

Q308. A company operates an ecommerce website on Amazon EC2 instances behind an Application Load Balancer (ALB) in an Auto Scaling group. The site is experiencing performance issues related to a high request rate from illegitimate external systems with changing IP addresses. The security team is worried about potential DDoS attacks against the website. The company must block the illegitimate incoming requests in a way that has a minimal impact on legitimate users. What should a solutions architect recommend?

- A. Deploy Amazon Inspector and associate it with the ALB.
- B. Deploy AWS WAF, associate it with the ALB, and configure a rate-limiting rule.
- C. Deploy rules to the network ACLs associated with the ALB to block the incoming traffic.
- D. Deploy Amazon GuardDuty and enable rate-limiting protection when configuring GuardDuty.

正确答案 B

**解析：**

Rate limitFor a rate-based rule, enter the maximum number of requests to allow in any five-minute period from an IP address that matches the rule's conditions. The rate limit must be at least 100. You can specify a rate limit alone, or a rate limit and conditions. If you specify only a rate limit, AWS WAF places the limit on all IP addresses. If you specify a rate limit and conditions, AWS WAF places the limit on IP addresses that match the conditions. When an IP address reaches the rate limit threshold, AWS WAF applies the assigned action (block or count) as quickly as possible, usually within 30 seconds. Once the action is in place, if five minutes pass with no requests from the IP address, AWS WAF resets the counter to zero.

Q309. A company is creating an architecture for a mobile app that requires minimal latency for its users. The company's architecture consists of Amazon EC2 instances behind an Application Load Balancer running in an Auto Scaling group. The EC2 instances connect to Amazon RDS. Application beta testing showed there was a slowdown when reading the data. However, the metrics indicate that the EC2 instances do not cross any CPU utilization thresholds. How can this issue be addressed?

- A. Reduce the threshold for CPU utilization in the Auto Scaling Group
- B. Replace the Application Load Balancer with a Network Load Balancer
- C. Add read replica for the RDS instances and direct read traffic to the replica
- D. Add Multi-AZ support to the RDS instances and direct read traffic to the new EC2 instance

正确答案 C

Q310. A company is hosting its static website in an Amazon S3 bucket, which is the origin for Amazon CloudFront. The company has users in the United States, Canada, and Europe and wants to reduce. What should a solutions architect recommend?

- A. Adjust the CloudFront caching time to live (TTL) from the default to a longer timeframe
- B. Implement CloudFront events with Lambda@edge to run the website's data processing
- C. Modify the CloudFront price class to include only the locations of the countries that are served
- D. Implement a CloudFront Secure Socket Layer (SSL) certificate to push security closer to the locations of the countries that are served

正确答案 C

Q311. A media company stores video content in an Amazon Elastic Block Store (Amazon EBS) volume. A certain video files has become popular and a large number of user across the world are accessing this content. This has resulted in a cost increase. Which action will DECREASE cost without compromising user accessibility?

- A. Change the EBS volume to provisioned IOPS (PIOPS)
- B. Store the video in an Amazon S3 bucket and create an Amazon CloudFront distribution
- C. Split the video into multiple, smaller segments so users are routed to the requested video segments only
- D. Create an Amazon S3 bucket in each Region and upload the videos so users are routed to the nearest S3 bucket

正确答案 B

Q312. A company built a new VPC with the intention of hosting Amazon EC2 based workloads on AWS. A solutions architect specified that an Amazon S3 gateway endpoint be created and attached to this new VPC. Once the first Application server is built, developers report that server times out when accessing data stored in the S3 bucket. Which scenario could be causing this issue? (Select TWO)

- A. The S3 bucket is in a region other than the VPC
- B. The endpoint has a policy that blocks the CIDR of the VPC
- C. The route to the S3 endpoint is not configured in the route table
- D. The access is routed through an internet gateway rather than the endpoint

E. The S3 bucket has a bucket policy that does not allow access to the CIDR of the VPC

正确答案 C, E

Q313. A solution architect is designing a shared storage solution for an Auto Scaling web application. The company anticipates making frequent changes to the content, so the solution must have strong consistency. Which solution requires the LEAST amount of effort?

- A. Create an Amazon S3 bucket to store the web content and use Amazon Cloudfront to deliver the content
- B. Create an Amazon Elastic File system (Amazon EFS) file system and mount it on the individual Amazon EC2 instance
- C. Create a shared Amazon Elastic Block store (Amazon EBS) volume and mount it on the individual Amazon EC2 instance
- D. Use AWS DataSync to perform continuous synchronization of data between Amazon EC2 hosts in the Auto scaling group.

正确答案 B

Q314. A solution architect creating an application that will handle batch processing of large amount of data. The input data will be held in Amazon S3 and the output data will be stored in a different S3 bucket. For processing the application will transfer the data over the network between multiple Amazon EC2 instances. What should the solution architect do to reduce the overall data transfer costs ?

- A. Place all the EC2 instances in an Auto scaling group.
- B. Place all the EC2 instance in the same AWS Region
- C. Place all the EC2 instance in the same Availability Zone

- D. Place all the EC2 instances in private subnets in multiple Availability zones

正确答案 C

**解析：**

私有子网的流量进 database ，但可用区部署，流量不产生费用，单可用区

Q315. A company previously migrated its data warehouse solution to AWS. The company also has an AWS Direct Connect connection Corporate office user query the data warehouse using a visualization tool. Th average size of a query returned by th 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. Access it over the internet.
- C. 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.
- D. 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 AWS Region.

正确答案 D

Q316. A company provides an API to its users that automates inquiries for tax computations based on item prices. The company experiences a larger number of inquiries during the holiday season only that cause

slower response times. A solution architect needs to design a solution that is scalable and elastic. What should the solutions architect do to accomplish this?

- A. Provide an API hosted on an Amazon EC2 instance. The EC2 instance performs the required computations when the API request is made.
- B. Design a REST API using Amazon API Gateway that accepts the item names, API Gateway passes item names to AWS Lambda for tax computations.
- C. Create an Application Load Balancer that has two Amazon EC2 instances behind it. The EC2 instances will compute the tax on the received item names.
- D. Design a REST API using Amazon API Gateway that connects with an API hosted on an Amazon EC2 instance, API Gateway accepts and passes the item names to the EC2 instance for tax computations.

正确答案 B

Q317. A company uses a legacy on-premises analytics application that operates on gigabytes of .csv and represents months of data. The legacy application cannot handle the growing size of .csv files. New CSV files are added daily from various data sources to a central on-premises storage location. The company wants to continue to support the legacy application while users learn AWS analytics services. To achieve this, a solution architect wants to maintain two synchronized copies of all the .csv files on-premises and in Amazon S3. Which solution should the solution architect recommend?

- A. Deploy AWS DataSync on-premises. Configure DataSync to continuously replicate the .csv files between the company's S3 bucket.
- B. Deploy an on-premises file gateway. Configure data source to write the .csv files to the file gateway, point the legacy analytics application

to the file gateway. The file gateway should replicate the .csv file to Amazon S3.

C. Deploy an on-premises volume gateway. configure data source to write the .csv files to the volume gateway. Point the legacy analytics application to the volume gateway. The volume gateway should replicate data to Amazon S3.

D. Deploy AWS datasync on-premises. Configure datasync to continuously replicate the .csv files between on-premises and Amazon Elastic file system (Amazon EFS) enable replication from Amazon EFS to the company's S3 Bucket.

正确答案 A

Q318. Management has decided to deploy all AWS VPCs with IPv6 enabled. After sometime, a solutions architect tries to launch a new instance and receives an error stating that there is no enough IP address space available in the subnet. What should the solutions architect do to fix this?

- A. Check to make sure that only IPv6 was used during the VPC creation
- B. Create a new IPv4 subnet with a larger range, and then launch the instance
- C. Create a new IPv6-only subnet with a larger range, and then launch the instance
- D. Disable the IPv4 subnet and migrate all instances to IPv6 only. Once that is complete, launch the instance.

正确答案 B

解析：

争议题，B 或者 C

- A. How can this fix the issue?

- B. This could work.
- C. This won't work since it's saying, only subnet with IPv6 since you can't disable IPv4.
- D. You can't disable IPv4 cidr.

cannot be A, C & D as "You cannot disable IPv4 support for your VPC and subnets; this is the default IP addressing system for Amazon VPC and Amazon EC2." in no way can you just use IPv6.

Q319. A company is developing a new machine learning model solution in AWS. The models are developed as independent microservices that fetch about 1 GB of model data from Amazon S3 at startup and load the data into memory. users access the models through an asynchronous API. Users can send a request or a batch of requests and specify where the result should be sent. The company provides models to hundreds of users. The usage patterns for the models are irregular. Some models could be unused for days or weeks. other models could receive batches of thousands of requests at a time. Which solution meets these requirements?

- A. The requests from the API are sent to an Application Load Balancer (ALB). Models are deployed as AWS Lambda functions invoked by the ALB
- B. The requests from the API are sent to the model's Amazon Simple Queue service (Amazon SQS) queue. Models are deployed as AWS Lambda functions triggered by SQS events. AWS Auto Scaling is enabled on Lambda to increase the number of vCPUs based on the SQS queue size.
- C. The requests from the API are sent to the model's Amazon Simple Queue service (Amazon SQS) queue. Models are deployed as Amazon Elastic Container Service (Amazon ECS) service reading from the queue. AWS App Mesh scales the instances of the ECS cluster based on the SQS queue size.
- D. The requests from the API are sent to the model's Amazon Simple Queue service (Amazon SQS) queue. Models are deployed as Amazon Elastic Container Service (Amazon ECS) services reading from the queue. AWS Auto

Scaling is enabled ECS for both the cluster and copies the service based on the queue size.

正确答案 D

Q320. A company has a mobile game that reads most of its metadata from an Amazon RDS DB instances. As the game increased in popularity, developer noticed slowdowns related to the game's metadata load times. Performance metrics Indicate that simply scaling the database will not help. A solutions architect must explore all options that include capabilities for snapshots, replication, and sub-millisecond response times. What should the solutions architect recommend to solve the issues?

- A. Migrate the database to Amazon Aurora with Aurora Replicas.
- B. Migrate the database to Amazon DynamoDB with global tables.
- C. Add an Amazon ElastiCache for Redis layer in front of the database.
- D. Add an Amazon ElastiCache for Memcached layer in front of the database.

正确答案 C

Q321. A company runs an application that uses multiple Amazon EC2 instances to gather data from its users. The data is then processed and transferred to Amazon S3 for long-term storage. A review of the application shows that there were long periods of time when the EC2 instances were not being used. A solution architect needs to design a solution that optimizes utilization and reduces costs. Which solution meets these requirements?

- A. Use Amazon EC2 in an Auto Scaling group with On-Demand instances.
- B. Build the application to use Amazon Lightsail with On-Demand instances.

C. Create an Amazon CloudWatch cron job to automatically stop the EC2 instance when there is no activity.

D. Redesign the application to use an event-driven design with Amazon Simple Queue Service (Amazon SQS) and AWS Lambda.

正确答案 D

Q322. A solutions architect is designing a VPC with public and private subnets. The VPC and subnets use IP 4 CIDR blocks. There is one public subnet and one private subnet in each of three Availability Zone (AZs) for high availability. An internet gateway is used to provide internet access for the public subnets. The private subnets require access to the internet to allow Amazon EC2 instances to download software updates. What should the solutions architect do to enable Internet access for the private subnets?

A. Create three NAT gateways, one for each public subnet in each AZ. Create a private route table for each AZ that forwards non-VPC traffic to the NAT gateway in its AZ.

B. Create three NAT gateways, one for each private subnet in each AZ. Create a private route table for each AZ that forwards non-VPC traffic to the NAT gateway in its AZ.

C. Create second internet gateway on one of the private subnets. Update the route table for the private subnets that forward non-VPC traffic to the private internet gateway.

D. Create an egress-only internet gateway on one of the public subnets. Update the route table for the private subnets that forward non-VPC traffic to the egress-only internet gateway.

正确答案 A

Q323. A solutions architect needs to design a network that will allow multiple Amazon EC2 instances to access a common data source used for mission-critical data that can be accessed by all the EC2 instances simultaneously. The solution must be highly scalable, easy to implement, and support the NFS protocol. Which solution meets these requirements?

- A. Create an Amazon EFS file system. Configure a mount target in each Availability Zone. Attach each instance to the appropriate mount target.
- B. Create an additional EC2 instance and configure it as a file server. Create security group that allows communication between the instances and apply that to the additional instance.
- C. Create an Amazon S3 bucket with the appropriate permissions. Create a role in AWS IAM that grants the correct permissions to the S3 bucket. Attach the role to the EC2 instances that need access to the data.
- D. Create an Amazon EBS volume with the appropriate permissions. Create a role in AWS IAM that grants the correct permissions to the EBS volume. Attach the role to the EC2 instances that need access to the data.

正确答案 A

Q324. A company has a multi-tier application deployed on several Amazon EC2 instances in an Auto Scaling group. An Amazon RDS for Oracle instance is the application's data layer that uses Oracle-specific PL/SQL functions. Traffic to the application has been steadily increasing. This is causing the EC2 instances to become overloaded and the RDS instance to run out of storage. The Auto Scaling group does not have any scaling metrics and defines the minimum healthy instance count only. The company predicts that traffic will continue to increase at a steady but unpredictable rate before leveling off. What should a solution architect do to ensure the system can automatically scale for the increased traffic? (Select TWO.)

- A. Configure storage auto scaling on the RDS for Oracle instance.
- B. Migrate the database to Amazon Aurora to use Auto Scaling storage.
- C. Configure an alarm on the RDS for Oracle instance for low free storage space.
- D. Configure the Auto Scaling group to use the average CPU as the scaling metric.
- E. Configure the Auto Scaling group to use the average free memory as the scaling metric.

正确答案 A, D

Q325. A company is preparing to launch a public-facing web application in the AWS Cloud. The architecture consists of Amazon EC2 instances within a VPC behind an Elastic Load Balancer (ELB). A third-party service is used for the DNS. The company's solutions architect must recommend a solution to detect and protect against large-scale DDoS attacks. Which solution meets these requirements?

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

正确答案 D

Q326. A company has a 10 Gbps AWS Direct Connect connection from its on-premises servers to AWS. The workloads using the connection are critical. The company requires a disaster recovery strategy with maximum resiliency that maintains the current connection bandwidth at a minimum. What should a solutions architect recommend?

- A. Set up a new Direct Connect connection in another AWS Region.
- B. Set up a new AWS managed VPN connection in another AWS Region.
- C. Set up two new Direct Connect connections one in the current AWS Region and one in another Region.
- D. Set up two new AWS managed VPN connections one in the current AWS Region and one in another Region.

正确答案 A

Q327. A company stores user data in AWS. The data is used continuously with peak usage during business hours. Access patterns vary, with some data not being used for months at a time. A solutions architect must choose a cost-effective solution that maintains the highest level of durability while maintaining high availability. Which storage solution meets these requirements?

- A. Amazon S3
- B. Amazon S3 Intelligent-Tiering
- C. Amazon S3 Glacier Deep Archive
- D. Amazon S3 One Zone-Infrequent Access (S3 One Zone-IA)

正确答案 B

Q328. A company has no existing file share services. A new project requires access to file storage that is mountable as a drive for on-premises desktops. The file server must authenticate users to an Active Directory domain before they are able to access the storage. Which service will allow Active Directory users to mount storage as a drive on their desktops?

- A. AWS S3 Glacier

- B. AWS DataSync
- C. AWS Snowball Edge
- D. AWS Storage Gateway

正确答案 B

Q329. A company is planning to migrate a legacy application to AWS. The application currently uses NFS to communicate to an on-premises storage solution to store application data. The application cannot be modified to use any other communication protocols other than NFS for this purpose. Which storage solution should a solutions architect recommend for use after the migrations?

- A. AWS DataSync
- B. Amazon Elastic Block Store (Amazon EBS)
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon EMR File System (Amazon EMRFS)

正确答案 C

Q330. 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.

正确答案 D

Q331. A solutions architect is designing a security solution for a company that wants to provide developers with individual AWS accounts through AWS Organizations, while also maintaining standard security controls. Because the individual developers will have AWS account root user-level access to their own account, the solutions architect wants to ensure that the mandatory AWS CloudTrail configuration that is applied to new developer accounts is not modified. Which action meets these requirements?

- A. Create an IAM policy that prohibits changes to CloudTrail, and attach it to the root user.
- B. Create a new trail in CloudTrail from within the developer accounts with the organization trails options enabled.
- C. Create a service control policy (SCP) that prohibits changes to CloudTrail, and attach it to the developer accounts.
- D. Create a service-linked role for CloudTrail with a policy condition that allows changes only from an Amazon Resource Name (ARN) in the master account.

正确答案 C

Q332. A company is building a media sharing application and decides to use Amazon S3 for storage. When a media file uploaded, the company starts a multi-step to create thumbnails, identify objects in the image, transcode videos into standard formats and resolutions, and extract and store the metadata to an Amazon DynamoDB table. The metadata is used for searching and navigation. The amount of traffic is variable. the solution must be able to scale handle spikes in load without unnecessary expenses. What should a solution architect recommend to support this workload?

- A. Build the processing into the website or mobile app used to upload the content to Amazon S3 save the required data to the DynamoDB table when the objects are uploaded
- B. Trigger an AWS Lambda function when an object is stored in the S3 bucket. Have the step functions perform the steps needed to process the object and then write the metadata to the DynamoDB table.
- C. Trigger an AWS Lambda function when an object is stored in the S3 bucket. Have the Lambda function start AWS batch to perform the steps to process the object. Place the object data in the DynamoDB table when complete.
- D. Trigger an AWS Lambda function to store an initial entry in the DynamoDB table when an object is uploaded to Amzon S3 use a program running on an Amazon EC2 instance in an Auto Scaling group to poll the Index for unprocessed items, and use the program to perform the processing.

正确答案 B

Q333. A company is preparing to migrate its on-premiss application to AWS. The application consists of application servers and a Microsoft SQL

Server database. The database cannot be migrated to a different engine because SQL Server features are used in the application's NET code. The company wants to attain the greatest availability possible while minimizing operational and management overhead. What should a solutions architect do to accomplish this?

- A. Install SQL Server on Amazon C2 in a Multi-AZ deployment.
- B. Migrate the data to Amazon RDS for SQL Server in a Multi-AZ deployment.
- C. Deploy the database on Amazon RDS for SQL Server with Multi-AZ Replicas.
- D. Migrate the data to Amazon RDS for SQL Server in a cross-Region Multi-AZ deployment

正确答案 B

Q334. A company is using Site-Site VPN connection for secure connectivity to its AWS cloud resource from on premises. Due to an increase in traffic across the VPN connections to the Amazon EC2 instances, users are experiencing slower VPN connectivity. Which solution will improve the VPN throughput?

- A. Implement multiple customer gateways for the same network to scale the throughput
- B. Use a Transit Gateway with equal cost multipath routing and add additional VPN tunnels.
- C. Configure a virtual gateway with equal cost multipath routing and multiple channels.
- D. Increase the number of tunnels in the VPN configuration to scale the throughput beyond the default limit.

正确答案 B

Q335. A mobile gaming company runs application servers on Amazon EC2 instances. The servers receive updates from players every 15 minutes. The mobile game creates a JSON object of the progress made in the game since the last update, and sends the JSON object an Application Load Balancer. As the mobile game is played, game updates are being lost. The company wants to create a durable way to get the updates in order. What should a solution architect recommend to decouple the system?

- A. Use Amazon Kinesis Data streams to capture the data and store the JSON object in Amazon S3.
- B. Use Amazon Kinesis Data Firehouse to capture the data and store the JSON object in Amazon S3
- C. Use Amazon simple Queue service (Amazon SQS) FIFO queue to capture the data and EC2 instances to process the messages in the queue.
- D. Use Amazon simple Notification Service (Amazon SNS) to capture the data and EC2 instances to process the messages sent to Application Load balancer.

正确答案 C

Q336. A recently created startup built a three-tier web application. The front end has static content. The application layer is based on microservices. User data is stored as JSON documents that needs to be accessed with low latency. The company expects regular traffic to be low during the first year, with peaks in traffic when it publicizes new features every month. The startup team needs to minimize operational overhead costs. What should a solutions architect recommend to accomplish this?

- A. Use Amazon S3 static website hosting to store and serve the front end. Use AWS Elastic Beanstalk for the applications layer. Use Amazon DynamoDB to store user data.
- B. Use Amazon S3 static website hosting to store and serve the front end. Use Amazon Elastic Kubernetes Service (Amazon EKS) for application layer. Use Amazon DynamoDB to store user data.
- C. Use Amazon S3 static website hosting to store and serve the front end. Use Amazon API Gateway and Lambda functions for application layer. Use Amazon DynamoDB to store user data.
- D. Use Amazon S3 static website hosting to store and serve the front end. Use Amazon API Gateway and Lambda functions for application layer. Use Amazon RDS with read replica to store user data.

正确答案 C

### 解析：

答案是 C，因为 B 里的 EKS 不是 fully managed services，需要人工维护，不能减少题目要求的：minimize operational overhead，C 是全托管，减少人工维护，符合题目要求，Key words: JSON document, low latency, minimize operational overhead（减少人工操作），API Gateway + Lambda 满足：JSON, low latency, minimal operational costs，这里有对比 container（B）和 serverless（C），说 container 还是需要挺多人工操作，serverless 就不要管。

Q337. A company needs comply with a regulatory requirement that states all emails must be stored and archived externally for 7 years. An administrator has created compressed email files on-premises and wants a managed service to transfer the files to AWS storage. Which managed service should a solution architect recommend?

- A. Amazon Elastic File System (Amazon EFS).
- B. Amazon S3 Glacier.
- C. AWS Backup.

D. AWS Storage Gateway.

正确答案 D

解析：

managed service to transfer, not to store

Q338. A company's near-real-time streaming application is running on AWS. As the data is ingested, a job runs on the data and takes 30 minutes to complete. The workload frequently experiences high latency due to large amount of incoming data. A solutions architect needs to design a scalable and serverless solution to enhance performance. Which combination of steps should the solutions architect take? (Select TWO)

- A. Use Amazon Kinesis Data Firehose to ingest the data.
- B. Use AWS Lambda with AWS Step Functions to process the data.
- C. Use AWS Database Migration Service (AWS DMS) to ingest the data.
- D. Use Amazon EC2 instances in an Auto Scaling group to process the data.
- E. Use AWS Fargate with Amazon Elastic Container Service (Amazon ECS) to process the data.

正确答案 A, E

Q339. A company is planning to transfer multiple terabytes of data to AWS. The data is collected offline from ships. The company wants to run complex transformations before transferring the data. Which AWS service should a solutions architect recommend for this migrations?

- A. AWS Snowball.
- B. AWS Snowmobile.
- C. AWS Snowball Edge Storage Optimized.

D. AWS Snowball Edge Compute Optimized.

正确答案 D

Q340. 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 over 10 million rows. The database has 2 TB of General Purpose SSD (gp2) storage. There are millions of updates against this data every day through the company's website. The company has noticed some operations are taking 10 seconds or longer, and has determined that the database storage performance is bottleneck. Which solution addresses the performance issues?

- A. Change the storage type to Provisioned IOPS SSD (io1).
- B. Change the instance to a memory-optimized instance class.
- C. Change the instance to a burstable performance DB instance class.
- D. Enable Multi-AZ RDS read replicas with MySQL native asynchronous replication.

正确答案 A

Q341. A company has a hybrid application hosted on multiple on-premises servers with static IP addresses. There is already a VPN that provides connectivity between the VPC and the on-premises network. The company wants to distribute TCP traffic across the on-premises servers for internet users. What should a solution architect recommend to provide a highly available and scalable solution?

- A. Launch an internet-facing Network Load Balancer (NLB) and register on-premises IP addresses with the NLB.
- B. Launch an internet-facing Application Load Balancer (ALB) and register on-premises IP addresses with the ALB.

C. Launch an Amazon EC2 instance, attach an Elastic IP address, and distribute traffic to the on-premises servers.

D. Launch an Amazon EC2 instance with public IP addresses in an Auto Scaling group and distribute traffic to the on-premises servers.

正确答案 A

Q342. A company has an application that generates a large number of files, each approximately 5 MB in size. The files are stored in Amazon S3. Company policy requires these files to be stored for 4 years before they can be deleted. Immediate accessibility is always required as these files contain critical business data that is not easy to reproduce. The files are frequently accessed in the first 30 days of the object creation but are rarely accessed after the first 30 days. Which storage solution is MOST cost effective?

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

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

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

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

正确答案 C

Q343. An online shopping application accesses an Amazon RDS Multi-AZ DB instance. Database performance is slowing down the application. After upgrading to the next generation instance type, there was no significant performance improvement. Analysis shows approximately 700 IOPS are sustained, common queries run for long durations, and memory utilization is high. Which application change should a solution architect recommend to resolve these issue?

- A. Migrate the RDS instance to an Amazon Redshift cluster and enable weekly garbage collection.
- B. Separate the long-running queries into a new Multi-AZ RDS database and modify the application to query whichever database only if needed.
- C. Deploy a two-node Amazon ElastiCache cluster and modify the application to query whichever database only if needed.
- D. Create an Amazon Simple Queue Service (Amazon SQS) FIFO queue for common queries and query it first and query the database only if needed

正确答案 C

Q344. A company hosts its web application on AWS using server Amazon EC2 instances. The company requires that the IP addresses of all healthy EC2 instances be returned in response to DNS queries.

Which policy should be used to meet this requirement?

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

正确答案 C

Q345. As part of budget planning, management wants a report of AWS billed items listed by user. The data will be used to create department budgets. A solutions architect needs to determine the most effective way to obtain this report information. Which solution meets these requirements?

- A. Run a query with Amazon Athena to generate the report.
- B. Create a report in Cost Explorer and download the report.
- C. Access the bill details from the billing dashboard and download the bill.
- D. Modify a cost budget in AWS Budgets to alert with Amazon Simple Email Service (Amazon SES).

正确答案 B

Q346. A company is preparing to store confidential data in Amazon S3. For compliance reasons, the data must be encrypted at rest. Encryption key usage must be logged for auditing purposes. Key must be rotated every year. Which solution meets these requirements and is the MOST operationally efficient?

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

正确答案 D

Q347. A company has 700 TB of backup data stored in network attached storage (NAS) in its data center. This backup data need to be accessible for infrequent regulatory requests and must be retained 7 years. The company has decided to migrate this backup data from its data center to AWS. The migrations must be complete within 1 month. The company has 500 Mbps of dedicated bandwidth on its public internet connection available for data transfer. What should a solutions architect do to migrate and store the data at the LOWEST cost?

- A. Order AWS Snowball devices to transfer the data. Use a lifecycle policy to transition the files to Amazon S3 Glacier Deep Archive.
- B. Deploy a VPN connection between the data center and Amazon VPC. Use the AWS CLI to copy the data from on-premises to Amazon S3 Glacier.
- C. Provision a 500 Mbps AWS Direct Connect connection and transfer the data to Amazon S3. Use a lifecycle policy to transition the files to Amazon S3 Glacier Deep Archive.
- D. Use AWS DataSync to transfer the data and deploy a DataSync agent on-premises. Use the DataSync task to copy files from the on-premises NAS Storage to Amazon S3 Glacier.

正确答案 A

Q348. A company wants to migrate its MySQL database from on-premises to AWS. The company recently experienced a database outage that significantly impacted the business. To ensure this does not happen again, the company wants a reliable database solution on AWS that minimizes data loss and stores every transaction on at least two nodes. Which solution meets these requirements?

- A. Create an Amazon RDS DB instance with synchronous replication to three nodes in three Availability Zones.
- B. Create an Amazon RDS MySQL DB instance with Multi-AZ functionality enabled to synchronously replicate the data.

C. Create an Amazon RDS MySQL DB instance with Multi-AZ and the create a read replica in a separate AWS Region that synchronously replicates the data.

D. Create an Amazon EC2 instance with a MySQL engine installed that triggers an AWS Lambda function to synchronously replicate the data to an Amazon RDS MySQL DB instance.

正确答案 B

Q349. A application running on an Amazon EC2 instance needs to securely access files on an Amazon Elastic File System (Amazon EFS) file system. The EFS files are stored using encryption at rest. Which solution for accessing the files is MOST secure?

- A. Enable TLS when mounting Amazon EFS.
- B. Store the encryption key in the code of the application.
- C. Enable AWS Key Management Service (AWS KMS) when mounting Amazon EFS.
- D. Store the encryption key in an Amazon S3 bucket and use IAM roles to grant the EC2 instance access permission.

正确答案 A

Q350. An ecommerce website is deploying its web application as Amazon Elastic Container Service (Amazon ECS) container instance behind an Application Load Balancer (ALB). During periods of high activity, the website slows down and availability is reduced. A solutions architect uses Amazon CloudWatch alarms to receive notifications whenever there is an availability issue so they can scale out resources. Company management wants a solution that automatically responds to such events. Which solution meets these requirements?

- A. Set up AWS Auto Scaling to scale out the ECS service when there are timeouts on the ALB. Set up AWS Auto Scaling to scale out the ECS cluster when the CPU or memory reservation is too high.
- B. Set up AWS Auto Scaling to scale out the ECS service when the ALB CPU utilization is too high. Set up AWS Auto Scaling to scale out the ECS cluster when the CPU or memory reservation is too high.
- C. Set up AWS Auto Scaling to scale out the ECS service when the service's CPU utilization is too high. Set up AWS Auto Scaling to scale out the ECS cluster when the CPU or memory reservation is too high.
- D. Set up AWS Auto Scaling to scale out the ECS service when the ALB target group CPU utilization is too high. Set up AWS Auto Scaling to scale out the ECS cluster when the CPU or memory reservation is too high.

正确答案 C

Q351. A company is reviewing a recent migration of a three-tier application to a VPC. The security team discovers that the principle of least privilege is not being applied to Amazon EC2 security group ingress and egress rules between the application tiers. What should a solutions architect do to correct this issue?

- A. Create security group rules using the instance ID as the source or destination.
- B. Create security group rules using the security group ID as the source or destination.
- C. Create security group rules using the VPC CIDR block as the source or destination.
- D. Create security group rules using the subnet CIDR block as the source or destination.

正确答案 B

Q352. A company is developing a video conversion application hosted on AWS. The application will be available in two tiers: a free tier and paid tier. User in the paid tier will have their videos converted first, and then the free tier users will have their videos converted. Which solution meets these requirements and is MOST cost-effective?

- A. One FIFO queue for the paid tier and one standard queue for the free tier
- B. A single FIFO Amazon Simple Queue Service (Amazon SQS) queue for all file types.
- C. A single standard Amazon Simple Queue Service (Amazon SQS) queue for all file types.
- D. Two standard Amazon Simple Queue Service (Amazon SQS) queues with one for the paid tier and one for the free tier.

正确答案 D

Q353. A company is building a website that relies on reading and writing to an Amazon DynamoDB database. The traffic associated with the website predictably peaks during business hours on weekdays and declines overnight and during weekends. A solutions architect needs to design a cost-effective solution that can handle the load. What should the solutions architect do to meet these requirements?

- A. Enable DynamoDB Accelerator (DAX) to cache the data.
- B. Enable Multi-AZ replication for the DynamoDB database.
- C. Enable DynamoDB auto scaling when creating the tables.
- D. Enable DynamoDB On-Demand capacity allocation when creating the tables.

正确答案 C

Q354. A company is preparing to deploy a data lake on AWS. A solutions architect must define the encryption strategy for data at rest in Amazon S3. The company's security policy states.  
– Keys must be rotated every 90 days.  
– Strict separation of duties between key users and key administrators must be implemented.  
– Auditing key usage must be possible.What should the solutions architect recommend?

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

正确答案 A

Q355. A company has an on-premises application that generates a large amount of time-sensitive data that is backed up to Amazon S3. The application has grown and there are user complaints about internet bandwidth limitations. A solutions architect needs to design a long-term solution that allows for both timely backups to Amazon S3 and with minimal impact on internet connectivity for internal users.Which solution meets these requirements?

- A. Establish AWS VPN connections and proxy all traffic through a VPC gateway endpoint
- B. Establish a new AWS Direct Connect connection and direct backup traffic through this new connection.

- C. Order daily AWS Snowball devices Load the data onto the Snowball devices and return the devices to AWS each day.
- D. Submit a support ticket through the AWS Management Console Request the removal of S3 service limits from the account.

正确答案 B

Q356. A company uses Amazon Redshift for its data warehouse. The company wants to ensure high durability for its data in case of any component failure. What should a solutions architect recommend?

- A. Enable concurrency scaling.
- B. Enable cross-Region snapshots.
- C. Increase the data retention period.
- D. Deploy Amazon Redshift in Multi-AZ.

正确答案 B

Q357. A company is migrating a Linux-based web server group to AWS. The web servers must access files in a shared file store for some content to meet the migration date, minimal changes can be made. What should a solutions architect do to meet these requirements?

- A. Create an Amazon S3 Standard bucket with access to the web server.
- B. Configure an Amazon CloudFront distribution with an Amazon S3 bucket as the origin.
- C. Create an Amazon Elastic File System (Amazon EFS) volume and mount it on all web servers.
- D. Configure Amazon Elastic Block Store (Amazon EBS) Provisioned IOPS SSD (io1) volumes and mount them on all web servers.

正确答案 C

Q358. A solutions architect is planning the deployment of a new static website. The solution must minimize costs and provide at least 99% availability. Which solution meets these requirements?

- A. Deploy the application to an Amazon S3 bucket in one AWS Region that has versioning disabled.
- B. Deploy the application to Amazon EC2 instances that run in two AWS Regions and two Availability Zones.
- C. Deploy the application to an Amazon S3 bucket that has versioning and cross-Region replication enabled.
- D. Deploy the application to an Amazon EC2 instance that runs in one AWS Region and one Availability Zone.

正确答案 A

Q359. A company hosts an online shopping application that stores all orders in an Amazon RDS for PostgreSQL Single-AZ DB instance. Management wants to eliminate single points of failure and has asked a solutions architect to recommend an approach to minimize database downtime without requiring any changes to the application code. Which solution meets these requirements?

- A. Convert the existing database instance to a Multi-AZ deployment by modifying the database instance and specifying the Multi-AZ option.
- B. Create a new RDS Multi-AZ deployment. Take a snapshot of the current RDS instance and restore the new Multi-AZ deployment with the snapshot.
- C. Create a read-only replica of the PostgreSQL database in another Availability Zone. Use Amazon Route 53 weighted record sets to distribute requests across the databases.

D. Place the RDS for PostgreSQL database in an Amazon EC2 Auto Scaling group with a minimum group size of two. Use Amazon Route 53 weighted record sets to distribute requests across instances.

正确答案 A

Q360. A company is deploying an application in three AWS Regions using an Application Load Balancer. Amazon Route 53 will be used to distribute traffic between these Regions. Which Route 53 configuration should a solutions architect use to provide the MOST high- performing experience?

- A. Create an A record with a latency policy.
- B. Create an A record with a geolocation policy
- C. Create a CNAME record with a failover policy.
- D. Create a CNAME record with a geoproximity policy.

正确答案 A

Q361. A company hosts an application used to upload files to an Amazon S3 bucket. Once uploaded, the files are processed to extract metadata, which takes less than 5 seconds. The volume and frequency of the uploads varies from a few files each hour to hundreds of concurrent uploads. The company has asked a solutions architect to design a cost-effective architecture that will meet these requirements. What should the solutions architect recommend?

- A. Configure AWS Cloud Trail trails to log S3 API calls. Use AWS AppSync to process the files.
- B. Configure an object-created event notification within the S3 bucket to invoke an AWS Lambda function to process the files.
- C. Configure Amazon Kinesis Data Streams to process and send data to Amazon S3. Invoke an AWS Lambda function to process the files.

D. Configure an Amazon Simple Notification Service (Amazon SNS) topic to process the files uploaded to Amazon S3. Invoke an AWS Lambda function to process the files.

正确答案 B

Q362. A company has data stored in an on-premises data center that is used by several on-premises applications. The company wants to maintain its existing application environment and be able to use AWS services for data analytics and future visualizations. Which storage service should a solutions architect recommend?

- A. Amazon Redshift.
- B. AWS Storage Gateway for files.
- C. Amazon Elastic Block Store (Amazon EBS).
- D. Amazon Elastic File System (Amazon EFS).

正确答案 B

解析：

use case for file gateway: "Hybrid cloud workflows using data generated by on-premises applications for processing by AWS services such as machine learning, big data analytics or serverless functions."

Q363. A company is developing a mobile game that streams score updates to a backend processor and then posts results on a leaderboard. A solutions architect needs to design a solution that can handle large traffic spikes, process the mobile game updates in order of receipt, and store the processed updates in a highly available database. The company also wants to minimize the management overhead required to maintain the solution. What should the solutions architect do to meet these requirements?

- A. Push score updates to Amazon Kinesis Data Streams. Process the updates in Kinesis Data Streams with AWS Lambda. Store the processed updates in Amazon DynamoDB.
- B. Push score updates to Amazon Kinesis Data Streams. Process the updates with a fleet of Amazon EC2 instances set up for Auto Scaling. Store the processed updates in Amazon Redshift.
- C. Push score updates to an Amazon Simple Notification Service (Amazon SNS) topic. Subscribe an AWS Lambda function to the SNS topic to process the updates. Store the processed updates in a SQL database running on Amazon EC2.
- D. Push score updates to an Amazon Simple Queue Service (Amazon SQS) queue. Use a fleet of Amazon EC2 instances with Auto Scaling to process the updates in the SOS queue. Store the processed updates in an Amazon RDS Multi-AZ DB instance.

正确答案 A

解析：

Keywords to focus on would be highly available database – DynamoDB would be a better choice for leaderboard.

Q364. A company has a three-tier environment on AWS that ingests sensor data from its users' devices. The traffic flows through a Network Load Balancer (NLB), then to Amazon EC2 instances for the web tier, and finally to EC2 instances for the application tier that makes database calls. What should a solutions architect do to improve the security of data in transit to the web tier?

- A. Configure a TLS listener and add the Server Certificate on the NLB.
- B. Configure AWS Shield Advanced and enable AWS WAF on the NLB.
- C. Change the Load Balancer to an Application Load Balancer and attach AWS WAF to it.

D. Encrypt the Amazon Elastic Block Store (Amazon EBS) volume on the EC2 instances using AWS Key Management Service (AWS KMS)

正确答案 A

**解析：**

User – NLB – EC2 (Web) + DB

Q365. A company uses Application Load Balancers (ALBs) in different AWS Regions. The ALBs receive inconsistent traffic that can spike and drop throughout the year. The company's networking team needs to allow the IP addresses of the ALBs in the on-premises firewall to enable connectivity. Which solution is the MOST scalable with minimal configuration changes?

A. Write an AWS Lambda script to get the IP addresses of the ALBs in different Regions. Update the on-premises firewalls rule to allow the IP addresses of the ALBs.

B. Migrate all ALBs in different Regions to the Network Load Balancers (NLBs). Update the on-premises firewall's rule to allow the Elastic IP addresses of all the NLBs.

C. Launch AWS Global Accelerator Register the ALBs in different Regions to the accelerator. Update the on-premises firewall's rule to allow static IP addresses associated with the accelerator.

D. Launch a Network Load Balancer (NLB) in one Region Register the private IP addresses of the ALBs in different Regions with the NLB. Update the on-premises firewall's rule to allow the Elastic IP address attached to the NLB.

正确答案 C

Q366. A company receives inconsistent service from its data center provider because the company is headquartered in an area affected by natural disasters. The company is not ready to fully migrate to the AWS Cloud, but it wants a failover environment on AWS in case the on-premises data center fails. The company runs web servers that connect to external vendors. The data available on AWS and on premises must be uniform. Which solution should a solutions architect recommend that has the LEAST amount of downtime?

- A. Configure an Amazon Route 53 failover record. Run application servers on Amazon EC2 instances behind an Application Load Balancer in an Auto Scaling group. Set up AWS Storage Gateway with stored volumes to back up data to Amazon S3.
- B. Configure an Amazon Route 53 failover record. Execute an AWS CloudFormation template from a script to create Amazon EC2 instances behind an Application Load Balancer. Set up AWS Storage Gateway with stored volumes to back up data to Amazon S3.
- C. Configure an Amazon Route 53 failover record. Set up an AWS Direct Connect connection between a VPC and the data center. Run application servers on Amazon EC2 in an Auto Scaling group. Run an AWS Lambda function to execute an AWS CloudFormation template to create an Application Load Balancer.
- D. Configure an Amazon Route 53 failover record. Run an AWS Lambda function to execute an AWS CloudFormation template to launch two Amazon EC2 instances. Set up AWS Storage Gateway with stored volumes to back up data to Amazon S3. Set up an AWS Direct Connect connection between a VPC and the data center.

正确答案 A

Q367. A company has two AWS accounts Production and Development. There are code changes ready in the Development account to push to the Production account. In the alpha phase, only two senior developers on

the development team need access to the Production account. In the beta phase, more developers might need access to perform testing as well. What should a solutions architect recommend?

- A. Create two policy documents using the AWS Management Console in each account. Assign the policy to developers who need access.
- B. Create an IAM role in the Development account. Give one IAM role access to the Production account. Allow developers to assume the role.
- C. Create an IAM role in the Production account with the trust policy that specifies the Development account. Allow developers to assume the role.
- D. Create an IAM group in the Production account and add it as a principal in the trust policy that specifies the Production account. Add developers to the group.

正确答案 C

Q368. A company has a custom application with embedded credentials that retrieves information from an Amazon RDS MySQL DB instance. Management says the application must be made more secure with the least amount of programming effort. What should a solutions architect do to meet these requirements?

- A. Use AWS Key Management Service (AWS KMS) customer master keys (CMKs) to create keys. Configure the application to load the database credentials from AWS KMS. Enable automatic key rotation.
- B. Create credentials on the RDS for MySQL database for the application user and store the credentials in AWS Secrets Manager. Configure the application to load the database credentials from Secrets Manager. Create an AWS Lambda function that rotates the credentials in Secret Manager.
- C. Create credentials on the RDS for MySQL database for the application user and store the credentials in AWS Secrets Manager. Configure the application to load the database credentials from Secrets Manager. Set up

a credentials rotation schedule for the application user in the RDS for MySQL database using Secrets Manager.

D. Create credentials on the RDS for MySQL database for the application user and store the credentials in AWS Systems Manager Parameter Store. Configure the application to load the database credentials from Parameter Store. Set up a credentials rotation schedule for the application user in the RDS for MySQL database using Parameter Store.

正确答案 C

Q369. A web application must persist order data to Amazon S3 to support near-real-time processing. A solutions architect needs to create an architecture that is both scalable and fault tolerant. Which solutions meet these requirements? (Select TWO.)

- A. Write the order event to an Amazon DynamoDB table. Use DynamoDB Streams to trigger an AWS Lambda function that parses the payload and writes the data to Amazon S3.
- B. Write the order event to an Amazon Simple Queue Service (Amazon SQS) queue. Use the queue to trigger an AWS Lambda function that parses the payload and writes the data to Amazon S3.
- C. Write the order event to an Amazon Simple Notification Service (Amazon SNS) topic. Use the SNS topic to trigger an AWS Lambda function that parses the payload and writes the data to Amazon S3.
- D. Write the order event to an Amazon Simple Queue Service (Amazon SQS) queue. Use an Amazon EventBridge (Amazon CloudWatch Events) rule to trigger an AWS Lambda function that parses the payload and writes the data to Amazon S3.
- E. Write the order event to an Amazon Simple Notification Service (Amazon SNS) topic. Use an Amazon EventBridge (Amazon CloudWatch Events) rule to trigger an AWS Lambda function that parses the payload and writes the data to Amazon S3.

正确答案 A, B

Q370. A company has an application workflow that uses an AWS Lambda function to download and decrypt files from Amazon S3. These files are encrypted using AWS Key Management Service Customer Master Keys (AWS KMS CMKs). A solutions architect needs to design a solution that will ensure the required permissions are set correctly. Which combination of actions accomplish this? (Select TWO.)

- A. Attach the kms.decrypt permission to the Lambda function's resource policy.
- B. Grant the decrypt permission for the Lambda IAM role in the KMS key's policy.
- C. Grant the decrypt permission for the Lambda resource policy in the KMS key's policy.
- D. Create a new IAM policy with the kms:decrypt permission and attach the policy to the Lambda function.
- E. Create a new IAM role with the kms decrypt permission and attach the execution role to the Lambda function.

正确答案 B, E

Q371. A company is building a document storage application on AWS. The application runs on Amazon EC2 instances in multiple Availability Zones. The company requires the document store to be highly available. The documents need to be returned immediately when requested. The lead engineer has configured the application to use Amazon Elastic Block Store (Amazon EBS) to store the documents, but is willing to consider other options to meet the availability requirement. What should a solutions architect recommend?

- A. Snapshot the EBS volumes regularly and build new volumes using those snapshots in additional Availability Zones.

B. Use Amazon EBS for the EC2 instance root volumes. Configure the application to build the document store on Amazon S3.

C. Use Amazon EBS for the EC2 instance root volumes. Configure the application to build the document store on Amazon S3 Glacier.

D. Use at least three Provisioned IOPS EBS volumes for EC2 instances. Mount the volumes to the EC2 instances in a RAID 5 configuration.

正确答案 B

Q372. A company is using a fleet of Amazon EC2 instances to ingest data from on-premises data sources. The data is in JSON format and ingestion rates can be as high as 1 MB/s. When an EC2 instance is rebooted, the data in-flight is lost. The company's data science team wants to query ingested data near-real time. Which solution provides near-real-time data querying that is scalable with minimal data loss?

A. Publish data to Amazon Kinesis Data Streams. Use Kinesis Data Analytics to query the data.

B. Publish data to Amazon Kinesis Data Firehose with Amazon Redshift as the destination. Use Amazon Redshift to query the data.

C. Store ingested data in an EC2 instance store. Publish data to Amazon Kinesis Data Firehose with Amazon S3 as the destination. Use Amazon Athena to query the data.

D. Store ingested data in an Amazon Elastic Block Store (Amazon EBS) volume. Publish data to Amazon ElastiCache for Redis. Subscribe to the Redis channel to query the data.

正确答案 C

Q373. A company has a website deployed on AWS. The database backend is hosted on Amazon RDS for MySQL with a primary instance and five read

replicas to support scaling needs. The read replicas should lag no more than 1 second behind the primary instance to support the user experience. As traffic on the website continues to increase, the replicas are falling further behind during periods of peak load, resulting in complaints from users when searches yield inconsistent results. A solutions architect needs to reduce the replication lag as much as possible, with minimal changes to the application code or operational requirements. Which solution meets these requirements?

- A. Migrate the database to Amazon Aurora MySQL. Replace the MySQL read replicas with Aurora Replicas and enable Aurora Auto Scaling.
- B. Deploy an Amazon ElastiCache for Redis cluster in front of the database. Modify the website to check the cache before querying the database read endpoints.
- C. Migrate the database from Amazon RDS to MySQL running on Amazon EC2 compute instances. Choose very large compute optimized instances for all replica nodes.
- D. Migrate the database to Amazon DynamoDB. Initially provision a large number of read capacity units (RCUs) to support the required throughput with on-demand capacity.

正确答案 A

Q374. A group requires permissions list an Amazon S3 bucket and delete objects from that bucket. An administrator has created the following IAM policy to provide access to the bucket and applied that policy to the group. The group is not able to delete objects in the bucket. The company follows least-privilege access rules. Which statement should a solutions architect add to the policy to correct bucket access?

A.

```
{  
    "Version": "2012-10-17",  
    "Statement": [  
        {  
            "Action": [  
                "s3>ListBucket",  
                "s3>DeleteObject"  
            ],  
            "Resource": [  
                "arn:aws:s3:::bucket-name"  
            ],  
            "Effect": "Allow"  
        }  
    ]  
}
```

B.

```
"Action": [  
    "s3:*Object"  
],  
"Resource": [  
    "arn:aws:s3:::bucket-name/*"  
],  
"Effect": "Allow"
```

C.

```
"Action": [
    "s3:*"
],
"Resource": [
    "arn:aws:s3:::bucket-name/*"
],
"Effect": "Allow"

>Action": [
    "s3:DeleteObject"
],
"Resource": [
    "arn:aws:s3:::bucket-name*"
],
"Effect": "Allow"
```

```
"Action": [
    "s3:DeleteObject"
],
"Resource": [
    "arn:aws:s3:::bucket-name/*"
],
"Effect": "Allow"
```

正确答案 D

解析：

- A is wrong as action type is invalid
- B is wrong since it allows everything
- C is wrong as the resource name is incorrect, should be /\* after the bucketname
- D least privilege

Q375. A company has an API-based inventory reporting application running on Amazon EC2 instances. The application stores information in an Amazon DynamoDB table. The company's distribution centers have an on-premises shipping application that calls an API to update the inventory before printing shipping labels. The company has been experiencing application interruptions several times each day, resulting in lost transactions. What should a solutions architect recommend to improve application resiliency?

- A. Modify the shipping application to write to a local database.
- B. Modify the application APIs to run serverless using AWS Lambda.

C. Configure Amazon API Gateway to call the EC2 inventory application APIs.

D. Modify the application to send inventory updates using Amazon Simple Queue Service (Amazon SQS).

正确答案 D

Q376. A user has underutilized on-premises resources. Which AWS Cloud concept can BEST address this issue?

A. High Availability

B. Elasticity

C. Security

D. Loose Coupling

正确答案 B

Q377. 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.

正确答案 D

**解析：**

A. You can't use Lambda directly with RDS, RDS sends the notification to SNS which then can trigger a lambda. Take a look

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

- B. Same as A.
- C. The RDS event notifications sends the notification using SNS not SQS.
- D. Sounds about right. You Subscribe to an RDS event notification which sends to SNS topic, which is fanned out to multiple Amazon SQS queues.

Subscribing to Amazon RDS event notification

You can create an Amazon RDS event notification subscription so you can be notified when an event occurs for a given DB instance, DB snapshot, DB security group, or DB parameter group. The simplest way to create a subscription is with the RDS console. If you choose to create event notification subscriptions using the CLI or API, you must create an Amazon Simple Notification Service topic and subscribe to that topic with the Amazon SNS console or Amazon SNS API

Q378. An application is running on an Amazon EC2 instance and must have millisecond latency when running the workload. The application makes many small reads and writes to the file system, but the file system itself is small. Which Amazon Elastic Block Store (Amazon EBS) volume type should a solutions architect attach to their EC2 instance?

- A. Cold HDD (sc1)
- B. General Purpose SSD (gp2)
- C. Provisioned IOPS SSD (io1)
- D. Throughput Optimized HDD (st1)

正确答案 C

### 解析：

原始答案是 B，更正为 C gp2 卷容量小的时候 IO 很差 所以用 io1 保证在卷比较小时也能提供需要的 IO

Q379. A company runs a static website through its on-premises data center. The company has multiple servers that handle all of its traffic, but on busy days, services are interrupted and the website becomes unavailable. The company wants to expand its presence globally and plans to triple its website traffic. What should a solutions architect recommend to meet these requirements?

- A. Migrate the website content to Amazon S3 and host the website on Amazon CloudFront.
- B. Migrate the website content to Amazon EC2 instances with public Elastic IP addresses in multiple AWS Regions.
- C. Migrate the website content to Amazon EC2 instances and vertically scale as the load increases.
- D. Use Amazon Route 53 to distribute the loads across multiple Amazon CloudFront distributions for each AWS Region that exists globally.

正确答案 A

Q380. A company has a media catalog with metadata for each item in the catalog. Different types of metadata are extracted from the media items

by an application running on AWS Lambda. Metadata is extracted according to a number of rules, with the output stored in an Amazon ElastiCache for Redis cluster. The extraction process is done in batches and takes around 40 minutes to complete. The update process is triggered manually whenever the metadata extraction rules change. The company wants to reduce the amount of time it takes to extract metadata from its media catalog. To achieve this, a solutions architect has split the single metadata extraction Lambda function into a Lambda function for each type of metadata. Which additional steps should the solutions architect take to meet the requirements?

- A. Create an AWS Step Functions workflow to run the Lambda functions in parallel. Create another Step Functions workflow that retrieves a list of media items and executes a metadata extraction workflow for each one.
- B. Create an AWS Batch compute environment for each Lambda function. Configure an AWS Batch job queue for the compute environment. Create a Lambda function to retrieve a list of media items and write each item to the job queue.
- C. Create an AWS Step Functions workflow to run the Lambda functions in parallel. Create a Lambda function to retrieve a list of media items and write each item to an Amazon SQS queue. Configure the SQS queue as an input to the Step Functions workflow.
- D. Create a Lambda function to retrieve a list of media items and write each item to an Amazon SQS queue. Subscribe the metadata extraction Lambda functions to the SQS queue with a large batch size.

正确答案 C

Q381. A company is deploying a public-facing global application on AWS using Amazon CloudFront. The application communicates with an external system. A solutions architect needs to ensure the data is secured during end-to-end transit and at rest. Which combination of steps will satisfy these requirements? (Select TWO)

- A. Create a public certificate for the required domain in AWS Certificate Manager and deploy it to CloudFront, an Application Load Balancer, and Amazon EC2 instances.
- B. Acquire a public certificate from a third-party vendor and deploy it to CloudFront, an Application Load Balancer, and Amazon EC2 instances.
- C. Provision Amazon EBS encrypted volumes using AWS KMS and ensure explicit encryption of data when writing to Amazon EBS.
- D. Use SSL or encrypt data while communicating with the external system using a VPN.
- E. Communicate with the external system using plaintext and use the VPN to encrypt the data in transit.

正确答案 C, D

Q382. A company's lease of a co-located storage facility will expire in 90 days. The company wants to move to AWS to avoid signing a contract extension. The company's environment consists of 200 virtual machines and a NAS with 40 TB of data. Most of the data is archival, yet instant access is required when data is requested. Leadership wants to ensure minimal downtime during the migration. Each virtual machine has a number of customized configurations. The company's existing 1 Gbps network connection is mostly idle, especially after business hours. Which combination of steps should the company take to migrate to AWS while minimizing downtime and operational impact? (Select TWO.)

- A. Use new Amazon EC2 instances and reinstall all application code.
- B. Use AWS SMS to migrate the virtual machines.
- C. Use AWS Storage Gateway to migrate the data to cloud-native storage.
- D. Use AWS Snowball to migrate the data.
- E. Use AWS SMS to copy the infrequently accessed data from the NAS.

正确答案 B, C

Q383. A company is planning a large event where a promotional offer will be introduced. The company's website is hosted on AWS and backed by an Amazon RDS for PostgreSQL DB instance. The website explains the promotion and includes a sign-up page that collects user information and preferences. Management expects large and unpredictable volumes of traffic periodically, which will create many database writes. A solutions architect needs to build a solution that does not change the underlying data model and ensures that submissions are not dropped before they are committed to the database. Which solutions meets these requirements?

- A. Immediately before the event, scale up the existing DB instance to meet the anticipated demand. Then scale down after the event.
- B. Use Amazon SQS to decouple the application and database layers. Configure an AWS Lambda function to write items from the queue into the database.
- C. Migrate to Amazon DynamoDB and manage throughput capacity with automatic scaling.
- D. Use Amazon ElastiCache for Memcached to increase write capacity to the DB instance.

正确答案 B

Q384. A solutions architect is designing a publicly accessible web application that is on an Amazon CloudFront distribution with an Amazon S3 website endpoint as the origin. When the solution is deployed, the website returns an Error 403: Access Denied message. Which steps should the solutions architect take to correct the issue? (Select TWO.)

- A. Remove the S3 block public access option from the S3 bucket.
- B. Remove the requester pays option from the S3 bucket.

- C. Remove the origin access identity (OAI) from the CloudFront distribution.
- D. Change the storage class from S3 Standard to S3 One Zone-Infrequent Access (S3 One Zone-IA).
- E. Disable S3 object versioning

正确答案 A, B

Q385. A company is running a media store across multiple Amazon EC2 instances distributed across multiple Availability Zones in a single VPC. The company wants a high-performing solution to share data between all the EC2 instances, and prefers to keep the data within the VPC only. What should a solutions architect recommend?

- A. Create an Amazon S3 bucket and call the service APIs from each instance's application.
- B. Create an Amazon S3 bucket and configure all instances to access it as a mounted volume.
- C. Configure an Amazon Elastic Block Store (Amazon EBS) volume and mount it across all instances.
- D. Configure an Amazon Elastic File System (Amazon EFS) file system and mount it across all instances.

正确答案 D

Q386. A company has a 143 TB MySQL database that it wants to migrate to AWS. The plan is to use Amazon Aurora MySQL as the platform going forward. The company has a 100 Mbps AWS Direct Connect connection to Amazon VPC. Which solution meets the company's needs and takes the LEAST amount of time?

- A. Use a gateway endpoint for Amazon S3. Migrate the data to Amazon S3. Import the data into Aurora.

- B. Upgrade the Direct Connect link to 500 Mbps. Copy the data to Amazon S3. Import the data into Aurora.
- C. Order an AWS Snowmobile and copy the database backup to it. Have AWS import the data into Amazon S3. Import the backup into Aurora.
- D. Order four 50-TB AWS Snowball devices and copy the database backup onto them. Have AWS import the data into Amazon S3. Import the data into Aurora.

正确答案 D

Q387. A media company has an application that tracks user clicks on its websites and performs analytics to provide near-real time recommendations. The application has a fleet of Amazon EC2 instances that receive data from the websites and send the data to an Amazon RDS DB instance. Another fleet of EC2 instances hosts the portion of the application that is continuously checking changes in the database and executing SQL queries to provide recommendations. Management has requested a redesign to decouple the infrastructure. The solution must ensure that data analysts are writing SQL to analyze the data only. No data can be lost during the deployment. What should a solutions architect recommend?

- A. Use Amazon Kinesis Data Streams to capture the data from the websites, Kinesis Data Firehose to persist the data on Amazon S3, and Amazon Athena to query the data.
- B. Use Amazon Kinesis Data Streams to capture the data from the websites, Kinesis Data Analytics to query the data, and Kinesis Data Firehose to persist the data on Amazon S3.
- C. Use Amazon Simple Queue Service (Amazon SQS) to capture the data from the websites, keep the fleet of EC2 instances, and change to a bigger instance type in the Auto Scaling group configuration.

D. Use Amazon Simple Notification Service (Amazon SNS) to receive data from the websites and proxy the messages to AWS Lambda functions that execute the queries and persist the data. Change Amazon RDS to Amazon Aurora Serverless to persist the data.

正确答案 B

Q388. A company has two VPCs named Management and Production. The Management VPC uses VPNs through a customer gateway to connect to a single device in the data center. The Production VPC uses a virtual private gateway with two attached AWS Direct Connect connections. The Management and Production VPCs both use a single VPC peering connection to allow communication between the applications. What should a solutions architect do to mitigate any single point of failure in this architecture?

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

正确答案 C

Q389. A solutions architect is designing a solution that involves orchestrating a series of Amazon Elastic Container Service (Amazon ECS) task types running on Amazon EC2 instances that are part of an ECS cluster. The output and state data for all tasks needs to be stored. The amount of data output by each task is approximately 10MB, and there could be hundreds of tasks running at a time. The system should be

optimized for high-frequency reading and writing. As old outputs are archived and deleted, the storage size is not expected to exceed 1TB. Which storage solution should the solutions architect recommend?

- A. An Amazon DynamoDB table accessible by all ECS cluster instances.
- B. An Amazon Elastic File System (Amazon EFS) with Provisioned Throughput mode.
- C. An Amazon Elastic File System (Amazon EFS) file system with Bursting Throughput mode.
- D. An Amazon Elastic File System (Amazon EFS) volume mounted to the ECS cluster instances.

正确答案 C

Q390. A company has three VPCs named Development, Testing, and Production in the us-east-1 Region. The three VPCs need to be connected to and on-premises data center and are designed to be separate to maintain security and prevent any resource sharing. A solution architect needs to find a scalable and secure solution. What should the solution architect recommend?

- A. Create an AWS Direct Connect connection and a VPN connection for each VPC to connect back to the data center.
- B. Create VPC peers from all the VPCs to the Production VPC. Use an AWS Direct Connect connection from the Production VPC back to the data center.
- C. Connect VPN connections from all the VPCs to a VPN in the Production VPC. Use a VPN connection from the Production VPC back to the data center.
- D. Create a new VPC called Network. Within the Network VPC, create an AWS Transit Gateway with an AWS Direct Connect connection back to the data center. Attach all the other VPCs to the Network VPC.

### 正确答案 A

Q391. A company wants to build a scalable key management infrastructure to support developers who need to encrypt data in their applications. What should a solutions architect do to reduce the operational burden?

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

### 正确答案 B

Q392. A development team is collaborating with another company to create an integrated product. The other company needs to access an Amazon Simple Queue Service (Amazon SQS) queue that is contained in the development team's account. The other company wants to poll the queue without giving up its own account permissions to do so. How should a solutions architect provide access to the SQS queue?

- A. Create an instance profile that provides the other company access to the SQS queue.
- B. Create an IAM policy that provides the other company access to the SQS queue.
- C. Create an SQS access policy that provides the other company access to the SQS queue.

D. Create an Amazon Simple Notification Service (Amazon SNS) access policy that provides the other company access to the SQS queue.

正确答案 C

Q393. A disaster response team is using drones to collect images from recent storm damage. The response team's laptops lack the storage and compute capacity to transfer the images and process the data. While the team has Amazon EC2 instances for processing and Amazon S3 buckets for storage, network connectivity is intermittent and unreliable. The images need to be processed to evaluate the damage. What should a solutions architect recommend?

A. Use AWS Snowball Edge devices to process and store the images.

B. Upload the images to Amazon Simple Queue Service (Amazon SQS) during intermittent connectivity to EC2 instances.

C. Configure Amazon Kinesis Data Firehose to create multiple delivery streams aimed separately at the S3 buckets for storage and the EC2 instances for processing the images.

D. Use AWS Storage Gateway pre-installed on a hardware appliance to cache the images locally for Amazon S3 to process the images when connectivity becomes available.

正确答案 A

Q394. A company has a live chat application running on list on-premises servers that use WebSockets. The company wants to migrate the application to AWS. Application traffic is inconsistent, and the company expects there to be more traffic with sharp spikes in the future. The company wants a highly scalable solution with no server maintenance nor advanced capacity planning. Which solution meets these requirements?

- A. Use Amazon API Gateway and AWS Lambda with an Amazon DynamoDB table as the data store Configure the DynamoDB table for provisioned capacity
- B. Use Amazon API Gateway and AWS Lambda with an Amazon DynamoDB table as the data store Configure the DynamoDB table for on-demand capacity
- C. Run Amazon EC2 instances behind an Application Load Balancer in an Auto Scaling group with an Amazon DynamoDB table as the data store Configure the DynamoDB table for on-demand capacity
- D. Run Amazon EC2 instances behind a Network Load Balancer in an Auto Scaling group with an Amazon DynamoDB table as the data store Configure the DynamoDB table for provisioned capacity

正确答案 B

Q395. A company has applications hosted on Amazon EC2 instances with IPv6 addresses. The applications must initiate communications with other external applications using the internet. However, the company's security policy states that any external service cannot initiate a connection to the EC2 instances. What should a solutions architect recommend to resolve this issue?

- A. Create a NAT gateway and make it the destination of the subnet's route table
- B. Create an internet gateway and make it the destination of the subnet's route table
- C. Create a virtual private gateway and make it the destination of the subnet's route table
- D. Create an egress-only internet gateway and make it the destination of the subnet's route table

正确答案 D

Q396. A company is deploying a web portal. The company wants to ensure that only the web portion of the application is publicly accessible. To accomplish this, the VPC was designed with two public subnets and two private subnets. The application will run on several Amazon EC2 instances in an Auto Scaling group. SSL termination must be offloaded from the EC2 instances. What should a solutions architect do to ensure these requirements are met?

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

正确答案 C

Q397. A company is running a multi-tier web application on premises. The web application is containerized and runs on a number of Linux hosts connected to a PostgreSQL database that contains user records. The operational overhead of maintaining the infrastructure and capacity planning is limiting the company's growth. A solutions architect must improve the application's infrastructure. Which combination of actions should the solutions architect take to accomplish this? (Select TWO.)

- A. Migrate the PostgreSQL database to Amazon Aurora
- B. Migrate the web application to be hosted on Amazon EC2 instances.

- C. Set up an Amazon CloudFront distribution for the web application content.
- D. Set up Amazon ElastiCache between the web application and the PostgreSQL database
- E. Migrate the web application to be hosted on AWS Fargate with Amazon Elastic Container Service (Amazon ECS)

正确答案 A, E

Q398. A solutions architect needs to ensure that all Amazon Elastic Block Store (Amazon EBS) volumes restored from unencrypted EBS snapshots are encrypted. What should the solutions architect do to accomplish this?

- A. Enable EBS encryption by default for the AWS Region
- B. Enable EBS encryption by default for the specific volumes
- C. Create a new volume and specify the symmetric customer master key (CMK) to use for encryption
- D. Create a new volume and specify the asymmetric customer master key (CMK) to use for encryption.

正确答案 A

Q399. A company wants to share forensic accounting data stored in an Amazon RDS DB instance with an external auditor. The Auditor has its own AWS account and requires its own copy of the database. How should the company securely share the database with the auditor?

- A. Create a read replica of the database and configure IAM standard database authentication to grant the auditor access.
- B. Copy a snapshot of the database to Amazon S3 and assign an IAM role to the auditor to grant access to the object in that bucket.

- C. Export the database contents to text files, store the files in Amazon S3, and create a new IAM user for the auditor with access to that bucket.
- D. Make an encrypted snapshot of the database, share the snapshot, and allow access to the AWS Key Management Service (AWS KMS) encryption key.

正确答案 D

### 解析：

- A. The question says the auditor needs its own copy of the database. A read replica won't do this request.
- B. We can't have direct access to the bucket in S3.
- C. Sounds a lot of work, I doubt, someone is going to be auditing from text files.
- D. Sounds reasonable. Making an encrypted snapshot, the auditor, will have it's own copy of the database.

To share an encrypted Amazon RDS DB snapshot:

Add the target account to a custom (non-default) KMS key.

Copy the snapshot using the customer managed key, and then share the snapshot with the target account.

Copy the shared DB snapshot from the target account.

<https://aws.amazon.com/premiumsupport/knowledge-center/rds-snapshots-share-account/>

Encrypted manual snapshots that don't use the default Amazon RDS encryption key can be shared, but you must first share the AWS Key Management Service (AWS KMS) key with the account that you want to share the snapshot with. To share the key with another account, share the AWS Identity and Access Management (IAM) policy with the primary and secondary accounts. Shared encrypted snapshots can't be restored directly from the destination account. First, copy the snapshot to the destination account by using a KMS key in the destination account. Then,

share the copied snapshot.

Q400. A company is experiencing growth as demand for its product has increased. The company's existing purchasing application is slow when traffic spikes. The application is a monolithic three tier application that uses synchronous transactions and sometimes sees bottlenecks in the application tier. A solutions architect needs to design a solution that can meet required application response times while accounting for traffic volume spikes. Which solution will meet these requirements?

- A. Vertically scale the application instance using a larger Amazon EC2 instance size.
- B. Scale the application's persistence layer horizontally by introducing Oracle RAC on AWS
- C. Scale the web and application tiers horizontally using Auto Scaling groups and an Application Load Balancer
- D. Decouple the application and data tiers using Amazon Simple Queue Service (Amazon SQS) with asynchronous AWS Lambda calls.

正确答案 D

**解析：**

A and B can be eliminated since "larger Amazon EC2 instance size" would still place a strain on the lone instance for increased traffic and "Oracle RAC on AWS" does not address the question at all. "monolithic three-tier application" so that would mean decoupling should be used. Option C would be correct if ALL 3 tiers are scaled. Key word "synchronous transaction" so we need to decouple through asynchronous transactions.

Q401. A company runs an online marketplace web application on AWS. The application serves hundreds of thousands of users during peak hours. The company needs a scalable, near-real-time solution to share the details

of millions of financial transactions with several other internal applications. Transactions also need to be processed to remove sensitive data before being stored in a document database for low-latency retrieval. What should a solutions architect recommend to meet these requirements?

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

正确答案 C

### 解析：

Kinesis DS with DynamoDB. As Kinesis Datafirehos cant store in DynamoDB.

Q402. An application running on an Amazon EC2 instance needs to access an Amazon DynamoDB table. Both the EC2 instance and the DynamoDB table are in the same AWS account. A solutions architect must configure the necessary

permissionsWhich solution will allow least privilege access to the DynamoDB table from the EC2 instance?

- A. Create an IAM role with the appropriate policy to allow access to the DynamoDB table. Create an instance profile to assign this IAM role to the EC2 instance.
- B. Create an IAM role with the appropriate policy to allow access to the DynamoDB table. Add the EC2 instance to the trust relationship policy document to allow it to assume the role.
- C. Create an IAM user with the appropriate policy to allow access to the DynamoDB table. Store the credentials in an Amazon S3 bucket and read them from within the application code directly.
- D. Create an IAM user with the appropriate policy to allow access to the DynamoDB table. Ensure that the application stores the IAM credentials securely on local storage and uses them to make the DynamoDB calls.

正确答案 A

Q403. A company uses an Amazon S3 bucket to store static images for its website. The company configured permissions to allow access to Amazon S3 objects by privileged users only. What should a solutions architect do to protect against data loss? (Select TWO.)

- A. Enable versioning on the S3 bucket.
- B. Enable access logging on the S3 bucket.
- C. Enable server-side encryption on the S3 bucket.
- D. Configure an S3 lifecycle rule to transition objects to Amazon S3 Glacier.
- E. Use MFA Delete to require multi-factor authentication to delete an object.

正确答案 A, E

Q404. A company is using Amazon DynamoDB with provisioned throughput for the database tier of its ecommerce website. During flash sales, customers experience periods of time when the database cannot handle the high number of transactions taking place. This causes the company to lose transactions. During normal periods, the database performs appropriately. Which solution solves the performance problem the company faces?

- A. Switch DynamoDB to on demand mode during flash sales.
- B. Implement DynamoDB Accelerator for fast in-memory performance
- C. Use Amazon Kinesis to queue transactions for processing to DynamoDB
- D. Use Amazon Simple Queue Service (Amazon SQS) to queue transactions to DynamoDB

正确答案 A

Q405. A company that operates a web application on premises is preparing to launch a newer version of the application on AWS. The company needs to route requests to either the AWS-hosted or the on-premises-hosted application based on the URL query string. The on-premises application is not available from the internet, and a VPN connection is established between Amazon VPC and the company's data center. The company wants to use an Application Load Balancer (ALB) for this launch. Which solution meets these requirements?

- A. Use two ALBs: one for on premises and one for the AWS resource. Add hosts to each target group of each ALB.
- B. Route with Amazon Route 53 based on the URL query string.

- B. Use two ALBs: one for on premises and one for the AWS resource. Add hosts to the target group of each ALB. Create a software router on an EC2 instance based on the URL query string .
- C. Use one ALB with two target groups: one for the AWS resource and one for on premises. Add hosts to each target group of the ALB. Configure listener rules based on the URL query string.
- D. Use one ALB with two AWS Auto Scaling groups: one for the AWS resource and one for on premises. Add hosts to each Auto Scaling group. Route with Amazon Route 53 based on the URL query string.

正确答案 C

Q406. 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 blocks. Associate the route table to the database subnets.
- B. Create a security group that denies ingress from the security group used by instances in the public subnets. Attach the security group to an Amazon RDS DB instance.
- C. Create a security group that allows ingress from the security group used by instances in the private subnets. Attach the security group to an Amazon RDS DB instance.
- D. Create a new peering connection between the public subnets and the private subnets. Create a different peering connection between the private subnets and the database subnets.

正确答案 C

解析：

仅允许内网子网的 EC2 访问 RDS，那就给 RDS 建一个安全组，allow 内网子网段的 ec2 B 只是拒绝了公网子网的 ec2，但还是没有允许内网子网访问

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Q407. A company has an ecommerce application that stores data in an on-premises SQL database. The company has decided to migrate this database to AWS. However, as part of the migration, the company wants to find a way to attain sub-millisecond responses to common read requests. A solutions architect knows that the increase in speed is paramount and that a small percentage of stale data returned in the database reads is acceptable. What should the solutions architect recommend?

- A. Build Amazon RDS read replicas.
- B. Build the database as a larger instance type.
- C. Build a database cache using Amazon ElastiCache.
- D. Build a database cache using Amazon Elasticsearch Service (Amazon ES).

正确答案 C

Q408. A company plans to host a survey website on AWS. The company anticipates an unpredictable amount of traffic. This traffic results in asynchronous updates to the database. The company wants to ensure that writes to the database hosted on AWS do not get dropped. How should the company write its application to handle these database requests?

- A. Configure the application to publish to an Amazon Simple Notification Service (Amazon SNS) topic. Subscribe the database to the SNS topic.

- B. Configure the application to subscribe to an Amazon Simple Notification Service (Amazon SNS) topic. Publish the database updates to the SNS topic.
- C. Use Amazon Simple Queue Service (Amazon SQS) FIFO queues to queue the database connection until the database has resources to write the data.
- D. Use Amazon Simple Queue Service (Amazon SQS) FIFO queues for capturing the writes and draining the queue as each write is made to the database.

正确答案 D

Q409. A company is planning on deploying a newly built application on AWS in a default VPC. The application will consist of a web layer and database layer. The web server was created in public subnets, and the MySQL database was created in private subnets. All subnets are created with the default network ACL settings, and the default security group in the VPC will be replaced with new custom security groups. The following are the key requirements:  
--The web servers must be accessible only to users on an SSL connection.  
--The database should be accessible to the web layer, which is created in a public subnet only.  
--All traffic to and from the IP range 182.20.0.0/16 subnet should be blocked. Which combination of steps meets these requirements? (Select TWO.)

- A. Create a database server security group with inbound and outbound rules for MySQL port 3306 traffic to and from anywhere (0.0.0.0/0).
- B. Create a database server security group with an inbound rule for MySQL port 3306 and specify the source as a web server security group.
- C. Create a web server security group with an inbound allow rule for HTTPS port 443 traffic from anywhere (0.0.0.0/0) and an inbound deny rule for IP range 182.20.0.0/16.
- D. Create a web server security group with an inbound rule for HTTPS port 443 traffic from anywhere (0.0.0.0/0). Create network ACL inbound and outbound deny rules for IP range 182.20.0.0/16

E. Create a web server security group with inbound and outbound rules for HTTPS port 443 traffic to and from anywhere (0.0.0.0/0). Create a network ACL inbound deny rule for IP range 182.20.0.0/16.

正确答案 B, D

Q410. A company wants to move its on-premises network attached storage (NAS) to AWS. The company wants to make the data available to any Linux instances within its VPC and ensure changes are automatically synchronized across all instances accessing the data store. The majority of the data is accessed very rarely, and some files are accessed by multiple users at the same time. Which solution meets these requirements and is MOST cost-effective?

- A. Create an Amazon Elastic Block Store (Amazon EBS) snapshot containing the data. Share it with users within the VPC.
- B. Create an Amazon S3 bucket that has a lifecycle policy set to transition the data to S3 Standard-Infrequent Access (S3 Standard-IA) after the appropriate number of days.
- C. Create an Amazon Elastic File System (Amazon EFS) file system within the VPC. Set the throughput mode to Provisioned and to the required amount of IOPS to support concurrent usage.
- D. Create an Amazon Elastic File System (Amazon EFS) file system within the VPC. Set the lifecycle policy to transition the data to EFS Infrequent Access (EFS IA) after the appropriate number of days.

正确答案 D

Q411. A company is using a third-party vendor to manage its marketplace analytics. The vendor needs limited programmatic access to resources in the company's account. All the needed policies have been created to

grant appropriate access. Which additional component will provide the vendor with the MOST secure access to the account?

- A. Create an IAM user.
- B. Implement a service control policy (SCP).
- C. Use a cross- account role with an external ID.
- D. Configure a single sign-on (SSO) identity provider.

正确答案 D

**解析：**

The vendor doesn't necessarily have an account to manage with SCP. Single Sign On gets my vote. An SCP defines a guardrail, or sets limits, on the actions that the account's administrator can delegate to the IAM users and roles in the affected accounts.

Q412. A company wants to improve the availability and performance of its hybrid application. The application consists of a stateful TCP-based workload hosted on Amazon EC2 instances in different AWS Regions and a stateless UDP-based workload hosted on premises. Which combination of actions should a solutions architect take to improve availability and performance? (Select TWO.)

- A. Create an accelerator using AWS Global Accelerator. Add the load balancers as endpoints.
- B. Create an Amazon CloudFront distribution with an origin that uses Amazon Route 53 latency-based routing to route requests to the load balancers.
- C. Configure two Application Load Balancers in each Region. The first will route to the EC2 endpoints, and the second will route to the on-premises endpoints.

D. Configure a Network Load Balancer in each Region to address the EC2 endpoints. Configure a Network Load Balancer in each Region that routes to the on-premises endpoints.

E. Configure a Network Load Balancer in each Region to address the EC2 endpoints. Configure an Application Load Balancer in each Region that routes to the on-premises endpoints.

正确答案 A, D

Q413. A company is planning to migrate a commercial off-the-shelf application from its on-premises data center to AWS. The software has a software licensing model using sockets and cores with predictable capacity and uptime requirements. The company wants to use its existing licenses, which were purchased earlier this year. Which Amazon EC2 pricing option is the MOST cost-effective?

- A. Dedicated Reserved Hosts
- B. Dedicated On-Demand Hosts
- C. Dedicated Reserved Instances
- D. Dedicated On-Demand Instances

正确答案 A

Q414. A company wants to improve the availability and performance of its stateless UDP-based workload. The workload is deployed on Amazon EC2 instances in multiple AWS Regions. What should a solutions architect recommend to accomplish this?

- A. Place the EC2 instances behind Network Load Balancers (NLBs) in each Region. Create an accelerator using AWS Global Accelerator. Use the NLBs as endpoints for the accelerator.

B. Place the EC2 instances behind Application Load Balancers (ALBs) in each Region. Create an accelerator using AWSGlobal Accelerator. Use the ALBs as endpoints for the accelerator.

C. Place the EC2 instances behind Network Load Balancers (NLBs) in each Region. Create an Amazon CloudFront distribution with an origin that uses Amazon Route 53 latency-based routing to route requests to the NLBs.

D. Place the EC2 instances behind Application Load Balancers (ALBs) in each Region. Create an Amazon CloudFront distribution with an origin that uses Amazon Route 53 latency-based routing to route requests to the ALBs

正确答案 A

Q415. A company is running a multi-tier ecommerce web application in the AWS Cloud. The application runs on Amazon EC2 instances with an Amazon RDS MySQL Multi-AZ DB instance. Amazon RDS is configured with the latest generation instance with 2 000 GB of storage in an Amazon EBS General Purpose SSD (gp2) volume. The database performance impacts the application during periods of high demand. After analyzing the logs in Amazon CloudWatch Logs, a database administrator finds that the application performance always degrades when the number of read and write IOPS is higher than 6,000. What should a solutions architect do to improve the application performance?

A. Replace the volume with a Magnetic volume.

B. Increase the number of IOPS on the gp2 volume.

C. Replace the volume with a Provisioned IOPS (PIOPS) volume.

D. Replace the 2, 000 GB gp2 volume with two 1,000 GB gp2 volumes.

正确答案 C

Q416. A user wants to list the IAM role that is attached to their Amazon EC2 instance. The user has login access to the EC2 instance but does not have IAM permissions. What should a solutions architect do to retrieve this information?

- A. Run the following EC2 command: curl http://169.254.169.254/latest/meta-data/ iam/ info
- B. Run the following EC2 command: curl http://169.254.169.254/latest/user-data/iam/ info
- C. Run the following EC2 command: http://169.254.169.254/latest/dynamic/instance-identity/
- D. Run the following AWS CLI command. aws iam get-instance-profile ; : --instance-profile-name ExampleInstanceProfile

正确答案 A

Q417. A company is setting up an application to use an Amazon RDS MySQL DB instance. The database must be architected for high availability across Availability Zones and AWS Regions with minimal downtime. How should a solutions architect meet this requirement?

- A. Set up an RDS MySQL Multi-AZ DB instance. Configure an appropriate backup window.
- B. Set up an RDS MySQL Multi-AZ DB instance. Configure a read replica in a different Region.
- C. Set up an RDS MySQL Single-AZ DB instance. Configure a read replica in a different Region.
- D. Set up an RDS MySQL Single AZ DB instance. Copy automated snapshots to at least one other Region.

正确答案 B

Q418. A company is working with an external vendor that requires write access to the company's Amazon Simple Queue Service (Amazon SQS) queue. The vendor has its own AWS account. What should a solutions architect do to implement least privilege access?

- A. Update the permission policy on the SQS queue to give write access to the vendor's AWS account.
- B. Create an IAM user with write access to the SQS queue and share the credentials for the IAM user.
- C. Update AWS Resource Access Manager to provide write access to the SQS queue from the vendor's AWS account.
- D. Create a cross-account role with access to all SQS queues and use the vendor's AWS account in the trust document for the role.

正确答案 D

Q419. A company has developed a microservices application. It uses a client-facing API with Amazon API Gateway and multiple internal services hosted on Amazon EC2 instances to process user requests. The API is designed to support unpredictable surges in traffic, but internal services may become overwhelmed and unresponsive for a period of time during surges. A solutions architect needs to design a more reliable solution that reduces errors when internal services become unresponsive or unavailable. Which solution meets these requirements?

- A. Use AWS Auto Scaling to scale up internal services when there is a surge in traffic.
- B. Use different Availability Zones to host internal services. Send a notification to a system administrator when an internal service becomes unresponsive.
- C. Use an Elastic Load Balancer to distribute the traffic between internal services. Configure Amazon CloudWatch metrics to monitor traffic to internal services.

D. Use Amazon Simple Queue Service (Amazon SQS) to store user requests as they arrive . Change the internal services to retrieve the requests from the queue for processing.

正确答案 D

Q420. 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.

正确答案 D

Q421. A company is creating a three-tier web application consisting of a web server, an application server, and a database server. The application will track GPS coordinates of packages as they are being delivered. The application will update the database every 0.5 seconds. The tracking will need to be read as fast as possible for users to check the status of their packages. Only a few packages might be

tracked on some days, whereas millions of packages might be tracked on other days. Tracking will need to be searchable by tracking ID, customer ID, and order ID. Orders older than 1 month no longer need to be tracked. What should a solutions architect recommend to accomplish this with minimal total cost of ownership?

- A. Use Amazon DynamoDB. Enable Auto Scaling on the DynamoDB table. Schedule an automatic deletion script for items older than 1 month.
- B. Use Amazon DynamoDB with global secondary indexes. Enable Auto Scaling on the DynamoDB table and the global secondary indexes. Enable TTL on the DynamoDB table.
- C. Use an Amazon RDS On-Demand Instance with Provisioned IOPS (PIOPS). Enable Amazon CloudWatch alarms to send notifications when PIOPS are exceeded. Increase and decrease PIOPS as needed.
- D. Use an Amazon RDS Reserved Instance with Provisioned IOPS (PIOPS). Enable Amazon CloudWatch alarms to send notifications when PIOPS are exceeded. Increase and decrease PIOPS as needed,

正确答案 B

Q422. A solutions architect is designing the architecture of a new application being deployed to the AWS Cloud. The application will run on Amazon EC2 On-Demand Instances and will automatically scale across multiple Availability Zones. The EC2 instances will scale up and down frequently throughout the day. An Application Load Balancer (ALB) will handle the load distribution. The architecture needs to support distributed session data management. The company is willing to make changes to code if needed. What should the solutions architect do to ensure that the architecture supports distributed session data management?

- A. Use Amazon ElastiCache to manage and store session data.

- B. Use session affinity (sticky sessions) of the AL . B to manage session data.
- C. Use Session Manager from AWS Systems Manager to manage the session.
- D. Use the GetSessionToken API operation in AWS Security Token Service (AWS STS) to manage the session.

正确答案 A

Q423. A solutions architect is designing a solution that requires frequent updates to a website that is hosted on Amazon S3 with versioning enabled. For compliance reasons, the older versions of the objects will not be accessed frequently and will need to be deleted after 2 years. What should the solutions architect recommend to meet these requirements at the LOWEST cost?

- A. Use S3 batch operations to replace object tags. Expire the objects based on the modified tags.
- B. Configure an S3 Lifecycle policy to transition older versions of objects to S3 Glacier. Expire the objects after 2 years.
- C. Enable S3 Event Notifications on the bucket that sends older objects to the Amazon Simple Queue Service (Amazon SQS) queue for further processing.
- D. Replicate older object versions to a new bucket. Use an S3 Lifecycle policy to expire the objects in the new bucket after 2 years.

正确答案 B

Q424. The financial application at a company stores monthly reports in an Amazon S3 bucket. The vice president of finance has mandated that all access to these reports be logged and that any modifications to the log files be detected. Which actions can a solutions architect take to meet these requirements?

- A. Use S3 server access logging on the bucket that houses the reports with the read and write data events and log file validation options enabled.
- B. Use S3 server access logging on the bucket that houses the reports with the read and write management events and log file validation options enabled.
- C. Use AWS CloudTrail to create a new trail. Configure the trail to log read and write data events on the S3 bucket that houses the reports. Log these events to a new bucket, and enable log file validation.
- D. Use AWS CloudTrail to create a new trail. Configure the trail to log read and write management events on the S3 bucket that houses the reports. Log these events to a new bucket, and enable log file validation.

正确答案 C

### 解析：

<https://aws.amazon.com/premiumsupport/knowledge-center/cloudtrail-data-management-events/>

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/logging-data-events-with-cloudtrail.html>

#### Data events:

Data events provide visibility into the resource operations performed on or within a resource. These are also known as data plane operations. Data events are often high-volume activities.

The following data types are recorded:

1. Amazon S3 object-level API activity (for example, GetObject, DeleteObject, and PutObject API operations)
2. AWS Lambda function execution activity (the Invoke API).

Q425. The following IAM policy is attached to an IAM group. This is the only policy applied to the group .What are the effective IAM permissions of this policy for group members?

```
{  
    "Version": "2012-10-17",  
    "Statement": [  
        {  
            "Sid": "1",  
            "Effect": "Allow",  
            "Action": "ec2:*",  
            "Resource": "*",  
            "Condition": {  
                "StringEquals": {  
                    "ec2:Region": "us-east-1"  
                }  
            }  
        },  
        {  
            "Sid": "2",  
            "Effect": "Deny",  
            "Action": [  
                "ec2:StopInstances",  
                "ec2:TerminateInstances"  
            ],  
            "Resource": "*",  
            "Condition": {  
                "BoolIfExists": {"aws:MultiFactorAuthPresent": false}  
            }  
        }  
    ]  
}
```

- A. Group members are permitted any Amazon EC2 action within the us-east-1 Region. Statements after the Allow permission are not applied.
- B. Group members are denied any Amazon EC2 permissions in the us-east-1 Region unless they are logged in with multi-factor authentication (MFA).

C. Group members are allowed the ec2: StopInstances and ec2:TerminateInstances permissions for all Regions when logged in with multi-factor authentication (MFA). Group members are permitted any other Amazon EC2 action.

D. Group members are allowed the ec2:StopInstances and ec2:TerminateInstances permissions for the us-east-1 Region only when logged in with multi-factor authentication (MFA) Group members are permitted any other Amazon EC2 action within the us-east-1 Region.

正确答案 D

Q426. 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.

正确答案 A, C

Q427. A company has developed a new video game as a web application. The application is in a three-tier architecture in a VPC with Amazon RDS for MySQL in the database layer. Several players will compete concurrently

online. The game's developers want to display a top-10 scoreboard in near-real time and offer the ability to stop and restore the game while preserving the current scores. What should a solutions architect do to meet these requirements?

- A. Set up an Amazon ElastiCache for Memcached cluster to cache the scores for the web application to display.
- B. Set up an Amazon ElastiCache for Redis cluster to compute and cache the scores for the web application to display.
- C. Place an Amazon CloudFront distribution in front of the web application to cache the scoreboard in a section of the application.
- D. Create a read replica on Amazon RDS for MySQL to run queries to compute the scoreboard and serve the read traffic to the web application.

正确答案 D

Q428. A company wants to migrate its web application to AWS. The legacy web application consists of a web tier, an application tier, and a MySQL database. The re-architected application must consist of technologies that do not require the administration team to manage instances or clusters. Which combination of services should a solutions architect include in the overall architecture? (Select TWO.)

- A. Amazon Aurora Serverless
- B. Amazon EC2 Spot Instances
- C. Amazon Elasticsearch Service (Amazon ES)
- D. Amazon RDS for MySQL
- E. AWS Fargate

正确答案 A, E

Q429. A company has NFS servers in an on-premises data center that need to periodically back up small amounts of data to Amazon S3. Which solution meets these requirements and is MOST cost-effective?

- A. Set up AWS Glue to copy the data from the on-premises servers to Amazon S3.
- B. Set up an AWS DataSync agent on the on-premises servers, and sync the data to Amazon S3.
- C. Set up an SFTP sync using AWS Transfer for SFTP to sync data from on premises to Amazon S3.
- D. Set up an AWS Direct Connect connection between the on-premises data center and a VPC, and copy the data to Amazon S3.

正确答案 B

Q430. A company is backing up on-premises databases to local file server shares using the SMB protocol. The company requires immediate access to 1 week of backup files to meet recovery objectives. Recovery after a week is less likely to occur, and the company can tolerate a delay in accessing those older backup files. What should a solutions architect do to meet these requirements with the LEAST operational effort?

- A. Deploy Amazon FSx for Windows File Server to create a file system with exposed file shares with sufficient storage to hold all the desired backups.
- B. Deploy an AWS Storage Gateway file gateway with sufficient storage to hold 1 week of backups. Point the backups to SMB shares from the file gateway

C. Deploy Amazon Elastic File System (Amazon EFS) to create a file system with exposed NFS shares with sufficient storage to hold all the desired backups.

D. Continue to back up to the existing file shares. Deploy AWS Database Migration Service (AWS DMS) and define a copy task to copy backup files older than 1 week to Amazon S3, and delete the backup files from the local file store.

正确答案 B

Q431. A company is preparing to deploy a new serverless workload. A solutions architect needs to configure permissions for invoking an AWS Lambda function. The function will be triggered by an Amazon EventBridge (Amazon CloudWatch Events) rule. Permissions should be configured using the principle of least privilege. Which solution will meet these requirements?

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

正确答案 D

解析：

A role must be assumed and not added, this rule out A & B.

C is out because have \* as principal.

D remain and is right

Q432. A development team stores its Amazon RDS MySQL DB instance user name and password credentials in a configuration file. The configuration file is stored as plaintext on the root device volume of the team's Amazon EC2 instance. When the team's application needs to reach the database, it reads the file and loads the credentials into the code. The team has modified the permissions of the configuration file so that only the application can read its content. A solutions architect must design a more secure solution. What should the solutions architect do to meet this requirement?

- A. Store the configuration file in Amazon S3. Grant the application access to read the configuration file.
- B. Create an IAM role with permission to access the database. Attach this IAM role to the EC2 instance.
- C. Enable SSL connections on the database instance. Alter the database user to require SSL when logging in.
- D. Move the configuration file to an EC2 instance store, and create an Amazon Machine Image (AMI) of the instance. Launch new instances from this AMI.

正确答案 B

Q433. A company has a service that produces event data. The company wants to use AWS to process the event data as it is received. The data is written in a specific order that must be maintained throughout processing. The company wants to implement a solution that minimizes operational overhead. How should a solutions architect accomplish this?

- A. Create an Amazon Simple Queue Service (Amazon SQS) FIFO queue to hold messages. Set up an AWS Lambda function to process messages from the queue.

- B. Create an Amazon Simple Notification Service (Amazon SNS) topic to deliver notifications containing payloads to process. Configure an AWS Lambda function as a subscriber.
- C. Create an Amazon Simple Queue Service (Amazon SQS) standard queue to hold messages. Set up an AWS Lambda function to process messages from the queue independently.
- D. Create an Amazon Simple Notification Service (Amazon SNS) topic to deliver notifications containing payloads to process. Configure an Amazon Simple Queue Service (Amazon SQS) queue as a subscriber.

正确答案 A

解析：

The data needs to be processed in order

Q434. A company is hosting 60 TB of production-level data in an Amazon S3 bucket. A solutions architect needs to bring that data on premises for quarterly audit requirements. This export of data must be encrypted while in transit. The company has low network bandwidth in place between AWS and its on-premises data center. What should the solutions architect do to meet these requirements?

- A. Deploy AWS Migration Hub with 90-day replication windows for data transfer.
- B. Deploy an AWS Storage Gateway volume gateway on AWS. Enable a 90-day replication window to transfer the data.
- C. Deploy Amazon Elastic File System (Amazon EFS), with lifecycle policies enabled, on AWS. Use it to transfer the data.
- D. Deploy an AWS Snowball device in the on-premises data center after completing an export job request in the AWS Snowball console.

正确答案 D

Q435. A solutions architect is designing the cloud architecture for a company that needs to host hundreds of machine learning models for its users. During startup, the models need to load up to 10 GB of data from Amazon S3 into memory, but they do not need disk access. Most of the models are used sporadically, but the users expect all of them to be highly available and accessible with low latency. Which solution meets the requirements and is MOST cost-effective?

- A. Deploy models as AWS Lambda functions behind an Amazon API Gateway for each model.
- B. Deploy models as Amazon Elastic Container Service (Amazon ECS) services behind an Application Load Balancer for each model.
- C. Deploy models as AWS Lambda functions behind a single Amazon API Gateway with path-based routing where one path corresponds to each model.
- D. Deploy models as Amazon Elastic Container Service (Amazon ECS) services behind a single Application Load Balancer with path-based routing where one path corresponds to each model.

正确答案 D

Q436. A solutions architect needs to design a resilient solution for Windows users' home directories. The solution must provide fault tolerance, file-level backup and recovery, and access control, based upon the company's Active Directory. Which storage solution meets these requirements?

- A. Configure Amazon S3 to store the users' home directories. Join Amazon S3 to Active Directory.
- B. Configure a Multi-AZ file system with Amazon FSx for Windows File Server. Join Amazon FSx to Active Directory.
- C. Configure Amazon Elastic File System (Amazon EFS) for the users' home directories. Configure AWS Single Sign-On with Active Directory

D. Configure Amazon Elastic Block Store (Amazon EBS) to store the users' home directories. Configure AWS Single Sign-On with Active Directory.

正确答案 B

Q437. A company is creating a web application that will store a large number of images in Amazon S3. The images will be accessed by users over variable periods of time. The company wants to:  
--Retain all the images.  
--Incur no cost for retrieval.  
--Have minimal management overhead.  
--Have the images available with no impact on retrieval time . Which solution meets these requirements?

- A. Implement S3 Intelligent-Tiering.
- B. Implement S3 storage class analysis.
- C. Implement an S3 Lifecycle policy to move data to S3 Standard-Infrequent Access (S3 Standard-1A).
- D. Implement an S3 Lifecycle policy to move data to S3 One Zone-Infrequent Access (S3 One Zone-1A).

正确答案 A

Q438. A solutions architect needs to design a network that will allow multiple Amazon EC2 instances to access a common data source used for mission-critical data that can be accessed by all the EC2 instances simultaneously. The solution must be highly scalable, easy to implement, and support the NFS protocol. Which solution meets these requirements?

- A. Create an Amazon EFS file system. Configure a mount target in each Availability Zone. Attach each instance to the appropriate mount target.
- B. Create an additional EC2 instance and configure it as a file server. Create a security group that allows communication between the instances and apply that to the additional instance.

C. Create an Amazon S3 bucket with the appropriate permissions. Create a role in AWS IAM that grants the correct permissions to the S3 bucket. Attach the role to the EC2 instances that need access to the data.

D. Create an Amazon EBS volume with the appropriate permissions. Create a role in AWS IAM that grants the correct permissions to the EBS volume. Attach the role to the EC2 instances that need access to the data.

正确答案 A

Q439. A company runs an application on an Amazon EC2 instance backed by Amazon Elastic Block Store (Amazon EBS). The instance needs to be available for 12 hours daily. The company wants to save costs by making the instance unavailable outside the window required for the application. However, the contents of the instance's memory must be preserved whenever the instance is unavailable. What should a solutions architect do to meet this requirement?

A. Stop the instance outside the application's availability window. Start up the instance again when required.

B. Hibernate the instance outside the application's availability window. Start up the instance again when required.

C. Use Auto Scaling to scale down the instance outside the application's availability window. Scale up the instance when required.

D. Terminate the instance outside the application's availability window. Launch the instance by using a preconfigured Amazon Machine Image (AMI) when required.

正确答案 B

Q440. A company has a popular gaming platform running on AWS. The application is sensitive to latency because latency can impact the user experience and introduce unfair advantages to some players. The

application is deployed in every AWS Region. It runs on Amazon EC2 instances that are part of Auto Scaling groups configured behind Application Load Balancers (ALBs). A solutions architect needs to implement a mechanism to monitor the health of the application and redirect traffic to healthy endpoints. Which solution meets these requirements?

- A. Configure an accelerator in AWS Global Accelerator. Add a listener for the port that the application listens on, and attach it to a Regional endpoint in each Region. Add the ALB as the endpoint.
- B. Create an Amazon CloudFront distribution and specify the ALB as the origin server. Configure the cache behavior to use origin cache headers. Use AWS Lambda functions to optimize the traffic.
- C. Create an Amazon CloudFront distribution and specify Amazon S3 as the origin server. Configure the cache behavior to use origin cache headers. Use AWS Lambda functions to optimize the traffic.
- D. Configure an Amazon DynamoDB database to serve as the data store for the application. Create a DynamoDB Accelerator (DAX) cluster to act as the in-memory cache for DynamoDB hosting the application data.

正确答案 A

Q441. 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 solution 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 server's aid 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. 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 web balancer. Create a network ACL for the MySQL servers and allow port 3306 from the web servers security group.

正确答案 C

Q442. A company is migrating to the AWS Cloud. A file server is the first workload to migrate. Users must be able to access the file share using the Server Message Block (SMB) protocol. Which AWS managed service meets these requirements?

- A. Amazon EBS
- B. Amazon EC2
- C. Amazon FSx
- D. Amazon S3

正确答案 C

Q443. A solutions architect needs to design a resilient solution for Windows users' home directories. The solution must provide fault tolerance, file-level backup and recovery, and access control, based upon the company's Active Directory. Which storage solution meets these requirements?

- A. Configure Amazon S3 to store the users' home directories. Join Amazon S3 to Active Directory.

- B. Configure a Multi-AZ file system with Amazon FSx for Windows File Server. Join Amazon FSx to Active Directory.
- C. Configure Amazon Elastic File System (Amazon EFS) for the users' home directories. Configure AWS Single Sign-On with Active Directory.
- D. Configure Amazon Elastic Block Store (Amazon EBS) to store the users' home directories. Configure AWS Single Sign-On with Active Directory.

正确答案 B

Q444. A company hosts its application using Amazon Elastic Container Service (Amazon ECS) and wants to ensure high availability. The company wants to be able to deploy updates to its application even if nodes in one Availability Zone are not accessible. The expected request volume for the application is 100 requests per second, and each container task is able to serve at least 60 requests per second. The company set up Amazon ECS with a rolling update deployment type with the minimum healthy percent parameter set to 50% and the maximum percent set to 100%. Which configuration of tasks and Availability Zones meets these requirements?

- A. Deploy the application across two Availability Zones, with one task in each Availability Zone
- B. Deploy the application across two Availability Zones, with two tasks in each Availability Zone.
- C. Deploy the application across three Availability Zones, with one task in each Availability Zone.
- D. Deploy the application across three Availability Zones, with two tasks in each Availability Zone.

正确答案 C

Q445. A web application runs on Amazon EC2 instances behind an Application Load Balancer. The application allows users to create custom reports of historical weather data. Generating a report can take up to 5 minutes. These long-running requests use many of the available incoming connections, making the system unresponsive to other users. How can a solutions architect make the system more responsive?

- A. Use Amazon SOS with AWS Lambda to generate reports.
- B. Increase the Idle timeout on the Application Load Balancer to 5 minutes.
- C. Update the client-side application code to increase its request timeout to 5 minutes.
- D. Publish the reports to Amazon S3 and use Amazon CloudFront for downloading to the user.

正确答案 A

解析：

Need de-coupling. So go with SQS and Lambda.

Q446. A company is designing an internet-facing web application. The application runs on Amazon EC2 for Linux-based instances that store sensitive user data in Amazon RDS MySQL Multi-AZ DB instances. The EC2 instances are in public subnets, and the RDS DB instances are in private subnets. The security team has mandated that the DB instances be secured against web-based attacks. What should a solutions architect recommend?

- A. Ensure the EC2 instances are part of an Auto Scaling group and are behind an Application Load Balancer. Configure the EC2 instance iptables rules to drop suspicious web traffic. Create a security group for the DB instances. Configure the RDS security group to only allow port 3306 inbound from the individual EC2 instances.

- B. Ensure the EC2 instances are part of an Auto Scaling group and are behind an Application Load Balancer. Move DB instances to the same subnets that EC2 instances are located in. Create a security group for the DB instances. Configure the RDS security group to only allow port 3306 inbound from the individual EC2 instances.
- C. Ensure the EC2 instances are part of an Auto Scaling group and are behind an Application Load Balancer. Use AWS WAF to monitor inbound web traffic for threats. Create a security group for the web application servers and a security group for the DB instances. Configure the RDS security group to only allow port 3306 inbound from the web application server security group.
- D. Ensure the EC2 instances are part of an Auto Scaling group and are behind an Application Load Balancer. Use AWS WAF to monitor inbound web traffic for threats. Configure the Auto Scaling group to automatically create new DB instances under heavy traffic. Create a security group for the RDS DB instances. Configure the RDS security group to only allow port 3306 inbound.

正确答案 C

Q447. A company has an on-premises application that collects data and stores it to an on-premises NFS server. The company recently set up a 10 Gbps AWS Direct Connect connection. The company is running out of storage capacity on premises. The company needs to migrate the application data from on-premises to the AWS Cloud while maintaining low-latency access to the data from the on-premises application. What should a solutions architect do to meet these requirements?

- A. Deploy AWS Storage Gateway for the application data, and use the file gateway to store the data in Amazon S3. Connect the on-premises application servers to the file gateway using NFS.

- B. Attach an Amazon Elastic File System (Amazon EFS) file system to the NFS server, and copy the application data to the EFS file system. Then connect the on-premises application to Amazon EFS.
- C. Configure AWS Storage Gateway as a volume gateway. Make the application data available to the on-premises application from the NFS server and with Amazon Elastic Block Store (Amazon EBS) snapshots.
- D. Create an AWS DataSync agent with the NFS server as the source location and an Amazon Elastic File System (Amazon EFS) file system as the destination for application data transfer. Connect the on-premises application to the EFS file system.

正确答案 D

Q448. A software vendor is deploying a new software-as-a-service (SaaS) solution that will be utilized by many AWS users. The service is hosted in a VPC behind a Network Load Balancer. The software vendor wants to provide access to this service to users with the least amount of administrative overhead and without exposing the service to the public internet. What should a solutions architect do to accomplish this goal?

- A. Create a peering VPC connection from each user's VPC to the software vendor's VPC.
- B. Deploy a transit VPC in the software vendor's AWS account. Create a VPN connection with each user account.
- C. Connect the service in the VPC with an AWS PrivateLink endpoint. Have users subscribe to the endpoint.
- D. Deploy a transit VPC in the software vendor's AWS account. Create an AWS Direct Connect connection with each user account.

正确答案 C

Q449. 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.

正确答案 A

Q450. A company receives 10 TB of instrumentation data each day from several machines located at a single factory. The data consists of JSON files stored on a storage area network (SAN) in an on-premises data center located within the factory. The company wants to send this data to Amazon S3 where it can be accessed by several additional systems that provide critical near-real-time analytics. A secure transfer is important because the data is considered sensitive. Which solution offers the MOST reliable data transfer?

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

正确答案 B

Q451. 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.

正确答案 D

Q452. A business application is hosted on Amazon EC2 and uses Amazon S3 for encrypted object storage. The chief information security officer has directed that no application traffic between the two services should traverse the public internet. Which capability should the solutions architect use to meet the compliance requirements?

- A. AWS Key Management Service (AWS KMS) )
- B. VPC endpoint
- C. Private subnet
- D. Virtual private gateway

正确答案 B

Q453. A solutions architect must design a database solution for a high-traffic ecommerce web application. The database stores customer profiles and shopping cart information. The database must support a peak load of several million requests each second and deliver responses in milliseconds. The operational overhead for managing and scaling the database must be minimized. Which database solution should the solutions architect recommend?

- A. Amazon Aurora
- B. Amazon DynamoDB
- C. Amazon RDS
- D. Amazon Redshift

正确答案 A

Q454. A company stores 200 GB of data each month in Amazon S3. The company needs to perform analytics on this data at the end of each month to determine the number of items sold in each sales region for the previous month. Which analytics strategy is MOST cost-effective for the company to use?

- A. Create an Amazon Elasticsearch Service (Amazon ES) cluster. Query the data in Amazon ES. Visualize the data by using Kibana.
- B. Create a table in the AWS Glue Data Catalog. Query the data in Amazon S3 by using Amazon Athena. Visualize the data in Amazon QuickSight
- C. Create an Amazon EMR cluster. Query the data by using Amazon EMR, and store the results in Amazon S3. Visualize the data in Amazon QuickSight.

D. Create an Amazon Redshift cluster. Query the data in Amazon Redshift, and upload the results to Amazon S3. Visualize the data in Amazon QuickSight.

正确答案 B

Q455. A company wants a storage option that enables its data science team to analyze its data on premises and in the AWS Cloud. The team needs to be able to run statistical analyses by using the data on premises and by using a fleet of Amazon EC2 instances across multiple Availability Zones. What should a solutions architect do to meet these requirements?

- A. Use an AWS Storage Gateway tape gateway to copy the on-premises files into Amazon S3.
- B. Use an AWS Storage Gateway volume gateway to copy the on-premises files into Amazon S3.
- C. Use an AWS Storage Gateway file gateway to copy the on-premises files to Amazon Elastic Block Store (Amazon EBS).
- D. Attach an Amazon Elastic File System (Amazon EFS) file system to the on-premises servers. Copy the files to Amazon EFS.

正确答案 D

Q456. 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.

正确答案 A

Q457. A new employee has joined a company as a deployment engineer. The deployment engineer will be using AWS CloudFormation templates to create multiple AWS resources. A solutions architect wants the deployment engineer to perform job activities. While following the principle of least privilege. Which combination of actions should the solutions architect take to accomplish this goal? (Select TWO.)

A. Have the deployment engineer use AWS account root user credentials for performing AWS CloudFormation stack operations.

B. Create a new IAM user for the deployment engineer and add the IAM user to a group that has the PowerUsers IAM policy attached

C. Create a new IAM user for the deployment engineer and add the IAM user to a group that has the Administrate/Access IAM policy attached

D. Create a new IAM User for the deployment engineer and add the IAM user to a group that has an IAM policy that allows AWS CloudFormation actions only

E. Create an IAM role for the deployment engineer to explicitly define the permissions specific to the AWS CloudFormation stack and launch stacks using Dial IAM role.

正确答案 B, E

Q458. A company is moving its on-premises Oracle database to Amazon Aurora PostgreSQL. The database has several applications that write to the same tables. The applications need to be migrated one by one with a month in between each migration. Management has expressed concerns that the database has a high number of reads and writes. The data must be

kept in sync across both databases throughout the migration. What should a solutions architect recommend?

- A. Use AWS DataSync for the initial migration. Use AWS Database Migration Service (AWS DMS) to create a change data capture (CDC) replication task and a table mapping to select all tables.
- B. Use AWS DataSync for the initial migration. Use AWS Database Migration Service (AWS DMS) to create a full load plus change data capture (CDC) replication task and a table mapping to select all tables.
- C. Use the AWS Schema Conversion Tool with AWS Database Migration Service (AWS DMS) using a memory optimized replication instance. Create a full load plus change data capture (CDC) replication task and a table mapping to select all tables.
- D. Use the AWS Schema Conversion Tool with AWS Database Migration Service (AWS DMS) using a compute optimized replication instance. Create a full load plus change data capture (CDC) replication task and a table mapping to select the largest tables.

正确答案 D

Q459. 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 label with the user requests.
- D. Use the Amazon Simple Queue Service (Amazon SQS) queue and Lambda to buffer writes to DynamoDB.

正确答案 D

Q460. To meet security requirements, a company needs to encrypt all of its application data in transit while communicating with an Amazon RDS MySQL DB instance. A recent security audit revealed that encryption at rest is enabled using AWS Key Management Service (AWS KMS), but data in transit is not enabled. What should a solutions architect do to satisfy the security requirements?

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

正确答案 D

Q461. A solutions architect is redesigning a monolithic application to be a loosely coupled application composed of two microservices: Microservice A and Microservice B. Microservice A places messages in a main Amazon Simple Queue Service (Amazon SQS) queue for Microservice B to consume. When Microservice B fails to process a message after four retries, the message needs to be removed from the queue and stored for further investigation. What should the solutions architect do to meet these requirements?

- A. Create an SQS dead-letter queue. Microservice B adds failed messages to that queue after it receives and fails to process the message four times.
- B. Create an SQS dead-letter queue. Configure the main SQS queue to deliver messages to the dead-letter queue after the message has been received four times.
- C. Create an SQS queue for failed messages. Microservice A adds failed messages to that queue after Microservice B receives and fails to process the message four times.
- D. Create an SQS queue for failed messages. Configure the SQS queue for failed messages to pull messages from the main SQS queue after the original message has been received four times.

正确答案 B

Q462. A company is moving its on-premises Oracle database to Amazon Aurora PostgreSQL. The database has several applications that write to the same tables. The applications need to be migrated one by one with a month in between each migration. Management has expressed concerns that the database has a high number of reads and writes. The data must be kept in sync across both databases throughout the migration. What should a solutions architect recommend?

- A. Use AWS DataSync for the initial migration. Use AWS Database Migration Service (AWS DMS) to create a change data capture (CDC) replication task and a table mapping to select all tables.
- B. Use AWS DataSync for the initial migration. Use AWS Database Migration Service (AWS DMS) to create a full load plus change data capture (CDC) replication task and a table mapping to select all tables.
- C. Use the AWS Schema Conversion Tool with AWS Database Migration Service (AWS DMS) using a memory optimized replication instance. Create

a full load plus change data capture (CDC) replication task and a table mapping to select all tables.

D. Use the AWS Schema Conversion Tool with AWS Database Migration Service (AWS DMS) using a compute optimized replication instance. Create a full load plus change data capture (CDC) replication task and a table mapping to select the largest tables.

正确答案 D

Q463. A company has multiple applications that use Amazon RDS for MySQL as its database. The company recently discovered that a new custom reporting application has increased the number of queries on the database. This is slowing down performance. How should a solutions architect resolve this issue with the LEAST amount of application changes?

- A. Add a secondary DB instance using Multi-AZ.
- B. Set up a read replica and Multi-AZ on Amazon RDS.
- C. Set up a standby replica and Multi-AZ on Amazon RDS.
- D. Use caching on Amazon RDS to improve the overall performance.

正确答案 B

Q464. A company wants to automate the security assessment of its Amazon EC2 instances. The company needs to validate and demonstrate that security and compliance standards are being followed throughout the development process. What should a solutions architect do to meet these requirements?

- A. Use Amazon Macie to automatically discover, classify, and protect the EC2 instances.

- B. Use Amazon GuardDuty to publish Amazon Simple Notification Service (Amazon SNS) notifications.
- C. Use Amazon Inspector with Amazon CloudWatch to publish Amazon Simple Notification Service (Amazon SNS) notifications.
- D. Use Amazon EventBridge (Amazon CloudWatch Events) to detect and react to changes in the status of AWS Trusted Advisor checks.

正确答案 C

**解析：**

FM20102431<https://aws.amazon.com/cn/inspector/>

Q465. A company has an application that is hosted on Amazon EC2 instances in two private subnets. A solutions architect must make the application available on the public internet with the least amount of administrative effort. What should the solutions architect recommend?

- A. Create a load balancer and associate two public subnets from the same Availability Zones as the private instances. Add the private instances to the load balancer.
- B. Create a load balancer and associate two private subnets from the same Availability Zones as the private instances. Add the private instances to the load balancer.
- C. Create an Amazon Machine Image (AMI) of the instances in the private subnet and restore in the public subnet. Create a load balancer and associate two public subnets from the same Availability Zones as the public instances.
- D. Create an Amazon Machine Image (AMI) of the instances in the private subnet and restore in the public subnet. Create a load balancer and associate two private subnets from the same Availability Zones as the public instances.

正确答案 A

Q466. A solutions architect must provide a fully managed replacement for an on-premises solution that allows employees and partners to exchange files. The solution must be easily accessible to employees connecting from on-premises systems, remote employees, and external partners. Which solution meets these requirements?

- A. Use AWS Transfer for SFTP to transfer files into and out of Amazon S3
- B. Use AWS Snowball Edge for local storage and large-scale data transfers.
- C. Use Amazon FSx to store and transfer files to make them available remotely.
- D. Use AWS Storage Gateway to create a volume gateway to store and transfer files to Amazon S3.

正确答案 A

解析：

<https://aws.amazon.com/cn/aws-transfer-family/?whats-new-cards.sort-by=item.additionalFields.postDateTime&whats-new-cards.sort-order=desc>

Q467. A company has an application that ingests incoming messages. These messages are then quickly consumed by dozens of other applications and microservices. The number of messages varies drastically and sometimes spikes as high as 100 000 each second. The company wants to decouple the solution and increase scalability. Which solution meets these requirements?

- A. Persist the messages to Amazon Kinesis Data Analytics. All the applications will read and process the messages.

- B. Deploy the application on Amazon EC2 instances in an Auto Scaling group, which scales the number of EC2 instances based on CPU metrics.
- C. Write the messages to Amazon Kinesis Data Streams with a single shard. All applications will read from the stream and process the messages.
- D. Publish the messages to an Amazon Simple Notification Service (Amazon SNS) topic with one or more Amazon Simple Queue Service (Amazon SQS) subscriptions. All applications then process the messages from the queues.

正确答案 D

#### 解析：

排除法，A 的 KDA 是用于数据分析的，C 的 KDS 也是结合数据分析用的，都排除。B 和 D 方案上都可以实现，但是题目说了想解耦，那 EC2 基本就是把原方案搬上云，没解耦，而且费用比 SNS，SQS 组合方案高，所以 D 更好。

Q468. A company wants to move a multi-tiered application from on premises to the AWS Cloud to improve the application's performance. The application consists of application tiers that communicate with each other by way of RESTful services. Transactions are dropped when one tier becomes overloaded. A solutions architect must design a solution that resolves these issues and modernizes the application. Which solution meets these requirements and is the MOST operationally efficient?

- A. Use Amazon API Gateway and direct transactions to the AWS Lambda functions as the application layer. Use Amazon Simple Queue Service (Amazon SQS) as the communication layer between application services.
- B. Use Amazon CloudWatch metrics to analyze the application performance history to determine the servers' peak utilization during the performance failures. Increase the size of the application server's Amazon EC2 instances to meet the peak requirements.
- C. Use Amazon Simple Notification Service (Amazon SNS) to handle the messaging between application servers running on Amazon EC2 in an Auto

Scaling group. Use Amazon CloudWatch to monitor the SNS queue length and scale up and down as required.

D. Use Amazon Simple Queue Service (Amazon SQS) to handle the messaging between application servers running on Amazon E02 in an Auto Scaling group. Use Amazon CloudWatch to monitor the SQS queue length and scale up when communication failures are detected.

正确答案 A

Q469. A company recently started using Amazon Aurora as the data store for its global ecommerce application. When large reports are run, developers report that the ecommerce application is performing poorly. After reviewing metrics in Amazon CloudWatch, a solutions architect finds that the Read10PS and CPUUtilization metrics are spiking when monthly reports run. What is the MOST cost-effective solution?

- A. Migrate the monthly reporting to Amazon Redshift
- B. Migrate the monthly reporting to an Aurora Replica.
- C. Migrate the Aurora database to a larger instance class.
- D. Increase the Provisioned 10PS on the Aurora instance.

正确答案 B

Q470. A company that recently started using AWS establishes a Site-to-Site VPN between its on-premises data center and AWS. The company's security mandate states that traffic originating from on premises should stay within the company's private IP space when communicating with an Amazon Elastic Container Service (Amazon ECS) cluster that is hosting a sample web application. Which solution meets this requirement?

- A. Configure a gateway endpoint for Amazon ECS. Modify the route table to include an entry pointing to the ECS cluster.

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

正确答案 B

Q471. A company has created a multi-tier application for its ecommerce website. The website uses an Application Load Balancer that resides in the public subnets, a web tier in the public subnets, and a MySQL cluster hosted on Amazon EC2 instances in the private subnets. The MySQL database needs to retrieve product catalog and pricing information that is hosted on the internet by a third party provider. A solutions architect must devise a strategy that maximizes security without increasing operational overhead. What should the solutions architect do to meet these requirements?

- A. Deploy a NAT instance in the VPC. Route all the internet-based traffic through the NAT instance.
- B. Deploy a NAT gateway in the public subnets. Modify the private subnet route table to direct all internet-bound traffic to the NAT gateway.
- C. Configure an internet gateway and attach it to the VPC. Modify the private subnet route table to direct internet-bound traffic to the internet gateway.
- D. Configure a virtual private gateway and attach it to the VPC. Modify the private subnet route table to direct internet-bound traffic to the virtual private gateway.

正确答案 B

Q472. A company has two applications: a sender application that sends messages with payloads to be processed and a processing application intended to receive the messages with payloads. The company wants to implement an AWS service to handle messages between the two applications. The sender application can send about 1,000 messages each hour. The messages may take up to 2 days to be processed. If the messages fail to process, they must be retained so that they do not impact the processing of any remaining messages. Which solution meets these requirements and is the MOST operationally efficient?

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

正确答案 C

Q473. A company's order fulfillment service uses a MySQL database. The database needs to support a large number of concurrent queries and transactions. Developers are spending time patching and tuning the database. This is causing delays in releasing new product features. The company wants to use cloud-based services to help address this new

challenge. The solution must allow the developers to migrate the database with little or no code changes and must optimize performance. Which service should a solutions architect use to meet those requirements?

- A. Amazon Aurora
- B. Amazon DynamoDB
- C. Amazon ElastiCache
- D. MySQL on Amazon EC2

正确答案 A

Q474. A company hosts a website on premises and wants to migrate it to the AWS Cloud. The website exposes a single hostname to the internet, but it routes its functions to different on-premises server groups based on the path of the URL. The server groups are scaled independently depending on the needs of the functions they support. The company has an AWS Direct Connect connection configured to its on-premises network. What should a solutions architect do to provide path-based routing to send the traffic to the correct group of servers?

- A. Route all traffic to an internet gateway. Configure pattern matching rules at the internet gateway to route traffic to the group of servers supporting that path.
- B. Route all traffic to a Network Load Balancer (NLB) with target groups for each group of servers. Use pattern matching rules at the NLB to route traffic to the correct target group.
- C. Route all traffic to an Application Load Balancer (ALB). Configure path-based routing at the ALB to route traffic to the correct target group for the servers supporting that path.

D. Use Amazon Route 53 as the DNS server. Configure Route 53 path-based alias records to route traffic to the correct Elastic Load Balancer for the group of servers supporting that path.

正确答案 D

Q475. A company has an Amazon S3 bucket that contains mission-critical data. The company wants to ensure this data is protected from accidental deletion. The data should still be accessible and a user should be able to delete the data intentionally. Which combination of steps should a solutions architect take to accomplish this? (Select 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.

正确答案 A, B

Q476. A company uses on-premises servers to host its applications. The company is running out of storage capacity. The applications use both block storage and NFS storage. The company needs a high-performing solution that supports local caching without re-architecting its existing applications. Which combination of actions should a solutions architect take to meet these requirements? (Select TWO.)

- A. Mount Amazon S3 as a file system to the on-premises servers.
- B. Deploy an AWS Storage Gateway file gateway to replace NFS storage.
- C. Deploy AWS Snowball Edge to provision NFS mounts to on-premises servers.

- D. Deploy an AWS Storage Gateway volume gateway to replace the block storage.
- E. Deploy Amazon Elastic File System (Amazon EFS) volumes and mount them to on-premises servers.

正确答案 B, D

### 解析：

<https://docs.aws.amazon.com/storagegateway/latest/userguide/WhatIsStorageGateway.html>:

“A file gateway simplifies file storage in Amazon S3, integrates to existing applications through industry-standard file system protocols, and provides a cost-effective alternative to on-premises storage. It also provides low-latency access to data through transparent local caching”

“Cached volumes – You store your data in Amazon Simple Storage Service (Amazon S3) and retain a copy of frequently accessed data subsets locally.”

Q477. A company wants to build an immutable infrastructure for its software applications. The company wants to test the software applications before sending traffic to them. The company seeks an efficient solution that limits the effects of application bugs. Which combination of steps should a solutions architect recommend? (Select TWO.)

- A. Use AWS CloudFormation to update the production infrastructure and roll back the stack if the update fails.
- B. Apply Amazon Route 53 weighted routing to test the staging environment and gradually increase the traffic as the tests pass.
- C. Apply Amazon Route 53 failover routing to test the staging environment and fail over to the production environment if the tests pass.

- D. Use AWS CloudFormation with a parameter set to the staging value in a separate environment other than the production environment.
- E. Use AWS CloudFormation to deploy the staging environment with a snapshot deletion policy and reuse the resources in the production environment if the tests pass.

正确答案 B, D

Q478. A company hosts its application in the AWS Cloud. The application runs on Amazon EC2 instances behind an Elastic Load Balancer in an Auto Scaling group and with an Amazon DynamoDB table. The company wants to ensure the application can be made available in another AWS Region with minimal downtime. What should a solutions architect do to meet these requirements with the LEAST amount of downtime?

- A. Create an Auto Scaling group and a load balancer in the disaster recovery Region. Configure the DynamoDB table as a global table. Configure DNS failover to point to the new disaster recovery Region's load balancer.
- B. Create an AWS CloudFormation template to create EC2 instances, load balancers, and DynamoDB tables to be executed when needed. Configure DNS failover to point to the new disaster recovery Region's load balancer.
- C. Create an AWS CloudFormation template to create EC2 instances and a load balancer to be executed when needed. Configure the DynamoDB table as a global table. Configure DNS failover to point to the new disaster recovery Region's load balancer.
- D. Create an Auto Scaling group and load balancer in the disaster recovery Region. Configure the DynamoDB table as a global table. Create an Amazon CloudWatch alarm to trigger an AWS Lambda function that updates Amazon Route 53 pointing to the disaster recovery load balancer.

正确答案 A

解析：

You will not need to make any effort if some disaster happens. The system will automatically handle everything without launching CF templates (manually or automatically).

Just curious, you as an architect, how are you going without any downtime to understand that CF template should be run? Sitting in front of the monitor and refreshing the web page with AWS console? Even in your case you will have to wait for failing health checks (or other triggers). But with option "A" if health checks are failed system will switch to failover configuration and that's it. No need to wait for resources being deployed

Q479. A company serves a multilingual website from a fleet of Amazon EC2 instances behind an Application Load Balancer (ALB). This architecture is currently running in the us-west-1 Region but is exhibiting high request latency for users 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. How should a solutions architect accomplish this?

- A. Replace the existing architecture with a website served from an Amazon S3 bucket. Configure an Amazon CloudFront distribution with the S3 bucket as the origin.
- B. Configure an Amazon CloudFront distribution with the ALB as the origin. Set the echo behavior settings to only echo based on the Accept-Language request header.
- C. Set up Amazon API Gateway with the ALB as an integration. Configure API Gateway to use an HTTP integration type. Set up an API Gateway stage to enable the API cache.

D. Launch an EC2 instance in each additional Region and configure NGINX to act as a cache server for that Region. Put all the instances plus the ALB behind an Amazon Route 53 record set with a geolocation routing policy.

正确答案 B

Q480. A company wants to use high performance computing (HPC) infrastructure on AWS for financial risk modeling. The company's HPC workloads run on Linux. Each HPC workflow runs on hundreds of Amazon EC2 Spot Instances, is short-lived and generates thousands of output files that are ultimately stored in persistent storage for analytics and long term future use. The company seeks a cloud storage solution that permits the copying of on-premises data to long-term persistent storage to make data available for processing by all EC2 instances. The solution should also be a high performance file system that is integrated with persistent storage to read and write datasets and output files. Which combination of AWS services meets these requirements?

- A. Amazon FSx for Lustre integrated with Amazon S3
- B. Amazon FSx for Windows File Server integrated with Amazon S3
- C. Amazon S3 Glacier integrated with Amazon Elastic Block Store (Amazon EBS)
- D. Amazon S3 bucket with a VPC endpoint integrated with an Amazon Elastic Block Store (Amazon EBS) General Purpose SSD (gp2) volume.

正确答案 A

Q481. A company's website hosted on Amazon EC2 instances processes classified data stored in Amazon S3. Due to security concerns, the company requires a private and secure connection between its EC2 resources and Amazon S3. Which solution meets these requirements?

- A. Set up S3 bucket policies to allow access from a VPC endpoint
- B. Set up an IAM policy to grant read-write access to the S3 bucket.
- C. Set up a NAT gateway to access resources outside the private subnet.
- D. Set up an access key ID and a secret access key to access the S3 bucket.

正确答案 A

Q482. A company recently migrated a message processing system to AWS. The system receives messages into an ActiveMQ queue running on an Amazon EC2 instance. Messages are processed by a consumer application running on Amazon EC2. The consumer application processes the messages and writes results to a MySQL database running on Amazon EC2. The company wants this application to be highly available with low operational complexity. Which architecture offers the HIGHEST availability?

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

正确答案 D

Q483. A company has an on-premises business application that generates hundreds of files each day. These files are stored on an SMB file share and require a low-latency connection to the application servers. A new company policy states all application-generated files must be copied to AWS. There is already a VPN connection to AWS. The application development team does not have time to make the necessary code modifications to move the application to AWS. Which service should a solutions architect recommend to allow the application to copy files to AWS?

- A. Amazon Elastic File System (Amazon EFS)
- B. Amazon FSx for Windows File Server
- C. AWS Snowball
- D. AWS Storage Gateway

正确答案 D

Q484. A company wants to build an online marketplace application on AWS as a set of loosely coupled microservices. For this application, when a customer submits a new order, two microservices should handle the event simultaneously. The Email microservice will send a confirmation email, and the OrderProcessing microservice will start the order delivery process. If a customer cancels an order, the OrderCancellation and Email microservices should handle the event simultaneously. A solutions architect wants to use Amazon Simple Queue Service (Amazon SQS) and Amazon Simple Notification Service (Amazon SNS) to design the messaging between the microservices. How should the solutions architect design the solution?

- A. Create a single SQS queue and publish order events to it. The Email, OrderProcessing, and OrderCancellation microservices can then consume messages off the queue.
- B. Create three SNS topics for each microservice. Publish order events to the three topics. Subscribe each of the Email, OrderProcessing, and OrderCancellation microservices to its own topic.
- C. Create an SNS topic and publish order events to it. Create three SQS queues for the Email, OrderProcessing, and OrderCancellation microservices. Subscribe all SQS queues to the SNS topic with message filtering.
- D. Create two SQS queues and publish order events to both queues simultaneously. One queue is for the Email and OrderProcessing microservices. The second queue is for the Email and OrderCancellation microservices.

正确答案 C

Q485. A company runs its production workload on an Amazon Aurora MySQL DB cluster that includes six Aurora Replicas. The company wants near-real-time reporting queries from one of its departments to be automatically distributed across three of the Aurora Replicas. Those three replicas have a different compute and memory specification from the rest of the DB cluster. Which solution meets these requirements?

- A. Create and use a custom endpoint for the workload.
- B. Create a three-node cluster clone and use the reader endpoint.
- C. Use any of the instance endpoints for the selected three nodes.
- D. Use the reader endpoint to automatically distribute the read-only workload.

### 正确答案 A

Q486. A company is running a multi-tier web application on AWS. The application runs its database tier on Amazon Aurora MySQL. The application and database tiers are in the us-east-1 Region. A database administrator who regularly monitors the Aurora DB cluster finds that an intermittent increase in read traffic is creating high CPU utilization on the read replica and causing increased read latency of the application. What should a solutions architect do to improve read scalability?

- A. Reboot the Aurora DB cluster.
- B. Create a cross-Region read replica.
- C. Increase the instance class of the read replica.
- D. Configure Aurora Auto Scaling for the read replica.

### 正确答案 D

Q487. A company is launching an ecommerce website on AWS. This website is built with a three-tier architecture that includes a MySQL database. In a Multi-AZ deployment of Amazon Aurora MySQL. The website application must be highly available and will initially be launched in an AWS Region with three Availability Zones. The application produces a metric that describes the load the application experiences. Which solution meets these requirements?

- A. Configure an Application Load Balancer (ALB) with Amazon EC2 Auto Scaling behind the ALB with scheduled scaling
- B. Configure an Application Load Balancer (ALB) and Amazon EC2 Auto Scaling behind the ALB with a simple scaling policy.

C. Configure a Network Load Balancer (NLB) and launch a Spot Fleet with Amazon EC2 Auto Scaling behind the NLB.

D. Configure an Application Load Balancer (ALB) and Amazon EC2 Auto Scaling behind the ALB with a target tracking scaling policy.

正确答案 D

Q488. A company is using a third-party vendor to manage its marketplace analytics. The vendor needs limited programmatic access to resources in the company's account. All the needed policies have been created to grant appropriate access. Which additional component will provide the vendor with the MOST secure access to the account?

A. Create an IAM user.

B. Implement a service control policy (SCP)

C. Use a cross-account role with an external ID.

D. Configure a single sign-on (SSO) identity provider.

正确答案 D

Q489. A solutions architect is working on optimizing a legacy document management application running on Microsoft a network file share. The chief information officer wants to reduce the on-premises data center footprint and minimize storage by moving on-premises storage to AWS. What should the solution architect do to meet these requirements?

A. Set up an AWS Storage Gateway file gateway.

B. Set up Amazon Elastic File System (Amazon EFS).

C. Set up AWS Storage Gateway as a volume gateway.

D. Set up an Amazon Elastic Block Store (Amazon EBS) volume.

### 正确答案 A

Q490. A company hosts its static website content from an Amazon S3 bucket in the us-east-1 Region. Content is made available through an Amazon CloudFront origin pointing to that bucket. Cross-Region replication is set to create a second copy of the bucket in the ap-southeast-1 Region. Management wants a solution that provides greater availability for the website. Which combination of actions should a solutions architect take to increase availability? (Choose two.)

- A. Add both buckets to the CloudFront origin.
- B. Configure failover routing in Amazon Route 53
- C. Create a record in Amazon Route 53 pointing to the replica bucket.
- D. Create an additional CloudFront origin pointing to the ap-southeast-1 bucket.
- E. Set up a CloudFront origin group with the us-east-1 bucket as the primary and the ap-southeast-1 bucket as the secondary.

### 正确答案 B, E

Q491. A company has a build server that is in an Auto Scaling group and often has multiple Linux instances running. The build server requires consistent and mountable shared NFS storage for jobs and configurations. Which storage option should a solutions architect recommend?

- A. Amazon S3
- B. Amazon FSx
- C. Amazon Elastic Block Store (Amazon EBS)
- D. Amazon Elastic File System (Amazon EFS)

正确答案 D

Q492. A company has an image processing workload running on Amazon Elastic Container Service (Amazon ECS) in two private subnets. Each private subnet uses a NAT instance for internet access. All images are stored in Amazon S3 buckets. The company is concerned about the data transfer costs between Amazon ECS and Amazon S3. What should a solutions architect do to reduce costs?

- A. Configure a NAT gateway to replace the NAT instances.
- B. Configure a gateway endpoint for traffic destined to Amazon S3.
- C. Configure an interface endpoint for traffic destined to Amazon S3.
- D. Configure Amazon CloudFront for the S3 bucket storing the images.

正确答案 B

解析：

VPC endpoints +S3/DynamoDB = gateway

Q493. 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. Run the Storage Gateway software appliance on premises and configure a percentage of data to cache locally. Mount the gateway storage volumes to provide local access to the data.
- D. Use AWS Storage Gateway and configure a stored volume gateway. Run the Storage Gateway software appliance on premises and map the gateway storage volumes to on-premises storage. Mount the gateway storage volumes to provide local access to the data.

正确答案 D

<https://docs.aws.amazon.com/snowball/latest/developer-guide/BestPractices.html>

Q494. A company hosts historical weather records in Amazon S3. The records are downloaded from the company's website by a way of a URL that resolves to a domain name. Users all over the world access this content through subscriptions. A third-party provider hosts the company's root domain name, but the company recently migrated some of its services to Amazon Route 53. The company wants to consolidate contracts, reduce latency for users, and reduce costs related to serving the application to subscribers. Which solution meets these requirements?

- A. Create a web distribution on Amazon CloudFront to serve the S3 content for the application. Create a CNAME record in a Route 53 hosted zone that points to the CloudFront distribution, resolving to the application's URL domain name.
- B. Create a web distribution on Amazon CloudFront to serve the S3 content for the application. Create an ALIAS record in the Amazon Route 53 hosted zone that points to the CloudFront distribution, resolving to the application's URL domain name.
- C. Create an A record in a Route 53 hosted zone for the application. Create a Route 53 traffic policy for the web application, and configure a geolocation rule. Configure health checks to check the health of the

endpoint and route DNS queries to other endpoints if an endpoint is unhealthy.

D. Create an A record in a Route 53 hosted zone for the application.  
Create a Route 53 traffic policy for the web application, and configure a geoproximity rule. Configure health checks to check the health of the endpoint and route DNS queries to other endpoints if an endpoint is unhealthy.

正确答案 B

Q495. A company is moving its on-premises applications to Amazon EC2 instances. However, as a result of fluctuating compute requirements, the EC2 instances must always be ready to use between 8 AM and 5 PM in specific Availability Zones. Which EC2 instances should the company choose to run the applications?

- A. Scheduled Reserved Instances
- B. On-Demand Instances
- C. Spot Instances as part of a Spot Fleet
- D. EC2 instances in an Auto Scaling group

正确答案 A

Q496. A company is building an application on Amazon EC2 instances that generates temporary transactional data. The application requires access to data storage that can provide configurable and consistent IOPS. What should a solutions architect recommend?

- A. Provision an EC2 instance with a Throughput Optimized HDD (st1) root volume and a Cold HDD (sc1) data volume.
- B. Provision an EC2 instance with a Throughput Optimized HDD (st1) volume that will serve as the root and data volume.

- C. Provision an EC2 instance with a General Purpose SSD (gp2) root volume and Provisioned IOPS SSD (io1) data volume.
- D. Provision an EC2 instance with a General Purpose SSD (gp2) root volume. Configure the application to store its data in an Amazon S3 bucket.

正确答案 C

Q497. A solutions architect needs to design an Amazon RDS for MySQL solution whereby users must be authenticated using only SSL connections. How should the solutions architect design the solution?

- A. Only allow SSL connections through a VPC security group.
- B. Use GRANT and ALTER commands with the REQUIRE SSL option for the user.
- C. Connect with a MySQL client that references the public key.
- D. Ensure that the SSL parameters are set in the parameter group at launch.

正确答案 B

Q498. An application is scanning an Amazon DynamoDB table that was created with default settings. The application occasionally reads stale data when it queries the table. How can this issue be corrected?

- A. Increase the provisioned read capacity of the table.
- B. Enable Auto Scaling on the DynamoDB table.
- C. Update the application to use strongly consistent reads.
- D. Re-create the DynamoDB table with eventual consistency disabled.

正确答案 C

Q499. A solutions architect is designing an API that will use Amazon API Gateway, which is backed by AWS Lambda. The Lambda function is not running inside a VPC and will query Amazon DynamoDB to get the results. The user will include the ItemId request parameter in the URL query string as the key to retrieve the data. The solutions architect analyzed the traffic pattern and has noticed that customers are sending repeated queries to get the same information. The solutions architect wants to implement a caching mechanism to reduce the load on the database and improve query latency.

What should the solutions architect do to implement a caching solution?

- A. In API Gateway, add an additional Cache-Control:only-if-cached header before sending the request to Lambda
- B. In API Gateway, enable caching based on the ItemId query parameter.
- C. In Lambda use /tmp as the cache directory to store previously retrieved requests.
- D. In Amazon ElastiCache, store previously retrieved requests and query the cluster before querying the database.

正确答案 B

Q500. A solutions architect is investigating purchasing options for a batch processing application on Amazon EC2. The batch job downloads an image from an Amazon S3 bucket, adds copyright information, and uploads it back to Amazon S3. formally takes 5 to 10 hours to process all the files uploaded each week. The application has built-in capabilities to process files in parallel, recover from the instance failures, and continue the processing from where it left off. What is the MOST cost-effective purchasing option the solutions architect can recommend?

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

正确答案 C

Q501. A company's new web application running on Amazon EC2 across multiple Availability Zones (AZs) will be heavily accessed during regular business hours. After business hours, usage will be minimal. What fleet-scaling approach should be used to size the EC2 fleet to handle the traffic demands?

- A. Manual scaling across all AZs.
- B. Provisioning for peak traffic.
- C. Scheduled scaling.
- D. Programmatic termination of all instances in one AZ during off-peak hours.

正确答案 C

Q502. A web application has an increase in traffic during certain times of the day, and a solutions architect notices that CPU usage is high during those periods. Sometimes the CPU usage reaches 100%, which results in poor application performance. How should the solutions architect ensure that adequate compute resources are provisioned at all times?

- A. Launch Spot Instances when CPU exceeds a given threshold.
- B. Use Elastic Load Balancing to balance the load during high-traffic periods

- C. Use Amazon EC2Auto Scaling to launch instances when CPU exceeds a given threshold
- D. Purchase Reserved Instances to ensure capacity.

正确答案 D

Q503. A customer has an application that consists of two layers: an ingestion layer that does some initial processing, and a second layer that does additional processing, which is much more resource intensive. The first layer consists of EC2 On-Demand Instances to ensure that all requests can be successfully received. The second layer for processing requires GPUs and uses Spot Instances. What service should the first layer use to deliver job batches to the second layer?

- A. AWS Batch
- B. Amazon SQS
- C. Amazon SNS
- D. AWS Step Functions

正确答案 B

Q504. Users submit requests to a service that takes several minutes to process. A solutions architect needs to ensure that these requests are processed at least once, and that the service has the ability to handle large increases in the number of requests. How should these requirements be met?

- A. Put the requests into an Amazon SQS queue and configure Amazon EC2 instances to poll the queue.
- B. Publish the message to an Amazon SNS topic that an Amazon EC2 subscriber can receive and process

- C. Save the request to an Amazon DynamoDB table with a DynamoDB stream that triggers an Amazon EC2 Spot Instance
- D. Use Amazon S3 to store the requests and configure an event notification to have Amazon EC2 instances process the new object

正确答案 A

Q505. 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 blocks Associate the route table to the database subnets.
- B. Create a security group that denies ingress from the security group used by instances in the public subnets. Attach the security group to an Amazon RDS DB instance
- C. Create a security group that allows ingress from the security group used by instances in the private subnets. Attach the security group to an Amazon RDS DB instance.
- D. Create a new peering connection between the public subnets and the private subnets. Create a different peering connection between the private subnets and the database subnets.

正确答案 C

Q506. A company has an on-premises MySQL database used by the global sales team with infrequent access patterns. The sales team requires the database to have minimal downtime. A database administrator wants to migrate this database to AWS without selecting a particular instance

type in anticipation of more users in the future. Which service should a solution architect recommend?

- A. Amazon Aurora MySQL
- B. Amazon Aurora Serverless for MySQL
- C. Amazon Redshift Spectrum
- D. Amazon RDS for MySQL

正确答案 B

Q507. A company maintains about 300 TB in Amazon S3 Standard storage month after month. The S3 objects are each typically around 50 GB in size and are frequently replaced with multipart uploads by their global application. The number and size of S3 objects remain constant but the company's S3 storage costs are increasing each month. How should a solutions architect reduce costs in this situation?

- A. Switch from multipart uploads to Amazon S3 Transfer Acceleration
- B. Enable an S3 Lifecycle policy that deletes incomplete multipart uploads
- C. Configure S3 inventory to prevent objects from being archived too quickly
- D. Configure Amazon CloudFront to reduce the number of objects stored in Amazon S3

正确答案 B

Q508. A solutions architect plans to convert a company's monolithic web application into a multi-tier application. The company wants to avoid managing its own infrastructure. The minimum requirements for the web application are high availability scalability and regional low latency

during peak hours. The solution should also store and retrieve data with millisecond latency using the application's API. Which solution meets these requirements?

- A. Use AWS Fargate to host the web application with backend Amazon RDS Multi-AZ DB instances
- B. Use Amazon API Gateway with an edge-optimized API endpoint, AWS Lambda for compute and Amazon DynamoDB as the data store
- C. Use an Amazon Route 53 routing policy with geolocation that points to an Amazon S3 bucket with static website hosting and Amazon DynamoDB as the data store
- D. Use an Amazon CloudFront distribution that points to an Elastic Load Balancer with an Amazon EC2 Auto Scaling group, along with Amazon RDS Multi-AZ DB instances

正确答案 D

Q509. An administrator of a large company wants to monitor for and prevent any cryptocurrency-related attacks on the company's AWS accounts. Which AWS service can the administrator use to protect the company against attacks?

- A. Amazon Cognito
- B. Amazon GuardDuty
- C. Amazon Inspector
- D. Amazon Macie

正确答案 B

Q510. A solutions architect is designing an VPC that requires access to a remote API server using IPv6. Resources within the VPC should not be accessed directly from the internet. How should this be achieved?

- A. Use a NAT gateway and deny public access using security groups.
- B. Attach an egress-only internet gateway and update the routing tables
- C. Use a NAT gateway and update the routing tables
- D. Attach an internet gateway and deny public access using security groups

正确答案 B

Q511. A company needs to store data for 6 years. The company will need to have immediate and highly available access to the data at any point in time, but will not require frequent access. What lifecycle action should be taken to meet these requirements while reducing costs?

- A. Transition objects from Amazon S3 Standard to Amazon S3 Standard Infrequent Access (S3 Standard IA)
- B. Transition objects to expire after 5 years
- C. Transition objects from Amazon S3 Standard to Amazon S3 One Zone-Infrequent Access (S3 One Zone IA)
- D. Transition objects from Amazon S3 Standard to the Amazon S3 Glacier

正确答案 A

Q512. A company has a three-tier, stateless web application. The company's web and application tiers run on Amazon EC2 instances in an Auto Scaling group with an Amazon Elastic Block Store (Amazon EBS) root volume, and the database tier runs on Amazon RDS for PostgreSQL. The

company's recovery point objective (RPO) is 2 hours. What should a solutions architect recommend to enable backups for this environment?

- A. Take snapshots of EBS volumes of the EC2 instances and database every 2 hours
- B. Configure a snapshot lifecycle policy to take EBS snapshots and configure an automated database backup in Amazon RDS to meet the RPO
- C. Take snapshots of EBS volumes of the EC2 instances every 2 hours  
Configure automated database backup in Amazon RDS so that it runs every 2 hours
- D. Retain the latest Amazon Machine Images (AMIs) of the web and application tiers  
Configure daily Amazon RDS snapshots and use point-in-time recovery to meet the RPO.

正确答案 D

Q513. A company is running a database on Amazon Aurora. The database is idle every evening. An application that performs extensive reads on the database experiences performance issues during morning thus when user traffic spikes. During these peak periods, the application receives timeout errors when reading from the database. The company does not have a dedicated operations team and needs an automated solution to address the performance issues. Which actions should a solutions architect take to automatically adjust to the increased read load on the database?  
(Select TWO )

- A. Migrate the database to Aurora Serverless.
- B. Increase the instance size of the Aurora database
- C. Configure Aurora Auto Scaling with Aurora Replicas
- D. Migrate the database to an Aurora multi-master cluster
- E. Migrate the database to an Amazon RDS for MySQL Multi-AZ deployment

正确答案 A, C

Q514. A company runs an application in the AWS Cloud and uses Amazon DynamoDB as the database. The company deploys Amazon EC2 instances to a private network to process data from the database. The company uses two NAT instances to provide connectivity to DynamoDB. The company wants to retire the NAT instances. A solutions architect must implement a solution that provides connectivity to DynamoDB and that does not require ongoing management. What is the MOST cost-effective solution that meets these requirements?

- A. Create a gateway VPC endpoint to provide connectivity to DynamoDB
- B. Configure a managed NAT gateway to provide connectivity to DynamoDB
- C. Establish an AWS Direct Connect connection between the private network and DynamoDB
- D. Deploy an AWS PrivateLink endpoint service between the private network and DynamoDB

正确答案 A

Q515. A company is running its application in a single region on Amazon EC2 with Amazon Elastic Block Store (Amazon EBS) and S3 as part of the storage design. What should be done to reduce data transfer costs?

- A. Create a copy of the compute environment in another AWS Region
- B. Convert the application to run on Lambda@Edge
- C. Create an Amazon CloudFront distribution with Amazon S3 as the origin
- D. Replicate Amazon S3 data to buckets in AWS Regions closer to the requester

正确答案 C

Q516. A company is running an application on Amazon EC2 instances hosted in a private subnet of a VPC . The EC2 instances are configured in an Auto Scaling group behind an Elastic Load Balancer (ELB). The EC2 instances use a NAT gateway for outbound internet access. However the EC2 instances are not able to connect to the public internet to download software updates. What are the possible root causes of this issue? (Select TWO )

- A. The ELB is not configured with a proper health check
- B. The route tables in the VPC are configured incorrectly
- C. The EC2 instances are not associated with an Elastic IP address
- D. The security group attached to the NAT gateway is configured incorrectly
- E. The outbound rules on the security group attached to the EC2 Instances are configured incorrectly.

正确答案 B, E

Q517. After reviewing the cost optimization checks in AWS Trusted Advisor, a team finds that it has 10,000 Amazon Elastic Block Store (Amazon EBS) snapshots in its account that are more than 30 days old. When the team determines that it needs to implement better governance for the lifecycle of its resources. Which actions should the team take to automate the lifecycle management of the EBS snapshots with the LEAST effort? (Select TWO )

- A. Create and schedule a backup plan with AWS Backup
- B. Copy the EBS snapshots to Amazon S3 and then create lifecycle configurations in the S3 bucket
- C. Use Amazon Data Lifecycle Manager (Amazon DLM)

D. Use a scheduled event in Amazon EventBridge (Amazon CloudWatch Events) and invoke AWS Step Functions to manage the snapshots

E. Schedule and run backups in AWS Systems Manager.

正确答案 D, E

Q518. A company runs a legacy application with a single-tier architecture on an Amazon EC2 instance Disk I/O is low. With occasional small spikes during business hours. The company requires the instance to be stopped from 8 PM to 8 AM daily. Which storage option is MOST appropriate for this workload?

A. Amazon EC2 instance storage

B. Amazon EBS General Purpose SSD (gp2) storage

C. Amazon S3

D. Amazon EBS Provisioned IOPS SSD (io2) storage

正确答案 B

Q519. A company is building a cloud storage and sharing application for photos. Users can upload photos from their computers and mobile phones to be stored durably in the cloud. After photos are uploaded, most are shared and downloaded frequently for the first 40–90 days. The photos are generally accessed less often after 90 days but some photos maintain a high access rate. The application initially stores photos in Amazon S3 Standard. A solutions architect needs to reduce the application's operational costs without sacrificing user experience or data durability. Which strategy should the solutions architect use to meet these requirements MOST cost-effectively?

A. Define an S3 Lifecycle rule to transition objects to S3 Intelligent-Tiering immediately

- B. Define an S3 Lifecycle rule to transition objects from S3 Standard to S3 Glacier after 90 days
- C. Define an S3 Lifecycle rule to transition objects from S3 Standard to S3 Standard Infrequent Access (S3 Standard-IA) after 65 days
- D. Define an S3 Lifecycle rule to transition objects from S3 Standard to S3 One Zone-Infrequent Access (S3 One zone-IA) after 90 days

正确答案 A

Q520. A solutions architect is designing a shared storage solution for a web application that is deployed across multiple Availability Zones. The web application runs on Amazon EC2 instances in an Auto Scaling group. The company anticipates making frequent changes to the content, so the solution must have strong consistency. Which solution meets these requirements?

- A. Create an Amazon S3 bucket to store the web content. Use Amazon CloudFront to deliver the content.
- B. Create an Amazon Elastic File System (Amazon EFS) file system and mount it on the individual EC2 instances.
- C. Create a shared Amazon Elastic Block Store (Amazon EBS) volume and mount it on the individual EC2 instances.
- D. Use AWS DataSync to perform continuous synchronization of data between EC2 hosts in the Auto Scaling group.

正确答案 B

Q521. A company designs a mobile app for its customers to upload photos to a website. The app needs a secure login with multi-factor authentication (MFA). The company wants to limit the initial build time

and the maintenance of the solution. Which solution should a solutions architect recommend to meet these requirements?

- A. Use Amazon Cognito Identity with SMS based MFA.
- B. Edit IAM policies to require MFA for all users
- C. Federate IAM against the corporate Active Directory that requires MFA
- D. Use Amazon API Gateway and require server-side encryption (SSE) for photos

正确答案 A

Q522. A company is using an Amazon S3 bucket to store data uploaded by different departments from multiple locations. During an AWS Well-Architected review the financial manager notices that 10 TB of S3 Standard storage data has been charged each month. However, in the AWS Management Console for Amazon S3, using the command to select all files and folders shows a total size of 5 TB. What are the possible causes for this difference? (Select TWO )

- A. Some files are stored with deduplication
- B. The S3 bucket has versioning enabled
- C. There are incomplete S3 multipart uploads
- D. The S3 bucket has AWS Key Management Service (AWS KMS) enabled
- E. The S3 bucket has Intelligent-Tiering enabled

正确答案 B, C

Q523. A solutions architect is designing a solution that will include a database in Amazon RDS. Corporate security policy mandates that the database logs, and its backups are all encrypted. What is the MOST efficient option to fulfill the security policy using Amazon RDS?

- A. Launch an Amazon RDS instance with encryption enabled Enable encryption for logs and backups
- B. Launch an Amazon RDS instance Enable encryption for the database, logs, and backups
- C. Launch an Amazon RDS instance with encryption enabled Logs and backups are automatically encrypted
- D. Launch an Amazon RDS instance Enable encryption for backups Encrypt logs with a database- engine feature

正确答案 C

Q524. A company wants to monitor its AWS costs for financial review. The cloud operations team is designing an architecture in the AWS Organizations master account to query AWS Cost and Usage Reports for all member accounts. The team must run this query once a month and provide a detailed analysis of the bill. Which solution is the MOST scalable and cost-effective way to meet these requirements?

- A. Enable Cost and Usage Reports in the master account. Deliver reports to Amazon KinesisUse Amazon EMR for analysis.
- B. Enable Cost and Usage Reports in the master account. Deliver the reports to Amazon S3Use Amazon Athena for analysis.
- C. Enable Cost and Usage Reports for member accounts. Deliver the reports to Amazon S3Use Amazon Redshift for analysis.
- D. Enable Cost and Usage Reports for member accounts. Deliver the reports to Amazon KinesisUse Amazon QuickSight for analysis.

正确答案 B

Q525. A solutions architect needs to allow developers to have SSH connectivity to web servers. The requirements are as follows:- Limit

access to users originating from the corporate network. – Web servers cannot have SSH access directly from the internet. – Web servers reside in a private subnet. Which combination of steps must the architect complete to meet these requirements? (Select TWO.)

- A. Create a bastion host that authenticates users against the corporate directory
- B. Create a bastion host with security group rules that only allow traffic from the corporate network.
- C. Attach an IAM role to the bastion host with relevant permissions
- D. Configure the web servers' security group to allow SSH traffic from a bastion host.
- E. Deny all SSH traffic from the corporate network in the inbound network ACL.

正确答案 B, D

Q526. The DNS provider that hosts a company's domain name records is experiencing outages that cause service disruption for a website running on AWS. The company needs to migrate to a more resilient managed DNS service and wants the service to run on AWS. What should a solutions architect do to rapidly migrate the DNS hosting service?

- A. Create an Amazon Route 53 public hosted zone for the domain name. Import the zone file containing the domain records hosted by the previous provider.
- B. Create an Amazon Route 53 private hosted zone for the domain name. Import the zone file containing the domain records hosted by the previous provider
- C. Create a Simple AD directory in AWS. Enable zone transfer between the DNS provider and AWS Directory Service for Microsoft Active Directory for the domain records.

D. Create an Amazon Route 53 Resolver inbound endpoint in the VPC. Specify the IP addresses that the provider's DNS will forward DNS queries to. Configure the provider's DNS to forward DNS queries for the domain to the IP addresses that are specified in the inbound endpoint.

正确答案 A

Q527. A solutions architect needs to host a high performance computing (HPC) workload in the AWS Cloud. The workload will run on hundreds of Amazon EC2 instances and will require parallel access to a shared file system to enable distributed processing of large datasets. Datasets will be accessed across multiple instances simultaneously. The workload requires access latency within 1 ms. After processing has completed, an engineer will need access to the dataset for manual postprocessing. Which solution will meet these requirements?

- A. Use Amazon Elastic File System (Amazon EFS) as a shared file system. Access the dataset from Amazon EFS.
- B. Mount an Amazon S3 bucket to serve as the shared file system. Perform postprocessing directly from the S3 bucket.
- C. Use Amazon FSx for Lustre as a shared file system. Link the file system to an Amazon S3 bucket for postprocessing.
- D. Configure AWS Resource Access Manager to share an Amazon S3 bucket so that it can be mounted to all instances for processing and postprocessing.

正确答案 C

Q528. A company seeks a storage solution for its application. The solution must be highly available and scalable. The solution also must function as a file system, be mountable by multiple Linux instances in AWS and on-premises through native protocols, and have no minimum size

requirements. The company has set up a Site-to-Site VPN for access from its on-premises network to its VPC. Which storage solution meets these requirements?

- A. Amazon FSx Multi-AZ deployments
- B. Amazon Elastic Block Store (Amazon EBS) Multi-Attach volumes
- C. Amazon Elastic File System (Amazon EFS) with multiple mount targets
- D. Amazon Elastic File System (Amazon EFS) with a single mount target and multiple access points

正确答案 C

Q529. A financial company operates its production AWS environment in the us-east-1 Region and uses Amazon Elastic Block Store (Amazon EBS) snapshots to back up its instances. To meet a compliance requirement, the company must maintain a secondary copy of all critical data at least 100 miles (160.9 km) away from its primary location. What is the MOST cost-effective way for the company to meet this requirement?

- A. Replicate the EBS snapshots to a different Availability Zone in us-east-1.
- B. Replicate the EBS snapshots to us-east-2.
- C. Replicate the EBS snapshots to us-west-1.
- D. Replicate the EBS snapshots to us-west-2

正确答案 C

Q530. A solutions architect is investigating AWS file storage solutions that can be used with a company's on-premises Linux servers and applications. The company has an existing VPN connection set up between the company's VPC and its on-premises network. Which AWS services should the solutions architect use? (Select TWO )

- A. AWS Backup
- B. AWS DataSync
- C. AWS Snowball Edge
- D. AWS Storage Gateway
- E. Amazon Elastic File System (Amazon EFS)

正确答案 D, E

Q531. A company wants to migrate its 1PB on-premises image repository to AWS. The images will be used by a serverless web application. Images stored in the repository are rarely accessed, but they must be immediately available. Additionally, the images must be encrypted at rest and protected from accidental deletion. Which solution meets these requirements?

- A. Implement client-side encryption and store the images in an Amazon S3 Glacier vault. Set a vault lock to prevent accidental deletion.
- B. Store the images in an Amazon S3 bucket in the S3 Standard-Infrequent Access (S3 Standard- IA) storage class. Enable versioning: default encryption, and MFA Delete on the S3 bucket.
- C. Store the images in an Amazon FSx for Windows File Server file share. Configure the Amazon FSx file share to use an AWS Key Management Service (AWS KMS) customer master key (CMK) to encrypt the images in the file share. Use NTFS permission sets on the images to prevent accidental deletion.
- D. Store the images in an Amazon Elastic File System (Amazon EFS) file share in the Infrequent Access storage class. Configure the EFS file share to use an AWS Key Management Service (AWS KMS) customer master key (CMK) to encrypt the images in the file share. Use NFS permission set on the images to prevent accidental deletion.

正确答案 B

Q532. A company needs to run its external website on Amazon EC2 instances and on-premises virtualized servers. The AWS environment has a 1 GB AWS Direct Connect connection to the data center. The application has IP addresses that will not change. The on-premises and AWS servers are able to restart themselves while maintaining the same IP address if a failure occurs. Some website users have to add their vendors to an allow list, so the solution must have a fixed IP address. The company needs a solution with the lowest operational overhead to handle this split traffic. What should a solutions architect do to meet these requirements?

- A. Deploy an Amazon Route 53 Resolver with rules pointing to the on-premises and AWS IP addresses
- B. Deploy a Network Load Balancer on AWS. Create target groups for the on-premises and AWS IP addresses.
- C. Deploy an Application Load Balancer on AWS Register the on-premises and AWS IP addresses with the target group.
- D. Deploy Amazon API Gateway to direct traffic to the on-premises and AWS IP addresses based on the header of the request.

正确答案 A

Q533. A company is relocating its data center and wants to securely transfer 50 TB of data to AWS within 2 weeks. The existing data center has a Site-to-Site VPN connection to AWS that is 90% utilized. Which AWS service should a solutions architect use to meet these requirements?

- A. AWS DataSync with a VPC endpoint
- B. AWS Direct Connect

C. AWS Snowball Edge Storage Optimized

D. AWS Storage Gateway

正确答案 C

Q534. A company purchased Amazon EC2 Partial Upfront Reserved Instances for a 1-year term. A solutions architect wants to analyze how much the daily effective cost is with all possible discounts. Which view must the solutions architect choose in the advanced options of Cost Explorer to get the correct values?

A. Show net amortized costs

B. Show net unblended costs

C. Show amortized costs

D. Show blended costs

正确答案 C

Q535. A company runs a web-based portal that provides users with global breaking news, local alerts, and weather updates. The portal delivers each user a personalized view by using a mixture of static and dynamic content. Content is served over HTTPS through an API server running on an Amazon EC2 instance behind an Application Load Balancer (ALB). The company wants the portal to provide this content to its users across the world as quickly as possible. How should a solutions architect design the application to ensure the LEAST amount of latency for all users?

A. Deploy the application stack in a single AWS RegionUse Amazon CloudFront to serve all static and dynamic content by specifying the ALB as an origin

B. Deploy the application stack in two AWS RegionsUse an Amazon Route 53 latency routing policy to serve all content from the ALB in the closest Region.

C. Deploy the application stack in a single AWS RegionUse Amazon CloudFront to serve the static contentServe the dynamic content directly from the ALB.

D. Deploy the application stack in two AWS RegionsUse an Amazon Route 53 geolocation routing policy to serve all content from the ALB in the closest Region.

正确答案 B

Q536. A company has a large dataset for its online advertising business stored in an Amazon RDS for MySQL DB instance in a single Availability Zone. The company wants business reporting queries to run without impacting the write operations to the production DB instance. Which solution meets these requirements?

A. Deploy RDS read replicas to process the business reporting queries.

B. Scale out the DB instance horizontally by placing it behind an Elastic Load Balancer

C. Scale up the DB instance to a larger instance type to handle write operations and queries.

D. Deploy the DB instance in multiple Availability Zones to process the business reporting queries.

正确答案 A

Q537. A company is running a batch application on Amazon EC2 instances. The application consists of a backend with multiple Amazon RDS databases. The application is causing a high number of reads on the

databases. A solutions architect must reduce the number of database reads while ensuring high availability. What should the solutions architect do to meet this requirement?

- A. Add Amazon RDS read replicas.
- B. Use Amazon ElastiCache for Redis
- C. Use Amazon Route 53 DNS caching
- D. Use Amazon ElastiCache for Memcached

正确答案 A

Q538. A company has a Microsoft .NET application that runs on an on-premises Windows Server. The application stores data by using an Oracle Database Standard Edition server. The company is planning a migration to AWS and wants to minimize development changes while moving the application. The AWS application environment should be highly available. Which combination of actions should the company take to meet these requirements? (Select TWO )

- A. Refactor the application as serverless with AWS Lambda functions running .NET Core
- B. Rehost the application in AWS Elastic Beanstalk with the .NET platform in a Multi-AZ deployment
- C. Replatform the application to run on Amazon EC2 with the Amazon Linux Amazon Machine Image (AMI).
- D. Use AWS Database Migration Service (AWS DMS) to migrate from the Oracle database to Amazon DynamoDB in a Multi-AZ deployment
- E. Use AWS Database Migration Service (AWS DMS) to migrate from the Oracle database to Oracle on Amazon RDS in a Multi-AZ deployment

正确答案 B, E

Q539. A company is planning to migrate a mission-critical three-tier web application from on-premises to the AWS Cloud. The backend database is snared with other on-premises systems and will remain in the on-premises data center. The application tier requires quick and predictable response times between the presentation tier and the database. Encryption is required for data in transit between client web browsers and the VPC. And between the on-premises data center and the VPC. Which solution meets these requirements?

- A. Use VPN tunnels over an AWS Direct Connect connection for the data transfers between the VPC and the on-premises data center
- B. Use SSL/TLS for the web traffic encryptionUse VPN tunnels for the data transfer between the VPC and the on-premises data center
- C. Use SSL/TLS for the web traffic encryptionUse an AWS Direct Connect connection for the data transfers between the VPC and the on-premises data center
- D. Use SSL/TLS for the web traffic encryptionUse VPN tunnels over an AWS Direct Connect connection for the data transfer between the VPC and the on-premises data center.

正确答案 D

Q540. An application calls a service run by a vendor. The vendor charges based on the number of calls. The finance department needs to know the number of calls that are made to the service to validate the billing statements. How can a solutions architect design a system to durably store the number of calls without requiring changes to the application?

- A. Call the service through an internet gateway

- B. Decouple the application from the service with an Amazon Simple Queue Service (Amazon SQS) queue
- C. Publish a custom Amazon CloudWatch metric that counts calls to the service
- D. Call the service through a VPC peering connection.

正确答案 C

Q541. A solutions architect needs to deploy a node js-based web application that is highly available and scales automatically. The marketing team needs to roll back on application releases quickly and they need to have an operational dashboard. The Marketing team does not want to manage deployment of operating system patches to the Linux servers. Which AWS service satisfies these requirements?

- A. Amazon EC2
- B. Amazon API Gateway
- C. AWS Elastic Beanstalk
- D. Amazon EC2 Container Service

正确答案 C

Q542. A company is deploying an application that processes large quantities of data in parallel. The company plans to use Amazon EC2 instances for the workload. The network architecture must be configurable to provide the lowest possible latency between nodes. Which combination of network solutions will meet these requirements? (Select TWO )

- A. Distribute the EC2 instances across multiple Availability Zones

- B. Attach an Elastic Fabric Adapter (EFA) to each EC2 instance
- C. Place the EC2 instances in a single Availability Zone
- D. Use Amazon Elastic Block Store (Amazon EBS) optimized instance types
- E. Run the EC2 instances in a cluster placement group

正确答案 C, E

Q543. A user is designing a new service that receives location updates from 3 600 rental cars every hour. The cars upload their location to an Amazon S3 bucket. Each location must be checked for distance from the original rental location. Which services will process the updates and automatically scale?

- A. Amazon EC2 and Amazon Elastic Block Store (Amazon EBS)
- B. Amazon Kinesis Data Firehose and Amazon S3
- C. Amazon Elastic Container Service (Amazon ECS) and Amazon RDS
- D. Amazon S3 events and AWS Lambda

正确答案 B

Q544. A company hosts its multi-tier applications on AWS. For compliance, governance, auditing, and security, the company must track configuration changes on its AWS resources and record a history of API calls made to these resources. What should a solutions architect do to meet these requirements?

- A. Use AWS CloudTrail to track configuration changes and AWS Config to record API calls
- B. Use AWS Config to track configuration changes and AWS CloudTrail to record API calls

C. Use AWS Config to track configuration changes and Amazon CloudWatch to record API calls

D. Use AWS CloudTrail to track configuration changes and Amazon CloudWatch to record API calls

正确答案 B

Q545. A company is running an application on AWS to process weather sensor data that is stored in an Amazon S3 bucket. Three batch jobs run hourly to process the data in the S3 bucket for different purposes. The company wants to reduce the overall processing time by running the three applications in parallel using an event-based approach. What should a solutions architect do to meet these requirements?

A. Enable S3 Event Notifications for new objects to an Amazon Simple Queue Service (Amazon SQS) FIFO queue. Subscribe all applications to the queue for processing

B. Enable S3 Event Notifications for new objects to an Amazon Simple Queue Service (Amazon SQS) standard queue. Create an additional SQS queue for all applications and subscribe all applications to the initial queue for processing

C. Enable S3 Event Notifications for new objects to separate Amazon Simple Queue Service (Amazon SQS) FIFO queues. Create an additional SQS queue for each application and subscribe each queue to the initial topic for processing

D. Enable S3 Event Notifications for new objects to an Amazon Simple Notification Service (Amazon SNS) topic. Create an Amazon Simple Queue Service (Amazon SQS) queue for each application and subscribe each queue to the topic for processing

正确答案 D

Q546. A company provides a three-tier web application to its customers. Each customer has an AWS account in which the application is deployed, and these accounts are members of the company's organization in AWS Organizations. To protect its customers' AWS accounts and applications the company wants to monitor them for unusual and unexpected behavior. The company needs to analyze and monitor customer VPC Flow Logs, AWS CloudTrail logs, and DNS logs. What should a solutions architect do to meet these requirements?

- A. Designate an account in the organization as the AWS Shield master account Enable Shield and Shield logs in every account and invite the accounts to join the Shield master account Analyze Shield findings in the Shield master account
- B. Designate an account in the organization as the Amazon GuardDuty master account Enable GuardDuty in every account and invite the accounts to join the GuardDuty master account Analyze GuardDuty finding in the GuardDuty master account
- C. Designate an account in the organization as the AWS WAF master account Enable AWS WAF and AWS WAF logs in every account and invite the accounts to join the AWS WAF master account Analyze AWS WAF logs in the AWS WAF master account
- D. Designate an account in the organization as the AWS Resource Access Manager (AWS RAM) master account Enable AWS RAM in every account, and invite the accounts to join the AWS RAM master account Analyze AWS RAM logs in the AWS RAM master account

正确答案 B

Q547. A company runs analytics software on Amazon EC2 instances. The software accepts job requests from users to process data that has been uploaded to Amazon S3. Users report that some submitted data is not being processed. Amazon CloudWatch reveals that the EC2 instances have a consistent CPU utilization at or near 100%. The company wants to improve

system performance and scale the system based on user load. What should a solutions architect do to meet these requirements?

- A. Create a copy of the instancePlace all instances behind an Application Load Balancer
- B. Create an S3 VPC endpoint for Amazon S3Update the software to reference the endpoint.
- C. Stop the EC2 instances Modify the instance type to one with a more powerful CPU and more memory Restart the instances
- D. Route incoming requests to Amazon Simple Queue Service (Amazon SQS) Configure an EC2 Auto Scaling group based on queue size Update the software to read from the queue

正确答案 D

Q548. A company uses Amazon S3 for storing a variety of files. A solutions architect needs to design a feature that will allow users to instantly restore any deleted files within 30 days of deletion. Which is the MOST cost-efficient solution?

- A. Create lifecycle policies that move the objects to Amazon S3 Glacier and delete them after 30 days
- B. Enable Cross-Region Replication Empty the replica bucket every 30 days using an AWS Lambda function
- C. Enable versioning and create a lifecycle policy to remove expired versions after 30 days.
- D. Enable versioning and MFA Delete Using a Lambda function remove MFA Delete from objects more than 30 days old

正确答案 C

Q549. A company is making a prototype of the infrastructure for its new website by manually provisioning the necessary infrastructure. This infrastructure includes an Auto Scaling group an Application Load Balancer, and an Amazon RDS database. After the configuration has been thoroughly validated the company wants the capability to immediately deploy the infrastructure for development and production use in two Availability Zones in an automated fashion. What should a solutions architect recommend to meet these requirements?

- A. Use AWS Systems Manager to replicate and provision the prototype infrastructure in two Availability Zones
- B. Define the infrastructure as a template by using the prototype infrastructure as a guide Deploy the infrastructure with AWS CloudFormation
- C. Use AWS Config to record the inventory of resources that are used in the prototype infrastructure Use AWS Config to deploy the prototype infrastructure into two Availability Zones.
- D. Use AWS Elastic Beanstalk and configure it to use an automated reference to the prototype infrastructure to automatically deploy new environments in two Availability Zones

正确答案 B

Q550. A solutions architect is designing a system that will store personally identifiable information (PII) in an Amazon S3 bucket. Due to compliance and regulatory requirements, both the master keys and the unencrypted data should never be sent to AWS. Which Amazon S3 encryption technique should the architect choose?

- A. Amazon S3 client-side encryption with an AWS Key Management Service (AWS KMS) managed customer master key (CMK)
- B. Amazon S3 server-side encryption with AWS KMS managed encryption keys (SSE-KMS)

- C. Amazon S3 client-side encryption with a client-side master key
- D. Amazon S3 server-side encryption with customer-provided encryption keys (SSE-C)

正确答案 C

解析：

Client side with client master key

"Your client-side master keys and your unencrypted data are never sent to AWS. It's important that you safely manage your encryption keys. If you lose them, you can't decrypt your data."

Q551. A company uses an Amazon S3 bucket as its data lake storage platform. The S3 bucket contains a massive amount of data that is accessed randomly by multiple teams and hundreds of applications. The company wants to reduce the S3 storage costs and provide immediate availability for frequently accessed objects. What is the MOST operationally efficient solution that meets these requirements?

- A. Create an S3 Lifecycle rule to transition objects to the S3 Intelligent-Tiering storage class
- B. Store objects in Amazon S3 GlacierUse S3 Select to provide applications with access to the data
- C. Use data from S3 storage class analysis to create S3 Lifecycle rules to automatically transition objects to the S3 Standard-Infrequent Access (S3 Standard-IA) storage class
- D. Transition objects to the S3 Standard-Infrequent Access (S3 Standard-IA) storage class Create an AWS Lambda function to transition objects to the S3 Standard storage class when they are accessed by an application

正确答案 A

Q552. A company wants to create an application that will transmit protected health information (PHI) to thousands of service consumers in different AWS accounts. The application servers will sit in private VPC subnets. The routing for the application must be fault tolerant. What should be done to meet these requirements?

- A. Create a VPC endpoint service and grant permissions to specific service consumers to create a connection
- B. Create a virtual private gateway connection between each pair of service provider VPCs and service consumer VPCs
- C. Create an internal Application Load Balancer in the service provider VPC and put application servers behind it.
- D. Create a proxy server in the service provider VPC to route requests from service consumers to the application servers.

正确答案 A

Q553. Cost Explorer is showing charges higher than expected for Amazon Elastic Block Store (Amazon EBS) volumes connected to application servers in a production account. A significant portion of the charges from Amazon EBS are from volumes that were created as Provisioned IOPS SSD (101) volume types. Controlling costs is the highest priority for this application. Which steps should the user take to analyze and reduce the EBS costs without incurring any application downtime? (Select TWO )

- A. Use the Amazon EC2 ModifyInstanceAttribute action to enable EBS optimization on the application server instances
- B. Use the Amazon CloudWatch GetMetricData action to evaluate the read/write operations and read/write bytes of each volume
- C. Use the Amazon EC2 ModifyVolume action to reduce the size of the underutilized 101 volumes

D. Use the Amazon EC2 ModifyVolume action to change the volume type of the underutilized io1 volumes to General Purpose SSD (gp2)

E. Use an Amazon S3 PutBucketPolicy action to migrate existing volume snapshots to Amazon S3 Glacier

正确答案 B, D

Q554. A company hosts a popular web application. The web application connects to a database running in a private VPC subnet. The web servers must be accessible only to customers on an SSL connection. The Amazon RDS for MySQL database services be accessible only from the web servers. How should a solution architect design a solution to meet the requirements without impacting applications?

A. Create a network ACL on the web server's subnet and allow HTTPS inbound and MySQL outbound. Place both database and web servers on the same subnet.

B. Open an HTTPS port on the security group for web server and set the source to 0. 0. 0. 0/0. Open the MySQL port on the database security group and attach it to the MySQL instance. Set the source to web server security group.

C. Create a network ACL on the web server's subnet, allow HTTP, allow inbound and specify the source as 0 . 0 . 0 . 0/0. Create a network ACL on a database subnet allow MySQL port inbound for web servers and deny all outbound traffic.

D. Open the MySQL port on the security group for web servers and set the source to 0. 0. 0. 0/0. Open the HTTPS port on the database security group and attach it to the MySQL instance. Set the source to web server security group.

正确答案 B

Q555. An online retailer has a series of flash sales occurring every Friday. Sales Traffic will increase during the sales only and the platform will handle the increased load. The platform is a three-tier application. The web tier runs on Amazon EC2 instances behind an Application Load Balancer. Amazon CloudFront is used to reduce web server load, but many requests for dynamic content must go to the web servers. What should be done to the web tier to reduce costs without impacting performance or reliability?

- A. Use T-series instances
- B. Purchase scheduled Reserved instances.
- C. Implement Amazon ElastiCache
- D. Use Spot instances.

正确答案 B

#### 解析：

Hint in the question "occurring every Friday" makes it a good candidate for scheduled reserved instances.

Wrong answer elimination:

A – T-Series instances are low-cost, general purposes EC2 instances – nothing special there and not scaling up or helping performance

C – ElastiCache won't help with the dynamic content problem

D – Spot Instances could be terminated in the middle of the flash sale impacting the reliability

Q556. A company has concerns about its Amazon RDS database. The workload is unpredictable, and periodic floods of new user registrations can cause the company to run out storage. The database runs on a general purpose instance with 300 GB of storage. What should a solution architect recommend to the company?

- A. Enable RDS storage autoscaling.

- B. Schedule vertical instance scaling
- C. Change to a storage optimized instance type and vertically scale the database.
- D. Configure an AWS Lambda function to increase RDS storage by 1 GiB when storage space is low.

正确答案 D

Q557. A company is hosting its website by using Amazon EC2 instances behind an Elastic Load Balancer across multiple Availability Zones. The instances run in an EC2 Auto Scaling group. The website uses Amazon Elastic Block Store (Amazon EBS) volumes to store product manuals for users to download. The company updates the product content often, so new instances launched by the Auto Scaling group often have old data. It can take up to 30 minutes for the new instances to receive all the updates. The updates also require the EBS volumes to be resized during business hours. The company wants to ensure that the product manuals are always up to date so that the architecture adjusts quickly to increased user demand. A solutions architect needs to meet these requirements without causing the company to update its application code or adjust its website. What should the solution architect do to accomplish this goal?

- A. Store the product manuals in an EBS volume. Mount that volume to the EC2 instances.
- B. Store the product manuals in an Amazon S3 bucket. Redirect the downloads to this bucket.
- C. Store the product manual in an Amazon Elastic File System (Amazon EFS) volume. Mount that volume to the EC2 instances.
- D. Store the product manual in an Amazon S3 Standard-infrequent Access (S3 Standard-IA) bucket. Redirect the downloads to this bucket.

正确答案 C

Q558. A company recently launched Linux-based application instances on Amazon EC2 in a private subnet and launched a Linux-based bastion host on an Amazon EC2 instance in a public subnet of an VPC. A solution architect needs to connect from the on-premises network, through the company's internet connection, to the bastion host, and to the application servers. The solution architect must make sure that the security groups of all the EC2 instances will allow that access. Which combination of steps should the solutions architect take to meet these requirements? (select TWO)

- A. Replace the current security group of the bastion host with one that only allows inbound access from the application instances.
- B. Replace the current security group of the bastion host with one that only allows inbound access from the internal IP range for the company.
- C. Replace the current security group of the bastion host with one that only allows inbound access from the external IP range for the company
- D. Replace the current security group of the application instances with one that allows inbound SSH access from only the private IP address of the bastion host.

正确答案 C, D

Q559. A company has an application that servers clients that are deployed in more than 20,000 retail storefront locations around the world. The application consists of backend web services that are exposed over HTTPS on port 443. The application is hosted on Amazon EC2 instance behind an Application Load balancer (ALB). The retail locations communicate with the web applications over the public internet. The company allows each retail location to register the IP address that the retail location has been allocated by its local ISP. The company's

security team recommends to increase the security of the application endpoint by restricting access to only the IP addresses registered by the retail locations. What should a solutions architect do to meet these requirements?

- A. Associate an AWS WAF web ACL with the ALB. Use IP rule sets on the ALB to filter traffic. Update the IP addresses in the rule to include the registered IP addresses.
- B. Deploy AWS Firewall Manager to manage the ALB. Configure firewall rules to restrict traffic to the ALB. Modify the firewall rules to include the registered IP addresses.
- C. Store the IP addresses in an Amazon DynamoDB table. Configure an AWS Lambda authorization function on the ALB to validate that incoming requests are from the registered IP addresses.
- D. Configure the network ACL on the subnet that contains the public interface of the ALB. Update the ingress rules on the network ACL with entries for each of the registered IP addresses.

正确答案 A

解析：

ALB 上面也配置不了 lambda 作为 authorization function 。但是 A 也有问题，一个 ipset rule 只能配置 10 , 000 个 ip 地址，答案里的 rule 应该用复数，因为需要多个 rule ，但是也比 C 正确

Q560. A company has many applications on Amazon EC2 instances running in Auto Scaling groups. Company policy requires that the data on the attached Amazon Elastic Block Store (Amazon EBS) volumes be retained. Which action will meet these requirements without impacting performance?

- A. Enable termination protection on the Amazon EC2 instances.
- B. Disable the DeleteOnTermination attribute for the Amazon EBS volumes.

- C. Use Amazon EC2 user data to set up a synchronization job for root volume.
- D. Change the Auto scaling health check to point to a source on the root volume.

正确答案 B

Q561. A company observes an increase in Amazon EC2 costs in its most recent bill. The billing team notices unwanted vertical scaling of instance types for a couple of EC2 instances. A solutions architect needs to create a graph comparing the last 2 months of EC2 costs and perform an in-depth analysis to identify the root cause of the vertical scaling. How should the solutions architect generate the information with the LEAST operational overhead?

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

正确答案 C

Q562. A company's cloud operations team wants to standardize resource remediation. The company wants to provide a standard set of governance evaluations and remediations to all member accounts in its organization in AWS Organizations. Which self-managed AWS service can the company use to meet these requirements with the LEAST amount of operational effort?

A. AWS Security Hub compliance standards

B. AWS Config conformance packs

C. AWS CloudTrail

D. AWS Trusted Advisor

正确答案 A

Q563. A product manager of an ecommerce website is launching a new product line next month. The application hosting the website runs on Amazon EC2 instances in an Auto Scaling group behind a load balancer. Testing has been performed, and the maximum load at launch has been estimated. Traffic to the application is expected to decrease gradually within the first few weeks after the launch. This workload is the only one on this account that is expected to scale during launch. Which combination of steps is MOST cost-effective to ensure that will be adequate capacity when the application scales at launch? (Select TWO.)

A. Purchase Reserved instance (RIs) with zonal scope to reserve capacity and get the discount to compute. Then cancel the RIs after the launch.

B. Contact AWS to reserve hardware in the AWS Reg on that will be near the most users.

C. Check the EC2 service quotas on the account, and request an increase if the values are lower than the expected load at launch.

D. Purchase Scheduled instances to reserve capacity for the launch, and run them on a daily schedule during peak capacity hours.

正确答案 A, D

Q564. A company is building a RESTful serverless web application on AWS by using Amazon API Gateway and AWS Lambda. The users of this web application will be geographically disturbed, and the company wants to

reduce the latency of API requests to these users. Which type of endpoint should a solutions architect use to meet these requirements?

- A. Private endpoint
- B. Regional endpoint
- C. Interface VPC endpoint
- D. Edge-optimized endpoint

正确答案 D

Q565. A company is planning to migrate 40 servers hosted on premises in VMware to the AWS Cloud. The migration process must be implemented with minimal downtime. The company also wants to test the servers before the cutover date. Which solution meets these requirements?

- A. Deploy the AWS DataSync agent into the on-premises environment. Use DataSync to migrate the servers.
- B. Deploy an AWS Snowball device connected by way of RJ45 to the on-premises network. Use Snowball to migrate the servers.
- C. Deploy an AWS Database Migration service (AWS DMS) replication instance into AWS. Use AWS DMS to migrate the servers.
- D. Deploy the AWS Server Migration Service (AWS SMS) connector into the on-premises environment. Use AWS SMS to migrate the servers.

正确答案 D

Q566. A company has a web application for travel ticketing. The application is based on a database that runs in a single data center in North America. The company wants to expand the application to serve a global user base. The company needs to display the application to multiple AWS Regions. Average latency must be less than 1 second on

updates to reservation database. The company wants to have separate deployments of its web platform across multiple Regions. However, the company must maintain a single primary reservation database that is globally consistent. Which solution should a solutions architect recommend to meet these requirements?

- A. Convert the application to use Amazon DynamoDB. Use a global table for the center reservation table. Use the correct Regional endpoint in each Regional deployment.
- B. Migrate the database to an Amazon Aurora MySQL database. Deploy Aurora Read Replicas in each Region. Use the correct Region endpoint in each Regional deployment for access to the database.
- C. Migrate the database to an Amazon RDS for MySQL database. Deploy MySQL read replicas in each Region. Use the correct Regional endpoint In each Regional deployment for access to the database.
- D. Migrate the application to an Amazon Aurora Serverless database. Deploy instances of the database to each Region. Use the correct Region endpoint in each Regional deployment to access the database. Use AWS Lambda functions to process event streams in each Region to synchronize the databases.

正确答案 A

Q567. A company is using Amazon CloudFront with its website. The company has enabled logging on the CloudFront distribution, and logs are saved in one of the company's Amazon S3 buckets. The company needs to perform advanced analysis on the logs and build visualizations. What should a solutions architect do to meet these requirements?

- A. Use standard SQL queries in Amazon Athena to analyze CloudFront logs in the S3 bucket. Visualize the results with AWS Glue.
- B. Use standard SQL queries in Amazon Athena to analyze the CloudFront logs in the S3 bucket. Visual the results with Amazon QuickSight.

- C. Use standard queries in Amazon DynamoDB to analyze the Cloudfront logs in the S3 bucket. Visualize the results with the AWS Glue.
- D. Use standard SQL queries in Amazon DynamoDB to analyze the CloudFront logs in the S3 bucket. Visualize the results with Amazon QuickSight.

正确答案 B

Q568. A company experienced a breach from an attacker on its on-premises network. The attacker launched port scanning, waged on outbound Dos attack, and performed crypto currency mining. The company is moving to AWS to build a more resilient architecture that monitors and remediate this type the attack on the account level. How should the company use AWS services to meet these requirements?

- A. Enable Amazon GuardDuty to generate findings. Trigger AWS Lambda for automated remediation of identified threats.
- B. Enable AWS Config and configure policies to monitor against breaches. Trigger AWS Lambda for automated remediation of noncompliant resources
- C. Enable Amazon Macie to identify and classify security threats. Configure events in Amazon EventBridge (Amazon CloudWatch Events) to trigger actions based on the severity of threats.
- D. Enable Amazon inspector to generate assessment reports. Configure events in Amazon EventBridge (Amazon CloudWatch Events) to trigger actions based on identified threat.

正确答案 A

Q569. A company is running a publicly accessible serverless application that uses Amazon API Gateway and AWS Lambda. The application's traffic recently spiked due to fraudulent requests from botnets. Which steps

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

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

正确答案 C, E

Q570. A company has developed a database in Amazon RDS for MySQL. Due to increased support team is reporting slow reads against the DB instance and recommends adding a read replica. Which combination of actions should a solutions architect take before implementing this change? (Select TWO.)

- A. Enable binlog replication on the RDS master.
- B. Choose a failover priority for the source DB instance.
- C. Allow long-running transactions to complete on the source DB instance.
- D. Create a global table and specify the AWS Regions where the table will be available.
- E. Enable automatic backups on the source instance by setting the backup retention period to a value other than 0.

正确答案 C, E

Q571. A company fails an AWS security reviews conducted by the third party. The review finds out that some of the company method to access the Amazon EMR through the public internet. Which combination of steps should the company take to MOST improve its security? (Select TWO.)

- A. Set up a VPC peering connect to the Amazon EMR API.
- B. Set up VPC endpoints to connect to the Amazon EMR API.
- C. Set up a NAT gateway to connect to the Amazon EMR API.
- D. Set up IAM roles to be used to connect to the Amazon FMR API.
- E. Set up each developer with AWS Secrets Manager to store access keys.

正确答案 B, D

Q572. A company's website receives 50,000 requests each second. The company wants to use multiple applications to analyze the navigation patterns of the website users so that the experience can be personalized. Which AWS services or feature should a solutions architect use to collect page clicks for the website and process them sequentially for each user?

- A. Amazon Kinesis Data Streams
- B. Amazon Simple Queue Service (Amazon SQS) standard queue
- C. Amazon Simple Queue Service (Amazon SQS) FIFO queue
- D. AWS CloudTrail

正确答案 A

Q573. A company is building a web application that servers a content management system. The content management system runs on Amazon EC2 instances behind an application Load Balancer (ALB). The EC2 instances run in an Auto Scaling group across Availability Zones. Users are constantly adding and updating files, blogs, and other website assets in the content management system. Which solution meets these requirements?

- A. Update the EC2 user data in the Auto Scaling group lifecycle policy to copy the website assets from the EC2 instance that was launched most recently. Configure the ALB to make changes to the websites assets only in the newest EC2 instance.
- B. Copy the website assets to an Amazon Elastic File System (Amazon EFS) file system. Configure each EC2 instance to mount the EFS file system locally. Configure the website hosting application to reference the website assets that are stored in the EFS file system.
- C. Copy the website assets to an Amazon S3 bucket. Ensure that each EC2 instance downloads the website assets from the S3 bucket to the attached Amazon Basic Block Store (Amazon EBS) volume. Run the S3 sync command once each hour to keep files up to date.
- D. Restore an Amazon Elastic Block Store (Amazon EBS) snapshot with the website assets. Attach the EBS snapshot as a secondary EBS volume when a new EBS EC2 instance is launched. Configure the website hosting application to reference the website assets that are stored in the secondary EBS volume.

正确答案 B

Q574. A company needs to connect several VPCs in the us-east Region that span hundreds of AWS accounts. The company's networking team has its own AWS account to manage the cloud network. What is the MOST operationally efficient solution to connect the VPCs?

- A. Set up VPC peering connections between each VPC. Update each associated subnet's route table.

- B. Configure a NAT gateway and an internal gateway in each VPC in connected each VPC through the internal.
- C. Create an AWS Transit Gateway in the networking team's AWS account. Configure static routes from each VPC.
- D. Deploy VPN gateway in each VPC. Configure create a transit VPC in the networking team's AWS account to connect to each VPC.

正确答案 C

Q575. A company designed a stateless two-tier that uses Amazon EC2 in a single Availability Zone and an Amazon RDS multi-AZ DB instance. New company management wants to ensure the application is highly available. What should a solutions architect do to meet this requirement?

- A. Configure the application to use Multi-AZ EC2 Auto Scaling and create an Application Load Balancer.
- B. Configure the application to take snapshots of the EC2 instances and sends them to a different AWS Region.
- C. Configure the application to use Amazon Route 53 latency-based routing to feed requests to the application.
- D. Configure Amazon Route 53 rules to handle incoming requests and create a multi-AZ Application Load Balancer.

正确答案 A

Q576. A gaming company is designing a highly available architecture. The application runs on a modified Linux kernel and support only UDP-based traffic. The company needs the front-end tier to provide the best possible user experience. The tier must have low latency, route traffic to the nearest edge location, and possible static IP addresses for entry

into the application endpoints. What should a solution architect do to meet these requirements?

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

正确答案 C

Q577. A company manages a data lake in an Amazon S3 bucket that numerous applications share. The S3 bucket contains unique folders with a prefix for each application. The company wants to restrict each application to its specific folder and have more granular control of the objects in each folder. Which solution met these requirements with the LEAST amount of effort?

- A. Create dedicated S3 access points and access point policies for each application.
- B. Create an S3 Batch Operations job to set the ACL permissions for each object in the S3 bucket.
- C. Update the S3 bucket policy to grant access to each application based on its specific folder in the S3 bucket.

D. Replicate the objects in the S3 bucket to new S3 buckets for each application Create replication rules by prefix.

正确答案 B

Q578. A team has an application that detects new objects being uploaded into an Amazon bucket. The upload a trigger AWS Lambda function to write metadata into an Amazon DynamoDB table and an Amazon RDS for PostgreSQL database. Which action should the team take to ensure high availability?

- A. Enable Cross-Region Replication to ensure high availability
- B. Create a Lambda function for each Availability Zone the application is deployed in
- C. Enable Multi-AZ on the RDS PostgreSQL database.
- D. Create a DynamoDB stream for the DynamoDB table

正确答案 C

Q579. A company sells datasets to customers who do research in artificial intelligence and machine learning (AIML). The datasets are large formatted files met are stored in an Amazon S3 bucket in the us-east-1 Region. The company hosts a web application that the customers use o purchase access to a given dataset. The web application Is deployed on mutate 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 Accelerator 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 URLSwitch 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 live 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 and users Configure the web application to read the data from the existing S3 bucket implement access control directly in the application

正确答案 B

Q580. 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 Associate a health check with each record
- B. Create a Route 53 failover routing policy record for each EC2 instance Associate a health check with each record
- C. Create an Amazon CloudFront distribution with EC2 instances as its origin Associate a health check with the EC2 instances
- D. Create an Application Load Balancer (ALB) with a health check in front of the EC2 instances Route to the ALB from Route 53

正确答案 A

Q581. A company is developing a data lake solution in Amazon S3 to analyze large scale datasets. The solution makes infrequent SQL queries only in addition, the company wants to minimize infrastructure costs. Which AWS service should be used to meet these requirements?

- A. Amazon Athena
- B. Amazon Redshift Spectrum
- C. Amazon RDS for PostgreSQL
- D. Amazon Aurora

正确答案 A

Q582. A company wants to identify underutilized instances for Amazon EC2 and Amazon RDS. The company needs to report on the cost of all underutilized instances and the utilization metrics for each resource. Which combination of tools and services will provide this data? (Select TWO.)

- A. Cost Explorer
- B. AWS Cost and Usage Report
- C. AWS Budgets
- D. Amazon CloudWatch Metrics
- E. AWS CloudTrail

正确答案 A, D

Q583. A company wants to migrate its accounting system from an on-premises data center to the AWS Cloud in a single AWS Region. Data

security and an immutable audit log are the top priorities. The company must monitor all AWS activities for compliance auditing. The company has enabled AWS CloudTrail but wants to make sure it meets these requirements. Which actions should a solutions architect take to protect and secure CloudTrail? (Select TWO.)

- A. Enable CloudTrail log file validation
- B. Install the CloudTrail Processing Library
- C. Enable logging of insights events in CloudTrail
- D. Enable custom logging from the on-premises resources
- E. Create an AWS Config rule to monitor whether CloudTrail is configured to use server-side encryption with AWS KMS managed encryption keys (SSE-KMS)

正确答案 C, E

Q584. A company finds that, as its use of Amazon EC2 instances grows, its Amazon Elasti Block Store (Amazon EBS) storage costs are increasing faster than expected. Which EBS management practices would help reduce costs? (Select TWO. )

- A. Convert the EBS volumes to an EC2 instance store.
- B. Monitor and enforce that the `DeleteOnTermination` attribute is set to true for all EBS volumes, unless persistence requirements dictate otherwise.
- C. Purchase an EC2 Instance Savings Plan for EBS volumes that are serving persistent business requirements.
- D. For EBS volumes needed for retention purposes that are not being actively used, take a snapshot and terminate the instance and volume.
- E. Convert the existing EBS volumes to EBS Provisioned IOPS SSD (io1).

正确答案 B, D

Q585. A company plans to deploy a new application in AWS that reads and writes information to a database. The company wants to deploy the application in two different AWS Regions with each application writing to a database in their Region. The databases in the Two Regions needs to keep the data synchronized. What should be used to meet these requirements?

- A. Use Amazon Athena with Amazon S3 Cross-Region Replication
- B. Use AWS Database Migration Service (AWS DMS) with change data capture between an RDS for MySQL cluster in each Region
- C. Use Amazon DynamoDB with global tables
- D. Use Amazon RDS for PostgreSQL cluster with a Cross-Region Read Replica

正确答案 C

Global Tables builds upon DynamoDB's global footprint to provide you with a fully managed, multi-region, and multi-master database that provides fast, local, read and write performance for massively scaled, global applications. Global Tables replicates your Amazon DynamoDB tables automatically across your choice of AWS regions.

- D is wrong due to the read replicas.
- B is wrong as this is a migration service.
- A is wrong as Athena is a query service and S3 is not a database.

Q586. A solution architect is designing the infrastructure for an application. The application must have a managed MySQL database that is highly available. The database will be accessed only by resources in the same VPC. The database also must have auto scaling for storage and compute. Which solution meets these requirements?

- A. Amazon RDS for MySQL
- B. Amazon Aurora with MySQL compatibility
- C. Amazon Aurora Serverless with MySQL compatibility
- D. MySQL on Amazon EC2 instances with Amazon Elastic File System (Amazon EFS)

正确答案 C

Q587. A company has an application that provides marketing services to stores. The services are based on previous purchases by store customers. The stores upload transaction data to the company through SFTP, and the data is processed and analyzed to generate new marketing offers. Some of the files can exceed 200 GB in size. Recently, the company discovered that some of the stores have uploaded files that contain personally identifiable information (PII) that should not have been included. The company wants administrators to be alerted if PII is shared again. The company also wants to automate remediation. What should a solutions architect do to meet these requirements with the LEAST development effort?

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

D. Implement custom scanning algorithms in an AWS Lambda function. Trigger the function when objects are loaded into the bucket. If objects contain P11, use Amazon Simple Email Service (Amazon SES) to Trigger a notification to the administrators and trigger an S3 Lifecycle policy to remove the objects that contain P11.

正确答案 B

Q588. A company is using Amazon S3 as its local repository for weekly analysis reports. One of the company-wide requirements is to secure data at rest using encryption. The company chooses Amazon S3 server-side encryption (SSE) how can the object be decrypted when a GET request is issued?

- A. the user needs a Put request to decrypt the object
- B. The user needs to decrypt the object using a private Key
- C. Amazon S3 manages encryption and decryption automatically
- D. Amazon S3 provides a server-side key for decrypting the object

正确答案 C

解析：

This question is so confusing C& D are both correct On another note based on this information from AWS – the correct answer is D

“Decryption of the encrypted data requires no effort on your part. When you GET an encrypted object, we fetch and decrypt the key, and then use it to decrypt your data. We also include an extra header in the response to the GET to let you know that the data was stored in encrypted form in Amazon S3” Reason for picking D the question was “The company wants to know how the object is decrypted when a GET request is issued” – The company chose SSE to secure data at REST using encryption but now want to know how S3 decrypts the data. D narrows the answer by breaking it up while C is answering both encryption and decryption – two answers for in

one question. What are your thoughts ? break it down as part of your job as an SA or answering a question that wasn't asked.

Q589. An environment has an Auto Scaling group across two Availability Zones to as AZ-a and AZ-b has four instances, and AZ-b has three EC2 instances. The Auto Scaling group uses a default termination policies. None of the instances are protected from a scale-in event. How will Auto Scaling processed if there is a scale-in event?

- A. Auto Scaling selects an instance to terminate randomly.
- B. Auto Scaling terminates the instance with the oldest launch configuration of all instances.
- C. Auto Scaling selects the Availability Zone with four EC2 instances, and then continues to evaluate.
- D. Auto Scaling terminates the instance with the closed next billing hour of all instances.

正确答案 C

Q590. A company is running a multi-tier ecommerce web application in the AWS Cloud. The web application is running on Amazon EC2 instances. The database tier Is on a provisioned Amazon Aurora MySQL DB cluster with a writer and a reader in a Multi-AZ environment. The new requirement for the database tier is to serve the application to achieve continuous write availability through an Instance failover. What should a solutions architect do to meet this new requirement?

- A. Add a new AWS Region to the DB cluster for multiple writes
- B. Add a new reader In the same Availability Zone as the writer.
- C. Migrate the database tier to an Aurora multi-master cluster.
- D. Migrate the database tier to an Aurora DB cluster with parallel query enabled.

正确答案 D

解析：

借助 Parallel Query，可将查询处理向下推送到 Aurora 存储层。查询将获得大量的计算能力，并且需要通过网络传输的数据将大幅减少。同时，Aurora 数据库实例可以继续为事务服务，而且中断大大减少。这样，您就可以在同一个 Aurora 数据库中互不干扰地运行事务和分析工作负载，同时保持高性能。

Q591. A company runs an application on three very large Amazon EC2 instances. In a single Availability Zone in the us-east-1 Region Multiple 16 TB Amazon Elastic Block Store (Amazon EBS) volumes are attached to each EC2 instance. The operations team uses an AWS Lambda script triggered by a schedule-based Amazon EventBridge (Amazon CloudWatch Events) rule to stop the instances on evenings and weekends, and start the instances on weekday mornings. Before deploying the solution, the company used the public AWS pricing documentation to estimate the overall costs of running this data warehouse solution 5 days a week for 10 hours a day. When looking at monthly Cost Explorer charges for this new account, the overall charges are higher than the estimate. What is the MOST likely cost factor that the company overlooked?

- A. EC2 data transfer charges between the instances are much higher than expected
- B. EC2 and EBS rates are higher in us-east-1 than most other AWS Regions
- C. The Lambda charges to stop and start the instances are much higher than expected.
- D. The company is being billed for the EBS storage on nights and weekends

正确答案 D