database-credentials-automatically-with-aws-secrets-manager/>

NEW QUESTION 61

- (Exam Topic 1)

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.

Answer: A

NEW QUESTION 62

- (Exam Topic 1)

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
- C. Add the aws:PrincipalOrgPaths global condition key to the S3 bucket policy.
- D. Use AWS CloudTrail to monitor the CreateAccount, InviteAccountToOrganization, LeaveOrganization, and RemoveAccountFromOrganization event
- E. Update the S3 bucket policy accordingly.
- F. Tag each user that needs access to the S3 bucket
- G. Add the aws:PrincipalTag global condition key to the S3 bucket policy.

Answer: A

Explanation:

<https://aws.amazon.com/blogs/security/control-access-to-aws-resources-by-using-the-aws-organization-of-iam-p> The aws:PrincipalOrgID global key provides an alternative to listing all the account IDs for all AWS accounts in an organization. For example, the following Amazon S3 bucket policy allows members of any account in the XXX organization to add an object into the examtopics bucket.

```
{"Version": "2020-09-10",
"Statement": {
  "Sid": "AllowPutObject", "Effect": "Allow",
  "Principal": "*", "Action": "s3:PutObject",
  "Resource": "arn:aws:s3:::examtopics/*", "Condition": {"StringEquals":
{"aws:PrincipalOrgID":["XXX"]}}}} https://docs.aws.amazon.com/IAM/latest/UserGuide/reference_policies_condition-keys.html
```

NEW QUESTION 65

- (Exam Topic 1)

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

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

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

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

Answer: D

Explanation:

<https://aws.amazon.com/blogs/networking-and-content-delivery/scaling-network-traffic-inspection-using-aws-ga>

NEW QUESTION 67

- (Exam Topic 1)

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

Answer: C

Explanation:

EFS is a standard file system, it scales automatically and is highly available.

NEW QUESTION 71

- (Exam Topic 1)

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.

Answer: A

Explanation:

<https://aws.amazon.com/ebs/features/>

"Provisioned IOPS volumes are backed by solid-state drives (SSDs) and are the highest performance EBS volumes designed for your critical, I/O intensive database applications.

These volumes are ideal for both IOPS-intensive and throughput-intensive workloads that require extremely low latency."

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Storage.html

NEW QUESTION 72

- (Exam Topic 2)

A company wants to direct its users to a backup static error page if the company's primary website is unavailable. The primary website's DNS records are hosted in Amazon Route 53. The domain is pointing to an Application Load Balancer (ALB). The company needs a solution that minimizes changes and infrastructure overhead.

Which solution will meet these requirements?

- A. Update the Route 53 records to use a latency routing policy

- B. Add a static error page that is hosted in an Amazon S3 bucket to the records so that the traffic is sent to the most responsive endpoints.
- C. Set up a Route 53 active-passive failover configuratio
- D. Direct traffic to a static error page that is hosted in an Amazon S3 bucket when Route 53 health checks determine that the ALB endpoint is unhealthy.
- E. Set up a Route 53 active-active configuration with the ALB and an Amazon EC2 instance that hosts a static error page as endpoint
- F. Configure Route 53 to send requests to the instance only if the health checks fail for the ALB.
- G. Update the Route 53 records to use a multivalue answer routing polic
- H. Create a health chec
- I. Direct traffic to the website if the health check passe
- J. Direct traffic to a static error page that is hosted in Amazon S3 if the health check does not pass.

Answer: B

NEW QUESTION 75

- (Exam Topic 2)

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

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

What should a solutions architect do to meet these requirements?

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

Answer: B

NEW QUESTION 80

- (Exam Topic 2)

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 meet these requirements?

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

Answer: D

NEW QUESTION 85

- (Exam Topic 2)

A company owns an asynchronous API that is used to ingest user requests and, based on the request type, dispatch requests to the appropriate microservice for processing. The company is using Amazon API Gateway to deploy the API front end, and an AWS Lambda function that invokes Amazon DynamoDB to store user requests before dispatching them to the processing microservices.

The company provisioned as much DynamoDB throughput as its budget allows, but the company is still experiencing availability issues and is losing user requests.

What should a solutions architect do to address this issue without impacting existing users?

- A. Add throttling on the API Gateway with server-side throttling limits.
- B. Use DynamoDB Accelerator (DAX) and Lambda to buffer writes to DynamoDB.
- C. Create a secondary index in DynamoDB for the table with the user requests.
- D. Use the Amazon Simple Queue Service (Amazon SQS) queue and Lambda to buffer writes to DynamoDB.

Answer: D

Explanation:

By using an SQS queue and Lambda, the solutions architect can decouple the API front end from the processing microservices and improve the overall scalability and availability of the system. The SQS queue acts as a buffer, allowing the API front end to continue accepting user requests even if the processing microservices are experiencing high workloads or are temporarily unavailable. The Lambda function can then retrieve requests from the SQS queue and write them to DynamoDB, ensuring that all user requests are stored and processed. This approach allows the company to scale the processing microservices independently from the API front end, ensuring that the API remains available to users even during periods of high demand.

NEW QUESTION 89

- (Exam Topic 2)

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

information should be restricted to certain applications.
Which action should the solutions architect take?

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

Answer: C

Explanation:

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/field-level-encryption.html>

"With Amazon CloudFront, you can enforce secure end-to-end connections to origin servers by using HTTPS. Field-level encryption adds an additional layer of security that lets you protect specific data throughout system processing so that only certain applications can see it."

NEW QUESTION 92

- (Exam Topic 2)

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 multifactor 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

Answer: B

Explanation:

<https://aws.amazon.com/kms/faqs/#:~:text=If%20you%20are%20a%20developer%20who%20needs%20to%20d>

NEW QUESTION 94

- (Exam Topic 2)

A company is building a containerized application on premises and decides to move the application to AWS. The application will have thousands of users soon after it is deployed. The company is unsure how to manage the deployment of containers at scale. The company needs to deploy the containerized application in a highly available architecture that minimizes operational overhead.
Which solution will meet these requirements?

- A. Store container images in an Amazon Elastic Container Registry (Amazon ECR) repository
- B. Use an Amazon Elastic Container Service (Amazon ECS) cluster with the AWS Fargate launch type to run the container
- C. Use target tracking to scale automatically based on demand.
- D. Store container images in an Amazon Elastic Container Registry (Amazon ECR) repository
- E. Use an Amazon Elastic Container Service (Amazon ECS) cluster with the Amazon EC2 launch type to run the container
- F. Use target tracking to scale automatically based on demand.
- G. Store container images in a repository that runs on an Amazon EC2 instance
- H. Run the containers on EC2 instances that are spread across multiple Availability Zones
- I. Monitor the average CPU utilization in Amazon CloudWatch
- J. Launch new EC2 instances as needed
- K. Create an Amazon EC2 Amazon Machine Image (AMI) that contains the container image. Launch EC2 instances in an Auto Scaling group across multiple Availability Zones
- L. Use an Amazon CloudWatch alarm to scale out EC2 instances when the average CPU utilization threshold is breached.

Answer: A

NEW QUESTION 97

- (Exam Topic 2)

A company is running several business applications in three separate VPCs within the us-east-1 Region. The applications must be able to communicate between VPCs. The applications also must be able to consistently send hundreds to gigabytes of data each day to a latency-sensitive application that runs in a single on-premises data center.
A solutions architect needs to design a network connectivity solution that maximizes cost-effectiveness. Which solution meets those requirements?

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

Answer: D

Explanation:

<https://docs.aws.amazon.com/whitepapers/latest/aws-vpc-connectivity-options/aws-direct-connect-aws-transit-g>

NEW QUESTION 100

- (Exam Topic 2)

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
- D. Amazon EFS for durable data storage and Amazon S3 for archival storage
- E. Amazon EC2 Instance store for maximum performance
- F. Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage

Answer: A

Explanation:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

NEW QUESTION 103

- (Exam Topic 2)

A company's application is having performance issues. The application is stateful and needs to complete in-memory tasks on Amazon EC2 instances. The company used AWS CloudFormation to deploy infrastructure and used the M5 EC2 Instance family. As traffic increased, the application performance degraded. Users are reporting delays when they attempt to access the application.

Which solution will resolve these issues in the MOST operationally efficient way?

- A. Replace the EC2 instances with T3 EC2 instances that run in an Auto Scaling group
- B. Make the changes by using the AWS Management Console.
- C. Modify the CloudFormation templates to run the EC2 instances in an Auto Scaling group
- D. Increase the desired capacity and the maximum capacity of the Auto Scaling group manually when an increase is necessary
- E. Modify the CloudFormation template
- F. Replace the EC2 instances with R5 EC2 instances
- G. Use Amazon CloudWatch built-in EC2 memory metrics to track the application performance for future capacity planning.
- H. Modify the CloudFormation template
- I. Replace the EC2 instances with R5 EC2 instances
- J. Deploy the Amazon CloudWatch agent on the EC2 instances to generate custom application latency metrics for future capacity planning.

Answer: D

Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/cloudwatch-memory-metrics-ec2/>

NEW QUESTION 105

- (Exam Topic 2)

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

Which action should the solutions architect take to accomplish this?

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

Answer: D

NEW QUESTION 110

- (Exam Topic 2)

A company has an event-driven application that invokes AWS Lambda functions up to 800 times each minute with varying runtimes. The Lambda functions access data that is stored in an Amazon Aurora MySQL DB cluster. The company is noticing connection timeouts as user activity increases. The database shows no signs of being overloaded. CPU, memory, and disk access metrics are all low.

Which solution will resolve this issue with the LEAST operational overhead?

- A. Adjust the size of the Aurora MySQL nodes to handle more connections
- B. Configure retry logic in the Lambda functions for attempts to connect to the database
- C. Set up Amazon ElastiCache for Redis to cache commonly read items from the database
- D. Configure the Lambda functions to connect to ElastiCache for reads.
- E. Add an Aurora Replica as a reader node
- F. Configure the Lambda functions to connect to the reader endpoint of the DB cluster rather than to the writer endpoint.
- G. Use Amazon ROS Proxy to create a proxy
- H. Set the DB cluster as the target database. Configure the Lambda functions to connect to the proxy rather than to the DB cluster.

Answer: D

NEW QUESTION 112

- (Exam Topic 2)

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

Answer: D

Explanation:

<https://aws.amazon.com/certificate-manager/>:

"With AWS Certificate Manager, you can quickly request a certificate, deploy it on ACM-integrated AWS resources, such as Elastic Load Balancers, Amazon CloudFront distributions, and APIs on API Gateway, and let AWS Certificate Manager handle certificate renewals. It also enables you to create private certificates for

your internal resources and manage the certificate lifecycle centrally."

NEW QUESTION 114

- (Exam Topic 2)

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 Region
- B. Associate Regional web ACLs with an API stage.
- C. Set up AWS Firewall Manager in both Region
- D. Centrally configure AWS WAF rules.
- E. Set up AWS Shield in both Region
- F. Associate Regional web ACLs with an API stage.
- G. Set up AWS Shield in one of the Region
- H. Associate Regional web ACLs with an API stage.

Answer: A

Explanation:

Using AWS WAF has several benefits. Additional protection against web attacks using criteria that you specify. You can define criteria using characteristics of web requests such as the following: Presence of SQL code that is likely to be malicious (known as SQL injection). Presence of a script that is likely to be malicious (known as cross-site scripting). AWS Firewall Manager simplifies your administration and maintenance tasks across multiple accounts and resources for a variety of protections. <https://docs.aws.amazon.com/waf/latest/developerguide/what-is-aws-waf.html>

NEW QUESTION 118

- (Exam Topic 2)

An entertainment company is using Amazon DynamoDB to store media metadata. The application is read intensive and experiencing delays. The company does not have staff to handle additional operational overhead and needs to improve the performance efficiency of DynamoDB without reconfiguring the application. What should a solutions architect recommend to meet this requirement?

- A. Use Amazon ElastiCache for Redis.
- B. Use Amazon DynamoDB Accelerator (DAX).
- C. Replicate data by using DynamoDB global tables.
- D. Use Amazon ElastiCache for Memcached with Auto Discovery enabled.

Answer: B

Explanation:

<https://aws.amazon.com/dynamodb/dax/>

NEW QUESTION 120

- (Exam Topic 2)

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
- B. Create an S3 event notification for the analysis S3 bucket
- C. Configure Lambda and SageMaker Pipelines as destinations of the event notification
- D. Configure s3objectCreated:Put as the event type.
- E. Create a Lambda function to copy the files to the analysis S3 bucket
- F. 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.
- G. Configure S3 replication between the S3 bucket
- H. Create an S3 event notification for the analysis S3 bucket
- I. Configure Lambda and SageMaker Pipelines as destinations of the event notification
- J. Configure s3objectCreated:Put as the event type.
- K. Configure S3 replication between the S3 bucket
- L. 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.

Answer: A

NEW QUESTION 124

- (Exam Topic 2)

A gaming company is designing a highly available architecture. The application runs on a modified Linux kernel and supports only UDP-based traffic. The company needs the front-end tier to provide the best possible user experience. That tier must have low latency, route traffic to the nearest edge location, and provide static IP addresses for entry into the application endpoints.

What should a solutions architect do to meet these requirements?

- A. Configure Amazon Route 53 to forward requests to an Application Load Balance
- B. Use AWS Lambda for the application in AWS Application Auto Scaling.
- C. Configure Amazon CloudFront to forward requests to a Network Load Balance
- D. Use AWS Lambda for the application in an AWS Application Auto Scaling group.
- E. Configure AWS Global Accelerator to forward requests to a Network Load Balance
- F. Use Amazon EC2 instances for the application in an EC2 Auto Scaling group.
- G. Configure Amazon API Gateway to forward requests to an Application Load Balance
- H. Use AmazonEC2 instances for the application in an EC2 Auto Scaling group.

Answer: C

NEW QUESTION 125

- (Exam Topic 2)

A hospital wants to create digital copies for its large collection of historical written records. The hospital will continue to add hundreds of new documents each day. The hospital's data team will scan the documents and will upload the documents to the AWS Cloud.

A solutions architect must implement a solution to analyze the documents, extract the medical information, and store the documents so that an application can run SQL queries on the data. The solution must maximize scalability and operational efficiency.

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

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

Answer: DE

NEW QUESTION 129

- (Exam Topic 2)

A company hosts a two-tier application on Amazon EC2 instances and Amazon RDS. The application's demand varies based on the time of day. The load is minimal after work hours and on weekends. The EC2 instances run in an EC2 Auto Scaling group that is configured with a minimum of two instances and a maximum of five instances. The application must be available at all times, but the company is concerned about overall cost.

Which solution meets the availability requirement MOST cost-effectively?

- A. Use all EC2 Spot Instance
- B. Stop the RDS database when it is not in use.
- C. Purchase EC2 Instance Savings Plans to cover five EC2 instance
- D. Purchase an RDS Reserved DB Instance
- E. Purchase two EC2 Reserved Instances Use up to three additional EC2 Spot Instances as needed
- F. Stop the RDS database when it is not in use.
- G. Purchase EC2 Instance Savings Plans to cover two EC2 instance
- H. Use up to three additional EC2 On-Demand Instances as needed
- I. Purchase an RDS Reserved DB Instance.

Answer: D

NEW QUESTION 130

- (Exam Topic 3)

A company wants to deploy a new public web application on AWS. The application includes a web server tier that uses Amazon EC2 instances. The application also includes a database tier that uses an Amazon RDS for MySQL DB instance.

The application must be secure and accessible for global customers that have dynamic IP addresses. How should a solutions architect configure the security groups to meet these requirements?

- A. Configure the security group for the web servers to allow inbound traffic on port 443 from 0.0.0.0/0. Configure the security group for the DB instance to allow inbound traffic on port 3306 from the security group of the web servers.
- B. Configure the security group for the web servers to allow inbound traffic on port 443 from the IP addresses of the customers. Configure the security group for the DB instance to allow inbound traffic on port 3306 from the security group of the web servers.
- C. Configure the security group for the web servers to allow inbound traffic on port 443 from the IP addresses of the customers. Configure the security group for the DB instance to allow inbound traffic on port 3306 from the IP addresses of the customers.
- D. Configure the security group for the web servers to allow inbound traffic on port 443 from 0.0.0.0/0. Configure the security group for the DB instance to allow inbound traffic on port 3306 from 0.0.0.0/0.

Answer: A

NEW QUESTION 134

- (Exam Topic 3)

A company's order system sends requests from clients to Amazon EC2 instances. The EC2 instances process the orders and then store the orders in a database.

on Amazon RDS Users report that they must reprocess orders when the system fails. The company wants a resilient solution that can process orders automatically if a system outage occurs.

What should a solutions architect do to meet these requirements?

- A. Move the EC2 Instances into an Auto Scaling group Create an Amazon EventBridge (Amazon CloudWatch Events) rule to target an Amazon Elastic Container Service (Amazon ECS) task
- B. Move the EC2 instances into an Auto Scaling group behind an Application Load Balancer (ALB) Update the order system to send messages to the ALB endpoint.
- C. Move the EC2 instances into an Auto Scaling group Configure the order system to send messages to an Amazon Simple Queue Service (Amazon SQS) queue Configure the EC2 instances to consume messages from the queue
- D. Create an Amazon Simple Notification Service (Amazon SNS) topic Create an AWS Lambda function, and subscribe the function to the SNS topic Configure the order system to send messages to the SNS topic Send a command to the EC2 instances to process the messages by using AWS Systems Manager Run Command

Answer: C

NEW QUESTION 135

- (Exam Topic 3)

A company hosts a marketing website in an on-premises data center. The website consists of static documents and runs on a single server. An administrator updates the website content infrequently and uses an SFTP client to upload new documents.

The company decides to host its website on AWS and to use Amazon CloudFront. The company's solutions architect creates a CloudFront distribution. The solutions architect must design the most cost-effective and resilient architecture for website hosting to serve as the CloudFront origin.

Which solution will meet these requirements?

- A. Create a virtual server by using Amazon Lightsail
- B. Configure the web server in the Lightsail instance.Upload website content by using an SFTP client.
- C. Create an AWS Auto Scaling group for Amazon EC2 instance
- D. Use an Application Load Balancer.Upload website content by using an SFTP client.
- E. Create a private Amazon S3 bucket
- F. Use an S3 bucket policy to allow access from a CloudFront origin access identity (OAI). Upload website content by using theAWSCLI.
- G. Create a public Amazon S3 bucket
- H. Configure AWS Transfer for SFT
- I. Configure the S3 bucket for website hosting
- J. Upload website content by using the SFTP client.

Answer: C

Explanation:

<https://docs.aws.amazon.com/cli/latest/reference/transfer/describe-server.html>

NEW QUESTION 140

- (Exam Topic 3)

A company needs to transfer 600 TB of data from its on-premises network-attached storage (NAS) system to the AWS Cloud. The data transfer must be complete within 2 weeks. The data is sensitive and must be encrypted in transit. The company's internet connection can support an upload speed of 100 Mbps.

Which solution meets these requirements MOST cost-effectively?

- A. Use Amazon S3 multi-part upload functionality to transfer the files over HTTPS
- B. Create a VPN connection between the on-premises NAS system and the nearest AWS Region Transfer the data over the VPN connection
- C. Use the AWS Snow Family console to order several AWS Snowball Edge Storage Optimized devices Use the devices to transfer the data to Amazon S3.
- D. Set up a 10 Gbps AWS Direct Connect connection between the company location and the nearest AWS Region Transfer the data over a VPN connection into the Region to store the data in Amazon S3

Answer: D

NEW QUESTION 142

- (Exam Topic 3)

A company has an On-premises volume backup solution that has reached its end of life. The company wants to use AWS as part of a new backup solution and wants to maintain local access to all the data while it is backed up on AWS. The company wants to ensure that the data backed up on AWS is automatically and securely transferred.

Which solution meets these requirements?

- A. Use AWS Snowball to migrate data out of the on-premises solution to Amazon S3. Configure on-premises systems to mount the Snowball S3 endpoint to provide local access to the data.
- B. Use AWS Snowball Edge to migrate data out of the on-premises solution to Amazon S3.Use the Snowball Edge file interface to provide on-premises systems with local access to the data.
- C. Use AWS Storage Gateway and configure a cached volume gateway
- D. Run the Storage Gateway software application on premises and configure a percentage of data to cache locally
- E. Mount the gateway storage volumes to provide local access to the data.
- F. Use AWS Storage Gateway and configure a stored volume gateway
- G. Run the Storage software application on premises and map the gateway storage volumes to on-premises storage
- H. Mount the gateway storage volumes to provide local access to the data.

Answer: C

NEW QUESTION 147

- (Exam Topic 3)

A company runs a public three-Tier web application in a VPC The application runs on Amazon EC2 instances across multiple Availability Zones. The EC2 instances that run in private subnets need to communicate with a license server over the internet The company needs a managed solution that minimizes operational maintenance

Which solution meets these requirements"

- A. Provision a NAT instance in a public subnet Modify each private subnets route table with a default route that points to the NAT instance
- B. Provision a NAT instance in a private subnet Modify each private subnet's route table with a default route that points to the NAT instance
- C. Provision a NAT gateway in a public subnet Modify each private subnet's route table with a default route that points to the NAT gateway
- D. Provision a NAT gateway in a private subnet Modify each private subnet's route table with a default route that points to the NAT gateway .

Answer: C

NEW QUESTION 149

- (Exam Topic 3)

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

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

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

Answer: B

NEW QUESTION 150

- (Exam Topic 3)

A company is designing a shared storage solution for a gaming application that is hosted in the AWS Cloud The company needs the ability to use SMB clients to access data solution must be fully managed.

Which AWS solution meets these requirements?

- A. Create an AWS DataSync task that shares the data as a mountable file system Mount the file system to the application server
- 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 FSx for Windows File Server file system Attach the file system to the origin server Connect the application server to the file system
- D. Create an Amazon S3 bucket Assign an IAM role to the application to grant access to the S3 bucket Mount the S3 bucket to the application server

Answer: C

NEW QUESTION 154

- (Exam Topic 3)

A solutions architect is designing a new API using Amazon API Gateway that will receive requests from users. The volume of requests is highly variable; several hours can pass without receiving a single request. The data processing will take place asynchronously, but should be completed within a few seconds after a request is made.

Which compute service should the solutions architect have the API invoke to deliver the requirements at the lowest cost?

- A. An AWS Glue job
- B. An AWS Lambda function
- C. A containerized service hosted in Amazon Elastic Kubernetes Service (Amazon EKS)
- D. A containerized service hosted in Amazon ECS with Amazon EC2

Answer: B

Explanation:

API Gateway + Lambda is the perfect solution for modern applications with serverless architecture.

NEW QUESTION 155

- (Exam Topic 3)

An application that is hosted on Amazon EC2 instances needs to access an Amazon S3 bucket Traffic must not traverse the internet How should a solutions architect configure access to meet these requirements?

- A. Create a private hosted zone by using Amazon Route 53
- B. Set up a gateway VPC endpoint for Amazon S3 in the VPC
- C. Configure the EC2 instances to use a NAT gateway to access the S3 bucket
- D. Establish an AWS Site-to-Site VPN connection between the VPC and the S3 bucket

Answer: B

NEW QUESTION 158

- (Exam Topic 3)

An ecommerce company is running a multi-tier application on AWS. The front-end and backend tiers run on Amazon EC2, and the database runs on Amazon RDS for MYSQL. The backend tier communities with the RDS instance. There are frequent calls to return identical database from the database that are causing performance slowdowns.

Which action should be taken to improve the performance of the backend?

- A. Implement Amazon SNS to store the database calls.
- B. Implement Amazon ElastiCache to cache the large database.
- C. Implement an RDS for MySQL read replica to cache database calls.
- D. Implement Amazon Kinesis Data Firehose to stream the calls to the database.

Answer: B

NEW QUESTION 160

- (Exam Topic 3)

A company has deployed a server less application that invokes an AWS Lambda function when new documents are uploaded to an Amazon S3 bucket. The application uses the Lambda function to process the documents. After a recent marketing campaign, the company noticed that the application did not process many of the documents.

What should a solutions architect do to improve the architecture of this application?

- A. Set the Lambda function's runtime timeout value to 15 minutes.
- B. Configure an S3 bucket replication policy. Stage the documents in the S3 bucket for later processing.
- C. Deploy an additional Lambda function. Load balance the processing of the documents across the two Lambda functions.
- D. Create an Amazon Simple Queue Service (Amazon SQS) queue. Send the requests to the queue. Configure the queue as an event source for Lambda.

Answer: B

NEW QUESTION 161

- (Exam Topic 3)

A company is building an application that consists of several microservices. The company has decided to use container technologies to deploy its software on AWS. The company needs a solution that minimizes the amount of ongoing effort for maintenance and scaling. The company cannot manage additional infrastructure.

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

- A. Deploy an Amazon Elastic Container Service (Amazon ECS) cluster.
- B. Deploy the Kubernetes control plane on Amazon EC2 instances that span multiple Availability Zones.
- C. Deploy an Amazon Elastic Container Service (Amazon ECS) service with an Amazon EC2 launch type. Specify a desired task number level of greater than or equal to 2.
- D. Deploy an Amazon Elastic Container Service (Amazon ECS) service with a Fargate launch type. Specify a desired task number level of greater than or equal to 2.
- E. Deploy Kubernetes worker nodes on Amazon EC2 instances that span multiple Availability Zones. Create a deployment that specifies two or more replicas for each microservice.

Answer: AD

Explanation:

AWS Fargate is a technology that you can use with Amazon ECS to run containers without having to manage servers or clusters of Amazon EC2 instances. With Fargate, you no longer have to provision, configure, or scale clusters of virtual machines to run containers.

<https://docs.aws.amazon.com/AmazonECS/latest/userguide/what-is-fargate.html>

NEW QUESTION 164

- (Exam Topic 3)

A media company collects and analyzes user activity data on premises. The company wants to migrate this capability to AWS. The user activity data store will continue to grow and will be petabytes in size. The company needs to build a highly available data ingestion solution that facilitates on-demand analytics of existing data and new data with SQL.

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

- A. Send activity data to an Amazon Kinesis data stream.
- B. Configure the stream to deliver the data to an Amazon S3 bucket.
- C. Send activity data to an Amazon Kinesis Data Firehose delivery stream.
- D. Configure the stream to deliver the data to an Amazon Redshift cluster.
- E. Place activity data in an Amazon S3 bucket.
- F. Configure Amazon S3 to run an AWS Lambda function on the data as the data arrives in the S3 bucket.
- G. Create an ingestion service on Amazon EC2 instances that are spread across multiple Availability Zones.
- H. Configure the service to forward data to an Amazon RDS Multi-AZ database.

Answer: B

Explanation:

Amazon Redshift is a fully managed, petabyte-scale data warehouse service in the cloud. You can start with just a few hundred gigabytes of data and scale to a petabyte or more. This allows you to use your data to gain new insights for your business and customers. The first step to create a data warehouse is to launch a set of nodes, called an Amazon Redshift cluster. After you provision your cluster, you can upload your data set and then perform data analysis queries. Regardless of the size of the data set, Amazon Redshift offers fast query performance using the same SQL-based tools and business intelligence applications that you use today.

NEW QUESTION 169

- (Exam Topic 3)

A company recently announced the deployment of its retail website to a global audience. The website runs on multiple Amazon EC2 instances behind an Elastic Load Balancer. The instances run in an Auto Scaling group across multiple Availability Zones.

The company wants to provide its customers with different versions of content based on the devices that the customers use to access the website.

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

- A. Configure Amazon CloudFront to cache multiple versions of the content.
- B. Configure a host header in a Network Load Balancer to forward traffic to different instances.
- C. Configure a Lambda@Edge function to send specific objects to users based on the User-Agent header.

- D. Configure AWS Global Accelerator
- E. Forward requests to a Network Load Balancer (NLB). Configure the NLB to set up host-based routing to different EC2 instances.
- F. Configure AWS Global Accelerator
- G. Forward requests to a Network Load Balancer (NLB). Configure the NLB to set up path-based routing to different EC2 instances.

Answer: AC

Explanation:

For C: IMPROVED USER EXPERIENCE Lambda@Edge can help improve your users' experience with your websites and web applications across the world, by letting you personalize content for them without sacrificing performance. Real-time Image Transformation You can customize your users' experience by transforming images on the fly based on the user characteristics. For example, you can resize images based on the viewer's device type—mobile, desktop, or tablet. You can also cache the transformed images at CloudFront Edge locations to further improve performance when delivering images.
<https://aws.amazon.com/lambda/edge/>

NEW QUESTION 170

- (Exam Topic 3)

A company needs a backup strategy for its three-tier stateless web application. The web application runs on Amazon EC2 instances in an Auto Scaling group with a dynamic scaling policy that is configured to respond to scaling events. The database tier runs on Amazon RDS for PostgreSQL. The web application does not require temporary local storage on the EC2 instances. The company's recovery point objective (RPO) is 2 hours. The backup strategy must maximize scalability and optimize resource utilization for this environment. Which solution will meet these requirements?

- A. Take snapshots of Amazon Elastic Block Store (Amazon EBS) volumes of the EC2 instances and database every 2 hours to meet the RPO.
- B. Configure a snapshot lifecycle policy to take Amazon Elastic Block Store (Amazon EBS) snapshots. Enable automated backups in Amazon RDS to meet the RPO.
- C. Retain the latest Amazon Machine Images (AMIs) of the web and application tiers. Enable automated backups in Amazon RDS and use point-in-time recovery to meet the RPO.
- D. Take snapshots of Amazon Elastic Block Store (Amazon EBS) volumes of the EC2 instances every 2 hours. Enable automated backups in Amazon RDS and use point-in-time recovery to meet the RPO.

Answer: D

NEW QUESTION 171

- (Exam Topic 3)

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

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

Answer: B

Explanation:

<https://docs.aws.amazon.com/prescriptive-guidance/latest/patterns/three-aws-glue-etl-job-types-for-converting-d>

NEW QUESTION 172

- (Exam Topic 3)

A solutions architect wants all new users to have specific complexity requirements and mandatory rotation periods for IAM user passwords. What should the solutions architect do to accomplish this?

- A. Set an overall password policy for the entire AWS account.
- B. Set a password policy for each IAM user in the AWS account.
- C. Use third-party vendor software to set password requirements.
- D. Attach an Amazon CloudWatch rule to the Create_newuser event to set the password with the appropriate requirements.

Answer: A

NEW QUESTION 175

- (Exam Topic 3)

An Amazon EC2 instance is located in a private subnet in a new VPC. This subnet does not have outbound internet access, but the EC2 instance needs the ability to download monthly security updates from an outside vendor. What should a solutions architect do to meet these requirements?

- A. Create an internet gateway, and attach it to the VPC.
- B. Configure the private subnet route table to use the internet gateway as the default route.
- C. Create a NAT gateway, and place it in a public subnet.
- D. Configure the private subnet route table to use the NAT gateway as the default route.
- E. Create a NAT instance, and place it in the same subnet where the EC2 instance is located.
- F. Configure the private subnet route table to use the NAT instance as the default route.

- G. Create an internet gateway, and attach it to the VP
- H. Create a NAT instance, and place it in the same subnet where the EC2 instance is locate
- I. Configure the private subnet route table to use the internet gateway as the default route.

Answer: B

Explanation:

This approach will allow the EC2 instance to access the internet and download the monthly security updates while still being located in a private subnet. By creating a NAT gateway and placing it in a public subnet, it will allow the instances in the private subnet to access the internet through the NAT gateway. And then, configure the private subnet route table to use the NAT gateway as the default route. This will ensure that all outbound traffic is directed through the NAT gateway, allowing the EC2 instance to access the internet while still maintaining the security of the private subnet.

NEW QUESTION 178

- (Exam Topic 3)

A company provides an online service for posting video content and transcoding it for use by any mobile platform. The application architecture uses Amazon Elastic File System (Amazon EFS) Standard to collect and store the videos so that multiple Amazon EC2 Linux instances can access the video content for processing. As the popularity of the service has grown over time, the storage costs have become too expensive. Which storage solution is MOST cost-effective?

- A. Use AWS Storage Gateway for files to store and process the video content
- B. Use AWS Storage Gateway for volumes to store and process the video content
- C. Use Amazon EFS for storing the video content. Once processing is complete, transfer the files to Amazon Elastic Block Store (Amazon EBS)
- D. Use Amazon S3 for storing the video content. Move the files temporarily over to an Amazon Elastic Block Store (Amazon EBS) volume attached to the server for processing

Answer: D

NEW QUESTION 179

- (Exam Topic 3)

A company's facility has badge readers at every entrance throughout the building. When badges are scanned, the readers send a message over HTTPS to indicate who attempted to access that particular entrance.

A solutions architect must design a system to process these messages from the sensors. The solution must be highly available, and the results must be made available for the company's security team to analyze.

Which system architecture should the solutions architect recommend?

- A. Launch an Amazon EC2 instance to serve as the HTTPS endpoint and to process the messages. Configure the EC2 instance to save the results to an Amazon S3 bucket.
- B. Create an HTTPS endpoint in Amazon API Gateway.
- C. Configure the API Gateway endpoint to invoke an AWS Lambda function to process the messages and save the results to an Amazon DynamoDB table.
- D. Use Amazon Route 53 to direct incoming sensor messages to an AWS Lambda function.
- E. Configure the Lambda function to process the messages and save the results to an Amazon DynamoDB table.
- F. Create a gateway VPC endpoint for Amazon S3. Configure a Site-to-Site VPN connection from the facility network to the VPC so that sensor data can be written directly to an S3 bucket by way of the VPC endpoint.

Answer: B

NEW QUESTION 181

- (Exam Topic 3)

A company wants to implement a disaster recovery plan for its primary on-premises file storage volume. The file storage volume is mounted from an Internet Small Computer Systems Interface (iSCSI) device on a local storage server. The file storage volume holds hundreds of terabytes (TB) of data.

The company wants to ensure that end users retain immediate access to all file types from the on-premises systems without experiencing latency.

Which solution will meet these requirements with the LEAST amount of change to the company's existing infrastructure?

- A. Provision an Amazon S3 File Gateway as a virtual machine (VM) that is hosted on-premise
- B. Set the local cache to 10 TB
- C. Modify existing applications to access the files through the NFS protocol
- D. To recover from a disaster, provision an Amazon EC2 instance and mount the S3 bucket that contains the files.
- E. Provision an AWS Storage Gateway tape gateway
- F. Use a data backup solution to back up all existing data to a virtual tape library
- G. Configure the data backup solution to run nightly after the initial backup is complete
- H. To recover from a disaster, provision an Amazon EC2 instance and restore the data to an Amazon Elastic Block Store (Amazon EBS) volume from the volumes in the virtual tape library.
- I. Provision an AWS Storage Gateway Volume Gateway cached volume
- J. Set the local cache to 10 TB
- K. Mount the Volume Gateway cached volume to the existing file server by using iSCSI
- L. and copy all files to the storage volume
- M. Configure scheduled snapshots of the storage volume
- N. To recover from a disaster, restore a snapshot to an Amazon Elastic Block Store (Amazon EBS) volume and attach the EBS volume to an Amazon EC2 instance.
- O. Provision an AWS Storage Gateway Volume Gateway stored volume with the same amount of disk space as the existing file storage volume
- P. Mount the Volume Gateway stored volume to the existing file server by using iSCSI, and copy all files to the storage volume
- Q. Configure scheduled snapshots of the storage volume
- R. To recover from a disaster, restore a snapshot to an Amazon Elastic Block Store (Amazon EBS) volume and attach the EBS volume to an Amazon EC2 instance.

Answer: C

NEW QUESTION 185

- (Exam Topic 3)

A company has an application that collects data from IoT sensors on automobiles. The data is streamed and stored in Amazon S3 through Amazon Kinesis Data Firehose. The data produces trillions of S3 objects each year. Each morning, the company uses the data from the previous 30 days to retrain a suite of machine learning (ML) models.

Four times each year, the company uses the data from the previous 12 months to perform analysis and train other ML models. The data must be available with minimal delay for up to 1 year. After 1 year, the data must be retained for archival purposes.

Which storage solution meets these requirements MOST cost-effectively?

- A. Use the S3 Intelligent-Tiering storage class
- B. Create an S3 Lifecycle policy to transition objects to S3 Glacier Deep Archive after 1 year
- C. Use the S3 Intelligent-Tiering storage class
- D. Configure S3 Intelligent-Tiering to automatically move objects to S3 Glacier Deep Archive after 1 year.
- E. Use the S3 Standard-Infrequent Access (S3 Standard-IA) storage class
- F. Create an S3 Lifecycle policy to transition objects to S3 Glacier Deep Archive after 1 year.
- G. Use the S3 Standard storage class
- H. Create an S3 Lifecycle policy to transition objects to S3 Standard-Infrequent Access (S3 Standard-IA) after 30 days, and then to S3 Glacier Deep Archive after 1 year.

Answer: B

NEW QUESTION 187

- (Exam Topic 3)

A company previously migrated its data warehouse solution to AWS. The company also has an AWS Direct Connect connection. Corporate office users query the data warehouse using a visualization tool. The average size of a query returned by the data warehouse is 50 MB and each webpage sent by the visualization tool is approximately 500 KB. Result sets returned by the data warehouse are not cached.

Which solution provides the LOWEST data transfer egress cost for the company?

- A. Host the visualization tool on premises and query the data warehouse directly over the internet.
- B. Host the visualization tool in the same AWS Region as the data warehouse
- C. Access it over the internet.
- D. Host the visualization tool on premises and query the data warehouse directly over a Direct Connect connection at a location in the same AWS Region.
- E. Host the visualization tool in the same AWS Region as the data warehouse and access it over a Direct Connect connection at a location in the same Region.

Answer: D

Explanation:

<https://aws.amazon.com/directconnect/pricing/> <https://aws.amazon.com/blogs/aws/aws-data-transfer-prices-reduced/>

NEW QUESTION 188

- (Exam Topic 3)

A company sells datasets to customers who do research in artificial intelligence and machine learning (AI/ML). The datasets are large, formatted files that are stored in an Amazon S3 bucket in the us-east-1 Region. The company hosts a web application that the customers use to purchase access to a given dataset. The web application is deployed on multiple Amazon EC2 instances behind an Application Load Balancer. After a purchase is made, customers receive an S3 signed URL that allows access to the files.

The customers are distributed across North America and Europe. The company wants to reduce the cost that is associated with data transfers and wants to maintain or improve performance.

What should a solutions architect do to meet these requirements?

- A. Configure S3 Transfer Acceleration on the existing S3 bucket. Direct customer requests to the S3 Transfer Acceleration endpoint. Continue to use S3 signed URLs for access control.
- B. Deploy an Amazon CloudFront distribution with the existing S3 bucket as the origin. Direct customer requests to the CloudFront URL. Switch to CloudFront signed URLs for access control.
- C. Set up a second S3 bucket in the eu-central-1 Region with S3 Cross-Region Replication between the buckets. Direct customer requests to the closest Region. Continue to use S3 signed URLs for access control.
- D. Modify the web application to enable streaming of the datasets to end user.
- E. Configure the web application to read the data from the existing S3 bucket. Implement access control directly in the application.

Answer: B

Explanation:

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/PrivateContent.html>

NEW QUESTION 189

- (Exam Topic 3)

A company serves a dynamic website from a fleet of Amazon EC2 instances behind an Application Load Balancer (ALB). The website needs to support multiple languages to serve customers around the world. The website's architecture is running in the us-west-1 Region and is exhibiting high request latency for users that are located in other parts of the world.

The website needs to serve requests quickly and efficiently regardless of a user's location. However, the company does not want to recreate the existing architecture across multiple Regions.

What should a solutions architect do to meet these requirements?

- A. Replace the existing architecture with a website that is served from an Amazon S3 bucket. Configure an Amazon CloudFront distribution with the S3 bucket as the origin. Set the cache behavior settings to cache based on the Accept-Language request header.
- B. Configure an Amazon CloudFront distribution with the ALB as the origin. Set the cache behavior settings to cache based on the Accept-Language request header.
- C. Create an Amazon API Gateway API that is integrated with the ALB. Configure the API to use the HTTP integration type. Set up an API Gateway stage to enable the API cache based on the Accept-Language request header.
- D. Launch an EC2 instance in each additional Region and configure NGINX to act as a cache server for that Region. Put all the EC2 instances and the ALB behind an Amazon Route 53 record set with a geolocation routing policy.

Answer: B

NEW QUESTION 192

- (Exam Topic 3)

A company is hosting a web application from an Amazon S3 bucket. The application uses Amazon Cognito as an identity provider to authenticate users and return a JSON Web Token (JWT) that provides access to protected resources that are stored in another S3 bucket.

Upon deployment of the application, users report errors and are unable to access the protected content. A solutions architect must resolve this issue by providing proper permissions so that users can access the protected content.

Which solution meets these requirements?

- A. Update the Amazon Cognito identity pool to assume the proper IAM role for access to the protected content.
- B. Update the S3 ACL to allow the application to access the protected content
- C. Redeploy the application to Amazon S3 to prevent eventually consistent reads in the S3 bucket from affecting the ability of users to access the protected content.
- D. Update the Amazon Cognito pool to use custom attribute mappings within the identity pool and grant users the proper permissions to access the protected content

Answer: B

NEW QUESTION 193

- (Exam Topic 3)

What should a solutions architect do to ensure that all objects uploaded to an Amazon S3 bucket are encrypted?

- A. Update the bucket policy to deny if the PutObject does not have an s3:x-amz-acl header set
- B. Update the bucket policy to deny if the PutObject does not have an s3:x-amz-aci header set to private.
- C. Update the bucket policy to deny if the PutObject does not have an aws SecureTransport header set to true
- D. Update the bucket policy to deny if the PutObject does not have an x-amz-server-side-encryption header set.

Answer: D

Explanation:

<https://aws.amazon.com/blogs/security/how-to-prevent-uploads-of-unencrypted-objects-to-amazon-s3/#:~:text=>

NEW QUESTION 196

- (Exam Topic 3)

The customers of a finance company request appointments with financial advisors by sending text messages. A web application that runs on Amazon EC2 instances accepts the appointment requests. The text messages are published to an Amazon Simple Queue Service (Amazon SQS) queue through the web application. Another application that runs on EC2 instances then sends meeting invitations and meeting confirmation email messages to the customers. After successful scheduling, this application stores the meeting information in an Amazon DynamoDB database.

As the company expands, customers report that their meeting invitations are taking longer to arrive. What should a solutions architect recommend to resolve this issue?

- A. Add a DynamoDB Accelerator (DAX) cluster in front of the DynamoDB database.
- B. Add an Amazon API Gateway API in front of the web application that accepts the appointment requests.
- C. Add an Amazon CloudFront distribution
- D. Set the origin as the web application that accepts the appointment requests.
- E. Add an Auto Scaling group for the application that sends meeting invitations
- F. Configure the Auto Scaling group to scale based on the depth of the SQS queue.

Answer: D

Explanation:

To resolve the issue of longer delivery times for meeting invitations, the solutions architect can recommend adding an Auto Scaling group for the application that sends meeting invitations and configuring the Auto Scaling group to scale based on the depth of the SQS queue. This will allow the application to scale up as the number of appointment requests increases, improving the performance and delivery times of the meeting invitations.

NEW QUESTION 201

- (Exam Topic 3)

A company runs a web application that is backed by Amazon RDS. A new database administrator caused data loss by accidentally editing information in a database table. To help recover from this type of incident, the company wants the ability to restore the database to its state from 5 minutes before any change within the last 30 days.

Which feature should the solutions architect include in the design to meet this requirement?

- A. Read replicas
- B. Manual snapshots
- C. Automated backups
- D. Multi-AZ deployments

Answer: C

NEW QUESTION 206

- (Exam Topic 3)

A company wants to use Amazon S3 for the secondary copy of its on-premises dataset. The company would rarely need to access this copy. The storage solution's cost should be minimal.

Which storage solution 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)

Answer: C

NEW QUESTION 209

- (Exam Topic 3)

A company is concerned that two NAT instances in use will no longer be able to support the traffic needed for the company's application. A solutions architect wants to implement a solution that is highly available, fault tolerant, and automatically scalable. What should the solutions architect recommend?

- A. Remove the two NAT instances and replace them with two NAT gateways in the same Availability Zone.
- B. Use Auto Scaling groups with Network Load Balancers for the NAT instances in different Availability Zones.
- C. Remove the two NAT instances and replace them with two NAT gateways in different Availability Zones.
- D. Replace the two NAT instances with Spot Instances in different Availability Zones and deploy a Network Load Balancer.

Answer: C

Explanation:

If you have resources in multiple Availability Zones and they share one NAT gateway, and if the NAT gateway's Availability Zone is down, resources in the other Availability Zones lose internet access. To create an Availability Zone-independent architecture, create a NAT gateway in each Availability Zone and configure your routing to ensure that resources use the NAT gateway in the same Availability Zone.
<https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-gateway.html#nat-gateway-basics>

NEW QUESTION 214

- (Exam Topic 3)

An IAM user made several configuration changes to AWS resources in their company's account during a production deployment last week. A solutions architect learned that a couple of security group rules are not configured as desired. The solutions architect wants to confirm which IAM user was responsible for making changes.

Which service should the solutions architect use to find the desired information?

- A. Amazon GuardDuty
- B. Amazon Inspector
- C. AWS CloudTrail
- D. AWS Config

Answer: C

NEW QUESTION 219

- (Exam Topic 3)

A company recently created a disaster recovery site in a Different AWS Region. The company needs to transfer large amounts of data back and forth between NFS file systems in the two Regions on a periodic basis.

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

- A. Use AWS DataSync.
- B. Use AWS Snowball devices
- C. Set up an SFTP server on Amazon EC2
- D. Use AWS Database Migration Service (AWS DMS)

Answer: A

NEW QUESTION 223

- (Exam Topic 3)

A company is launching a new application deployed on an Amazon Elastic Container Service (Amazon ECS) cluster and is using the Fargate launch type for ECS tasks. The company is monitoring CPU and memory usage because it is expecting high traffic to the application upon its launch. However, the company wants to reduce costs when utilization decreases.

What should a solutions architect recommend?

- A. Use Amazon EC2 Auto Scaling to scale at certain periods based on previous traffic patterns.
- B. Use an AWS Lambda function to scale Amazon ECS based on metric breaches that trigger an Amazon CloudWatch alarm.
- C. Use Amazon EC2 Auto Scaling with simple scaling policies to scale when ECS metric breaches trigger an Amazon CloudWatch alarm.
- D. Use AWS Application Auto Scaling with target tracking policies to scale when ECS metric breaches trigger an Amazon CloudWatch alarm.

Answer: C

NEW QUESTION 228

- (Exam Topic 3)

A company must migrate 20 TB of data from a data center to the AWS Cloud within 30 days. The company's network bandwidth is limited to 15 Mbps and cannot exceed 70% utilization. What should a solutions architect do to meet these requirements?

- A. Use AWS Snowball.
- B. Use AWS DataSync.
- C. Use a secure VPN connection.
- D. Use Amazon S3 Transfer Acceleration.

Answer: A

Explanation:

AWS Snowball is a secure data transport solution that accelerates moving large amounts of data into and out of the AWS cloud. It can move up to 80 TB of data at a time, and provides a network bandwidth of up to 50 Mbps, so it is well-suited for the task. Additionally, it is secure and easy to use, making it the ideal solution for this migration.

NEW QUESTION 232

- (Exam Topic 3)

A company's application runs on Amazon EC2 instances behind an Application Load Balancer (ALB). The instances run in an Amazon EC2 Auto Scaling group across multiple Availability Zones. On the first day of every month at midnight. The application becomes much slower when the month-end financial calculation batch runs. This causes the CPU utilization of the EC2 instances to immediately peak to 100%, which disrupts the application. What should a solution architect recommend to ensure the application is able to handle the workload and avoid downtime?

- A. Configure an Amazon CloudFront distribution in front of the ALB.
- B. Configure an EC2 Auto Scaling simple scaling policy based on CPU utilization.
- C. Configure an EC2 Auto Scaling scheduled scaling policy based on the monthly schedule.
- D. Configure Amazon ElasticCache to remove some of the workload from the EC2 instances.

Answer: A

NEW QUESTION 234

- (Exam Topic 3)

A rapidly growing ecommerce company is running its workloads in a single AWS Region. A solutions architect must create a disaster recovery (DR) strategy that includes a different AWS Region. The company wants its database to be up to date in the DR Region with the least possible latency. The remaining infrastructure in the DR Region needs to run at reduced capacity and must be able to scale up if necessary. Which solution will meet these requirements with the LOWEST recovery time objective (RTO)?

- A. Use an Amazon Aurora global database with a pilot light deployment
- B. Use an Amazon Aurora global database with a warm standby deployment
- C. Use an Amazon RDS Multi-AZ DB instance with a pilot light deployment
- D. Use an Amazon RDS Multi-AZ DB instance with a warm standby deployment

Answer: B

Explanation:

<https://docs.aws.amazon.com/whitepapers/latest/disaster-recovery-workloads-on-aws/disaster-recovery-options>

NEW QUESTION 235

- (Exam Topic 3)

A company is migrating an old application to AWS. The application runs a batch job every hour and is CPU intensive. The batch job takes 15 minutes on average with an on-premises server. The server has 64 virtual CPU (vCPU) and 512 GiB of memory. Which solution will run the batch job within 15 minutes with the LEAST operational overhead?

- A. Use AWS Lambda with functional scaling
- B. Use Amazon Elastic Container Service (Amazon ECS) with AWS Fargate
- C. Use Amazon Lightsail with AWS Auto Scaling
- D. Use AWS Batch on Amazon EC2

Answer: D

Explanation:

Use AWS Batch on Amazon EC2. AWS Batch is a fully managed batch processing service that can be used to easily run batch jobs on Amazon EC2 instances. It can scale the number of instances to match the workload, allowing the batch job to be completed in the desired time frame with minimal operational overhead. Using AWS Lambda with Amazon API Gateway - AWS Lambda <https://docs.aws.amazon.com/lambda/latest/dg/services-apigateway.html> AWS Lambda FAQs <https://aws.amazon.com/lambda/faqs/>

NEW QUESTION 238

- (Exam Topic 3)

A payment processing company records all voice communication with its customers and stores the audio files in an Amazon S3 bucket. The company needs to capture the text from the audio files. The company must remove from the text any personally identifiable information (PII) that belongs to customers. What should a solutions architect do to meet these requirements?

- A. Process the audio files by using Amazon Kinesis Video Stream
- B. Use an AWS Lambda function to scan for known PII patterns.
- C. When an audio file is uploaded to the S3 bucket, invoke an AWS Lambda function to start an Amazon Textract task to analyze the call recordings.
- D. Configure an Amazon Transcribe transcription job with PII redaction turned on
- E. When an audio file is uploaded to the S3 bucket, invoke an AWS Lambda function to start the transcription job
- F. Store the output in a separate S3 bucket.
- G. Create an Amazon Connect contact flow that ingests the audio files with transcription turned on
- H. Embed an AWS Lambda function to scan for known PII patterns
- I. Use Amazon EventBridge (Amazon CloudWatch Events) to start the contact flow when an audio file is uploaded to the S3 bucket.

Answer: C

NEW QUESTION 242

- (Exam Topic 3)

A company is using Amazon Route 53 latency-based routing to route requests to its UDP-based application for users around the world. The application is hosted on redundant servers in the company's on-premises data centers in the United States, Asia, and Europe. The company's compliance requirements state that the application must be hosted on-premises. The company wants to improve the performance and availability of the application. What should a solutions architect do to meet these requirements?

- A. Configure three Network Load Balancers (NLBs) in the three AWS Regions to address the on-premises endpoints. Create an accelerator by using AWS Global Accelerator, and register the NLBs as its endpoint
- B. Provide access to the application by using a CNAME that points to the accelerator DNS

- C. Configure three Application Load Balancers (ALBs) in the three AWS Regions to address the on-premises endpoint
- D. Create an accelerator by using AWS Global Accelerator and register the ALBs as its endpoints Provide access to the application by using a CNAME that points to the accelerator DNS
- E. Configure three Network Load Balancers (NLBs) in the three AWS Regions to address the on-premises endpoints In Route 53. create a latency-based record that points to the three NLB
- F. and use it as an origin for an Amazon CloudFront distribution Provide access to the application by using a CNAME that points to the CloudFront DNS
- G. Configure three Application Load Balancers (ALBs) in the three AWS Regions to address the on-premises endpoints In Route 53 create a latency-based record that points to the three ALBs and use it as an origin for an Amazon CloudFront distribution- Provide access to the application by using a CNAME that points to the CloudFront DNS

Answer: A

NEW QUESTION 245

- (Exam Topic 3)

A hospital is designing a new application that gathers symptoms from patients. The hospital has decided to use Amazon Simple Queue Service (Amazon SQS) and Amazon Simple Notification Service (Amazon SNS) in the architecture.

A solutions architect is reviewing the infrastructure design Data must be encrypted at rest and in transit. Only authorized personnel of the hospital should be able to access the data.

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

- A. Turn on server-side encryption on the SQS components Update the default key policy to restrict key usage to a set of authorized principals.
- B. Turn on server-side encryption on the SNS components by using an AWS Key Management Service (AWS KMS) customer managed key Apply a key policy to restrict key usage to a set of authorized principals.
- C. Turn on encryption on the SNS components Update the default key policy to restrict key usage to a set of authorized principal
- D. Set a condition in the topic policy to allow only encrypted connections over TLS.
- E. Turn on server-side encryption on the SQS components by using an AWS Key Management Service (AWS KMS) customer managed key Apply a key policy to restrict key usage to a set of authorized principal
- F. Set a condition in the queue policy to allow only encrypted connections over TLS.
- G. Turn on server-side encryption on the SNS components by using an AWS Key Management Service (AWS KMS) customer managed key
- H. Apply an IAM policy to restrict key usage to a set of authorized principal
- I. Set a condition in the queue policy to allow only encrypted connections over TLS

Answer: BD

NEW QUESTION 247

- (Exam Topic 3)

A company has migrated an application to Amazon EC2 Linux instances. One of these EC2 instances runs several 1-hour tasks on a schedule. These tasks were written by different teams and have no common programming language. The company is concerned about performance and scalability while these tasks run on a single instance. A solutions architect needs to implement a solution to resolve these concerns.

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

- A. Use AWS Batch to run the tasks as job
- B. Schedule the jobs by using Amazon EventBridge (Amazon CloudWatch Events).
- C. Convert the EC2 instance to a container
- D. Use AWS App Runner to create the container on demand to run the tasks as jobs.
- E. Copy the tasks into AWS Lambda function
- F. Schedule the Lambda functions by using Amazon EventBridge (Amazon CloudWatch Events).
- G. Create an Amazon Machine Image (AMI) of the EC2 instance that runs the task
- H. Create an Auto Scaling group with the AMI to run multiple copies of the instance.

Answer: C

NEW QUESTION 251

- (Exam Topic 3)

A solutions architect is creating a new VPC design There are two public subnets for the load balancer, two private subnets for web servers and two private subnets for MySQL The web servers use only HTTPS The solutions architect has already created a security group for the load balancer allowing port 443 from 0.0.0.0/0 Company policy requires that each resource has the least access required to still be able to perform its tasks

Which additional configuration strategy should the solutions architect use to meet these requirements?

- A. Create a security group for the web servers and allow port 443 from 0.0.0.0/0 Create a security group for the MySQL servers and allow port 3306 from the web servers security group
- B. Create a network ACL for the web servers and allow port 443 from 0.0.0.0/0 Create a network ACL for the MySQL servers and allow port 3306 from the web servers security group
- C. Create a security group for the web servers and allow port 443 from the load balancer security group Create a security group for the MySQL servers and allow port 3306 from the web servers security group
- D. Create a network ACL for the web servers and allow port 443 from the load balancer security group Create a network ACL for the MySQL servers and allow port 3306 from the web servers security group

Answer: C

NEW QUESTION 252

- (Exam Topic 3)

A company has a web application hosted over 10 Amazon EC2 instances with traffic directed by Amazon Route 53. The company occasionally experiences a timeout error when attempting to browse the application. The networking team finds that some DNS queries return IP addresses of unhealthy instances, resulting in the timeout error.

What should a solutions architect implement to overcome these timeout errors?

- A. Create a Route 53 simple routing policy record for each EC2 instance
- B. Associate a health check with each record.

- C. Create a Route 53 failover routing policy record for each EC2 instance
- D. Associate a health check with each record.
- E. Create an Amazon CloudFront distribution with EC2 instances as its origin
- F. Associate a health check with the EC2 instances.
- G. Create an Application Load Balancer (ALB) with a health check in front of the EC2 instance
- H. Route to the ALB from Route 53.

Answer: D

Explanation:

An Application Load Balancer (ALB) allows you to distribute incoming traffic across multiple backend instances, and can automatically route traffic to healthy instances while removing traffic from unhealthy instances. By using an ALB in front of the EC2 instances and routing traffic to it from Route 53, the load balancer can perform health checks on the instances and only route traffic to healthy instances, which should help to reduce or eliminate timeout errors caused by unhealthy instances.

NEW QUESTION 257

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