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Attempt 1

[All Questions ▾](#)Question 1: Skipped

A company wants to deploy docker containers to the AWS Cloud. They also want a highly scalable service which can help manage the orchestration of these containers. Which of the following would be ideal for such a requirement

- A. Use the Amazon Elastic Container Service for Kubernetes

(Correct)

- B. Install a custom orchestration tool on EC2 Instances

- C. Use SQS to orchestrate the messages between docker containers

- D. Use AWS Lambda functions to embed the logic for container orchestration.

Explanation

The AWS Documentation mentions the following Amazon Elastic Container Service for Kubernetes (Amazon EKS) is a managed service that makes it easy for you to run Kubernetes on AWS without needing to install and operate your own Kubernetes clusters. Kubernetes is an open-source system for automating the deployment, scaling, and management of containerized applications. Operating Kubernetes for production applications presents a number of challenges. You need to manage the scaling and availability of your Kubernetes masters and persistence layer by ensuring that you have chosen appropriate instance types, running them across multiple Availability Zones, monitoring their health, and replacing unhealthy nodes. You need to patch and upgrade your masters and worker nodes to ensure that you are running the latest version of Kubernetes. This all requires expertise and a lot of manual work. With Amazon EKS, upgrades and high availability are managed for you by AWS. Amazon EKS runs three Kubernetes masters across three Availability Zones in order to ensure high availability. Amazon EKS automatically detects and replaces unhealthy masters, and it provides automated version upgrades and patching for the masters. For more information on the Elastic Container service, please visit the below URL: <https://aws.amazon.com/eks/>

Question 2: Skipped

When using the following AWS services, which should be implemented in multiple Availability Zones for high availability solutions? Choose 2 answers from the options below

- A. Amazon DynamoDB

- B. Amazon Elastic Compute Cloud (EC2)

(Correct)

- C. Amazon Elastic Load Balancing

(Correct)

- D. Amazon Simple Storage Service (S3)

Explanation

The snapshot from the aws documentation shows how the ELB and EC2 instances get setup for high availability. You have the ELB placed in front of the instances. The instances are placed in different AZ's. For more information on the ELB, please visit the below URL: <https://aws.amazon.com/elasticloadbalancing/> Option A is wrong because the service runs across Amazon's proven, high-availability data centers. The service replicates data across three facilities in an AWS Region to provide fault tolerance in the event of a server failure or Availability Zone outage. Option D is wrong because Amazon S3 Standard and Standard - IA redundantly stores your objects on multiple devices across multiple facilities in an Amazon S3 Region. The service is designed to sustain concurrent device failures by quickly detecting and repairing any lost redundancy

Question 3: Skipped

Your company's management team has asked you to devise a strategy for disaster recovery for the current resources hosted in AWS. They want to minimize costs, but be able to spin up the Infrastructure when needed in another region. How could you accomplish this with the LEAST costs in mind?

- A. Create a duplicate of the entire infrastructure in another region
- B. Create a Pilot light infrastructure in another region
- C. Use Elastic Beanstalk to create another copy of the infrastructure in another region if a disaster occurs in the primary region
- D. Use Cloudformation to spin up resources in another region if a disaster occurs in the primary region (Correct)

Explanation

Since cost is a factor, both option A and B are invalid. The best and most cost effective option is to create Cloudformation templates which can be used to spin up resources in another region in a disaster recovery. For more information on Cloudformation please visit the below URL: <https://aws.amazon.com/cloudformation/>

Question 4: Skipped

You create an Autoscaling Group which is used to spin up instances on Demand. You need to ensure that as an architect the instances get pre-installed with a software when they are launched. What are the ways in which you can achieve this? Choose 2 answers from the options given below.

- A. Add the software installation to the configuration for the Autoscaling Group
- B. Add the scripts for the installation in the User data section. (Correct)
- C. Create a golden image and then create a launch configuration. (Correct)

- D. Ask the IT operations team to install the software as soon as the instance is launched

Explanation

The User data section of an Instance launch can be used to pre-configure software after the instance is initially booted. For more information on UserData please visit the below URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/user-data.html>
Also you can create an AMI or a golden image with the software already installed and then create a launch configuration which can be used by that Autoscaling Group For more information on AMI's please visit the below URL:
<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIs.html>

Question 5: Skipped

You are building a stateless architecture for an application. This will consists of Web servers and an Autoscaling Group. Which of the following would be an ideal storage mechanism for the Session data.

- A. AWS DynamoDB (Correct)
- B. AWS Redshift
- C. AWS EBS Volumes
- D. AWS S3

Explanation

The diagram from the AWS Documentation shows how the stateless architecture would look like. For more information on architecting for the cloud please visit the below URL: <https://aws.amazon.com/whitepapers/architecting-for-the-aws-cloud-best-practices/>

Question 6: Skipped

You have a set of IIS Servers running on EC2 Instances. You want to collect and process the log files generated from the IIS Servers. Which of the below services is ideal to run in this scenario

- A. Amazon S3 for storing the log files and Amazon EMR for processing the log files (Correct)
- B. Amazon S3 for storing the log files and EC2 Instances for processing the log files
- C. Amazon EC2 for storing and processing the log files
- D. Amazon DynamoDB to store the logs and EC2 for running custom log analysis scripts

Explanation

Amazon EMR is a managed cluster platform that simplifies running big data frameworks, such as Apache Hadoop and Apache Spark, on AWS to process and analyze vast amounts of data. By using these frameworks and related open-source projects, such as Apache Hive and Apache Pig, you can process data for analytics purposes and business intelligence workloads. Additionally, you can use Amazon EMR to transform and move large amounts of data into and out of other AWS data stores and databases, such as Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB. Option B and C, even though partially correct would be an overhead for EC2 Instances to process the log files when you already have a ready-made service which can help in this regard. Option D is invalid because DynamoDB is not an ideal option to store log files. For more information on EMR, please visit the below URL: <http://docs.aws.amazon.com/emr/latest/ManagementGuide/emr-what-is-emr.html>

Question 7: Skipped

You need to ensure that objects in an S3 bucket are available in another region. This is because of the criticality of the data that is hosted in the S3 bucket. How can you achieve this in the easiest way possible?

A. Enable cross region replication for the bucket

(Correct)

B. Write a script to copy the objects to another bucket in the destination region

C. Create an S3 snapshot in the destination region

D. Enable versioning which will copy the objects to the destination region

Explanation

The AWS Documentation mentions the following Cross-region replication is a bucket-level configuration that enables automatic, asynchronous copying of objects across buckets in different AWS Regions. For more information on Cross region replication in the Simple Storage Service, please visit the below URL: <https://docs.aws.amazon.com/AmazonS3/latest/dev/crr.html>

Question 8: Skipped

You want to build and deploy code functions in the AWS Cloud, but don't want to manage the infrastructure. Which of the following services can meet this requirement.

A. AWS EC2

B. AWS API Gateway

C. AWS Lambda

(Correct)

D. AWS DynamoDB

Explanation

Explanation

The AWS Documentation mentions the following AWS Lambda is a compute service that lets you run code without provisioning or managing servers. AWS Lambda executes your code only when needed and scales automatically, from a few requests per day to thousands per second. You pay only for the compute time you consume - there is no charge when your code is not running. With AWS Lambda, you can run code for virtually any type of application or backend service - all with zero administration. For more information on AWS Lambda, please visit the below URL: <https://docs.aws.amazon.com/lambda/latest/dg/welcome.html>

Question 9: Skipped

A storage solution is required in AWS to store videos uploaded by the user. Over a period of a month these videos can be deleted. How should this be implemented in an cost effective manner?

A. Use EBS Volumes to store the videos. Create script to delete the videos after a month

B. Store the videos in S3 and then use Lifecycle policies

C. Store the videos in Amazon Glacier and then use Lifecycle policies

(Correct)

D. Store the videos using Stored Volumes. Create script to delete the videos after a month

Explanation

The AWS Documentation mentions the following on lifecycle policies Lifecycle configuration enables you to specify the lifecycle management of objects in a bucket. The configuration is a set of one or more rules, where each rule defines an action for Amazon S3 to apply to a group of objects. These actions can be classified as follows:

- Transition actions – In which you define when objects transition to another storage class. For example, you may choose to transition objects to the STANDARD_IA (IA, for infrequent access) storage class 30 days after creation, or archive objects to the GLACIER storage class one year after creation.
- Expiration actions – In which you specify when the objects expire. Then Amazon S3 deletes the expired objects on your behalf.

For more information on AWS S3 Lifecycle policies, please visit the following URL:
<https://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html>

Question 10: Skipped

You want to ensure that you keep a check on the Active EBS Volumes, Active snapshots and Elastic IP addresses you use so that you don't go beyond the service limit. Which of the below services can help in this regard?

A. AWS Cloudwatch

B. AWS EC2

C. AWS Trusted Advisor

(Correct)

D. AWS SNS

Explanation

Explanation

Snapshot of the service limits that the Trusted Advisor can monitor will be found in AWS documentation Option A is invalid because even though you can monitor resources, it cannot be checked against the service limit. Option B is invalid because this is the Elastic Compute cloud service Option D is invalid because it can be send notification but not check on service limits For more information on the Trusted Advisor monitoring, please visit the below URL: <https://aws.amazon.com/premiumsupport/faqs/>

Question 11: Skipped

You have an EC2 Instance in a particular region. This EC2 Instance has a preconfigured software running on it. You have been requested to create a disaster recovery solution in case the instance in the region fails. Which of the following is the best solution.

- A. Create a duplicate EC2 Instance in another AZ. Keep it in the shutdown state. When required, bring it back up.
- B. Backup the EBS data volume. If the instance fails, bring up a new EC2 instance and attach the volume.
- C. Store the EC2 data on S3. If the instance fails, bring up a new EC2 instance and restore the data from S3.
- D. Create an AMI of the EC2 Instance and copy it to another region

(Correct)

Explanation

You can copy an Amazon Machine Image (AMI) within or across an AWS region using the AWS Management Console, the AWS command line tools or SDKs, or the Amazon EC2 API, all of which support the CopyImage action. You can copy both Amazon EBS-backed AMIs and instance store-backed AMIs. You can copy AMIs with encrypted snapshots and encrypted AMIs. Copying a source AMI results in an identical but distinct target AMI with its own unique identifier. In the case of an Amazon EBS-backed AMI, each of its backing snapshots is, by default, copied to an identical but distinct target snapshot. Option A is invalid, because it is a maintenance overhead to maintain another non-running instance Option B is invalid, because the pre-configured software could have settings on the root volume Option C is invalid because this is a long and inefficient way to restore a failed instance For more information on Copying AMI's, please visit the below URL:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html>

Question 12: Skipped

You working in the media industry and you have created a web application where users will be able to upload photos they create to your website. This web application must be able to call the S3 API in order to be able to function. Where should you store your API credentials whilst maintaining the maximum level of security?

- A. Save the API credentials to your PHP files.
- B. Don't save your API credentials. Instead create a role in IAM and assign this role to an EC2 instance when you first create it.
- C. Save your API credentials in a public Github repository.
- D. Save API credentials in the browser cookie of the user's machine.

(Correct)

Explanation

Applications must sign their API requests with AWS credentials. Therefore, if you are an application developer, you need a strategy for managing credentials for your applications that run on EC2 instances. For example, you can securely distribute your AWS credentials to the instances, enabling the applications on those instances to use your credentials to sign requests, while protecting your credentials from other users. However, it's challenging to securely distribute credentials to each instance, especially those that AWS creates on your behalf, such as Spot Instances or instances in Auto Scaling groups. You must also be able to update the credentials on each instance when you rotate your AWS credentials. IAM roles are designed so that your applications can securely make API requests from your instances, without requiring you to manage the security credentials that the applications use. For more information on IAM Roles, please visit the below URL:
<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-for-amazon-ec2.html>

Question 13: Skipped

You need to ensure that data stored in S3 is encrypted. You don't want to manage the encryption keys. Which of the following encryption mechanism can be used in such a case

A. SSE-S3

(Correct)

B. SSE-C

C. SSE-KMS

D. SSE-SSL

Explanation

The AWS Documentation mentions the following on Encryption keys : · SSE-S3 requires that Amazon S3 manage the data and master encryption keys. · SSE-C requires that you manage the encryption key. · SSE-KMS requires that AWS manage the data key but you manage the master key in AWS KMS. For more information on using the Key Management service for S3, please visit the below URL: <https://docs.aws.amazon.com/kms/latest/developerguide/services-s3.html>

Question 14: Skipped

An organization is managing a Redshift Cluster in AWS. They need to monitor the performance of the Redshift to ensure that it is performing as efficiently as possible. Which of the following service can be used for achieving this requirement

A. Cloudtrail

B. VPC Flow Logs

C. Cloudwatch

(Correct)

Explanation

The AWS Documentation mentions the following on monitoring Redshift Clusters Amazon CloudWatch metrics help you monitor physical aspects of your cluster, such as CPU utilization, latency, and throughput. Metric data is displayed directly in the Amazon Redshift console. You can also view it in the Amazon CloudWatch console, or you can consume it in any other way you work with metrics such as with the Amazon CloudWatch Command Line Interface (CLI) or one of the AWS Software Development Kits (SDKs). For more information on monitoring Redshift please visit the below URL:
<https://docs.aws.amazon.com/redshift/latest/mgmt/metrics.html>

Question 15: Skipped

Your company currently has an S3 bucket in AWS. The objects in S3 are accessed quite frequently. Which of the following is an implementation step that can be considered to reduce the cost of accessing contents from the S3 bucket.

- A. Place the S3 bucket behind a Cloudfront distribution (Correct)
- B. Enable versioning on the S3 bucket
- C. Enable encryption on the S3 bucket
- D. Place the S3 bucket behind an API gateway

Explanation

The AWS Documentation mentions the following Using CloudFront can be more cost effective if your users access your objects frequently because, at higher usage, the price for CloudFront data transfer is lower than the price for Amazon S3 data transfer. In addition, downloads are faster with CloudFront than with Amazon S3 alone because your objects are stored closer to your users. For more information on using Cloudfront with S3 please visit the below URL:
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/MigrateS3ToCloudFront.html>

Question 16: Skipped

You have an application in which users can subscribe to a service. They can subscribe to it using their email ID. They should be able to receive messages published by the service. This all needs to be done using AWS Components. Which of the below would be a probable service included in this architecture.

- A. AWS SNS (Correct)
- B. AWS Config
- C. AWS S3
- D. AWS Glacier

Explanation

The AWS Documentation mentions the following Amazon Simple Notification Service (Amazon SNS) is a web service that coordinates and manages the delivery or sending of messages to subscribing endpoints or clients. In Amazon SNS, there are two types of clients—publishers and subscribers—also referred to as producers and consumers. Publishers communicate asynchronously with subscribers by producing and sending a message to a topic, which is a logical access point and communication channel. Subscribers (i.e., web servers, email addresses, Amazon SQS queues, AWS Lambda functions) consume or receive the message or notification over one of the supported protocols (i.e., Amazon SQS, HTTP/S, email, SMS, Lambda) when they are subscribed to the topic. For more information on the Simple Notification service, please visit the below URL: <https://docs.aws.amazon.com/sns/latest/dg/welcome.html>

Question 17: Skipped

You are IoT sensors to monitor the number of bags that are handled at an airport. The data gets sent back to a Kinesis stream with default settings. Every alternate day, the data from the stream is sent to S3 for processing. But you notice that S3 is not receiving all of the data that is being sent to the Kinesis stream. What could be the reason for this?

A. The sensors probably stopped working on some days hence data is not sent to the stream.

B. S3 can only store data for a day

C. Data records are only accessible for a default of 24 hours from the time they are added to a stream

(Correct)

D. Kinesis streams are not meant to handle IoT related data

Explanation

Kinesis Streams supports changes to the data record retention period of your stream. A Kinesis stream is an ordered sequence of data records meant to be written to and read from in real-time. Data records are therefore stored in shards in your stream temporarily. The time period from when a record is added to when it is no longer accessible is called the retention period. A Kinesis stream stores records from 24 hours by default, up to 168 hours. Option A, even though a possibility, cannot be taken for granted as the right option. Option B is invalid since S3 can store data indefinitely unless you have a lifecycle policy defined. Option D is invalid because the Kinesis service is perfect for this sort of data ingestion. For more information on Kinesis data retention, please refer to the below URL: <http://docs.aws.amazon.com/streams/latest/dev/kinesis-extended-retention.html>

Question 18: Skipped

A company needs to have a columnar database due to the underlying analytic query performance that can be achieved. Which of the following can meet this requirement for a database.

A. Amazon Redshift

(Correct)

B. Amazon RDS

C. ElastiCache

D. DynamoDB

Explanation

The AWS Documentation mentions the following Amazon Redshift is a column-oriented, fully managed, petabyte-scale data warehouse that makes it simple and cost-effective to analyze all your data using your existing business intelligence tools. Amazon Redshift achieves efficient storage and optimum query performance through a combination of massively parallel processing, columnar data storage, and very efficient, targeted data compression encoding schemes. For more information on columnar database in AWS, please refer to the below URL: <https://aws.amazon.com/nosql/columnar/>

Question 19: Skipped

There is a requirement to host a database on an EC2 Instance. There is a requirement for the EBS volume to support a high rate of IOPS since there are going to be a large number of read and write requests on the database. Which Amazon EBS volume type can meet the performance requirements of this database?

A. EBS Provisioned IOPS SSD

(Correct)

B. EBS Throughput Optimized HDD

C. EBS General Purpose SSD

D. EBS Cold HDD

Explanation

Since there is a high performance requirement with high IOPS needed, one needs to opt for EBS Provisioned IOPS SSD. The snapshot from the AWS Documentation mentions the need of using Provisioned IOPS for better IOPS performance for database based applications. For more information on AWS EBS Volume types, please visit the following URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html>

Question 20: Skipped

You have a requirement for deploying an existing Java based application to AWS. There is a need for automatic scaling for the underlying environment. Which of the following can be used to deploy this environment in the quickest way possible.

A. Deploy to an S3 bucket and enable web site hosting.

B. Use the Elastic beanstalk service to provision the environment.

(Correct)

C. Use EC2 with Autoscaling for the environment

D. Use AMI's to build EC2 instances for deployment

Explanation

The AWS Documentation mentions the following AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS. You can simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, auto-scaling to application health monitoring. At the same time, you retain full control over the AWS resources powering your application and can access the underlying resources at any time. For more information on the Elastic beanstalk service, please visit the following URL: <https://aws.amazon.com/elasticbeanstalk/>

Question 21: Skipped

There is a requirement to upload a million files to S3. Which of the following can be used to ensure optimal performance

A. Use a date for the prefix

B. Use a hexadecimal hash for the prefix

(Correct)

C. Use a date for the suffix

D. Use a sequential ID for the suffix

Explanation

This recommendation for increasing performance if you have a high request rate in S3 is given in the AWS documentation. For more information on S3 performance considerations, please visit the following URL:
<https://docs.aws.amazon.com/AmazonS3/latest/dev/request-rate-perf-considerations.html>

Question 22: Skipped

You want to build a decoupled, highly available and fault tolerant architecture for your application in AWS. You decide to use EC2, the Classic Load balancer, Autoscaling and Route53. Which of the following is an additional service you should involve in this architecture.

A. AWS SNS

B. AWS SQS

(Correct)

C. AWS API Gateway

D. AWS Config

Explanation

The Simple Queue service can be used to build a decoupled architecture. The AWS Documentation further mentions the following Amazon Simple Queue Service (SQS) is a fully managed message queuing service that makes it easy to decouple and scale microservices, distributed systems, and serverless applications. Building applications from individual components that each perform a discrete function improves scalability and reliability, and is best practice design for modern applications. For more information on the Simple Queue Service, please visit the following URL: <https://aws.amazon.com/sqs/>

Question 23: Skipped

You have been tasked with architecting an application in AWS. The architecture would consist of EC2, the Classic Load balancer, Autoscaling and Route53. There is a directive to ensure that Blue Green deployments are possible in this architecture. Which routing policy could you ideally use in Route53 for achieving Blue Green deployments?

A. Simple

B. Multi-answer

C. Latency

D. Weighted

(Correct)

Explanation

The AWS Documentation mentions that the weighted routing policy is good for testing new versions of the software. And this is the ideal approach for Blue Green deployments. Weighted routing lets you associate multiple resources with a single domain name (example.com) or subdomain name (acme.example.com) and choose how much traffic is routed to each resource. This can be useful for a variety of purposes, including load balancing and testing new versions of software. For more information on Route53 routing policies, please visit the following URL: <https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html>

Question 24: Skipped

A company is planning to deploy an application in AWS. The application requires an EC2 Instance to do continuously log processing activities which requires at least 500MiB/s throughput of data. Which of the following is the best storage option for this.

A. EBS IOPS

B. EBS SSD

C. EBS Throughput Optimized

(Correct)

D. EBS Cold Storage

Explanation

When you are considering storage volume types for batch processing activities with large throughput, then consider using EBS Throughput Optimized volume type. This is also mentioned in the AWS Documentation For more information on EBS volume types, please visit the following URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html>

Question 25: Skipped

You have a need to connect 2 VPC's in different accounts. How could this be achieved?

- A. Use the Security Groups to do the mapping of both VPC's
- B. Use the VPC Route tables to do the mapping of both VPC's
- C. Use Consolidating billing to connect both accounts.
- D. Use VPC peering to connect both VPC's

(Correct)

Explanation

The AWS Documentation mentions the following about VPC Peering A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, with a VPC in another AWS account, or with a VPC in a different AWS Region. For more information on VPC Peering, please visit the following URL: <https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-peering.html>

Question 26: Skipped

You need to ensure that instances in a private subnet can access the Internet. The solution should be highly available and ensure less maintenance overhead. Which of the following would ideally fit this requirement.

- A. Host the NAT instance in the private subnet
- B. Host the NAT instance in the public subnet
- C. Use the NAT gateway in the private subnet
- D. Use the NAT gateway in the public subnet

(Correct)

Explanation

If you look at the comparison of the NAT gateway and NAT instances in the AWS Documentation, you can see that the NAT gateway is highly available and requires less management. For more information on the comparison, please visit the following URL: <https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-nat-comparison.html>

Question 27: Skipped

You need to have a data storage layer in AWS. Following are the key requirements
a) Storage of JSON documents
b) Availability of Indexes
c) Automatic scaling
Which would be the ideal storage layer for this.

A. AWS DynamoDB

(Correct)

B. AWS EBS Volumes

C. AWS S3

D. AWS Glacier

Explanation

The AWS Documentation mentions the following Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. DynamoDB enables customers to offload the administrative burdens of operating and scaling distributed databases to AWS so that they don't have to worry about hardware provisioning, setup and configuration, throughput capacity planning, replication, software patching, or cluster scaling. For more information on DynamoDB please visit the following URL: <https://aws.amazon.com/dynamodb/faqs/>

Question 28: Skipped

You have a set of Docker images that you use for building containers. You want to start using the Elastic container service and utilize the docker images. You need a place to store these docker images. Which of the following can be used for this purpose.

A. Use AWS DynamoDB to store the docker Images

B. Use AWS RDS to store the docker Images

C. Use EC2 Instances with EBS Volumes to store the docker Images

D. Use the ECR service to store the docker Images

(Correct)

Explanation

The AWS Documentation mentions the following Amazon Elastic Container Registry (ECR) is a fully-managed Docker container registry that makes it easy for developers to store, manage, and deploy Docker container images. Amazon ECR is integrated with Amazon Elastic Container Service (ECS), simplifying your development to production workflow. For more information on the Elastic container service please visit the following URL: https://aws.amazon.com/ecr/?nc2=h_m1

Question 29: Skipped

You need to start using resources in AWS to build a big data processing system. Which of the following is a service that you would ideally use for this requirement

A. AWS DynamoDB

B. AWS EMR

(Correct)

C. AWS ECS

D. AWS ECR

Explanation

The AWS Documentation mentions the following Amazon EMR provides a managed Hadoop framework that makes it easy, fast, and cost-effective to process vast amounts of data across dynamically scalable Amazon EC2 instances. You can also run other popular distributed frameworks such as Apache Spark, HBase, Presto, and Flink in Amazon EMR, and interact with data in other AWS data stores such as Amazon S3 and Amazon DynamoDB. Amazon EMR securely and reliably handles a broad set of big data use cases, including log analysis, web indexing, data transformations (ETL), machine learning, financial analysis, scientific simulation, and bioinformatics. For more information on the EMR service please visit the following URL:
https://aws.amazon.com/emr/?nc2=h_m1

Question 30: Skipped

Your company asked you to create a mobile application. The application is built to work with DynamoDB as the backend and Javascript as the frontend. During the usage of the application you notice that there are spikes in the application, especially in the DynamoDB area. Which option provides the most cost effective and scalable architecture for this application? Choose an answer from the options below.

A. Auto scale DynamoDB to meet the requirements

B. Increase write capacity of DynamoDB tables to meet the peak loads

C. Create a service that pulls SQS messages and writes these to DynamoDB to handle sudden spikes in dynamoDB

(Correct)

D. Launch DynamoDB in Multi-AZ configuration with a global index to balance writes

Explanation

When the idea comes for scalability then SQS is the best option. Normally DynamoDB is scalable, but since one is looking for a cost effective solution, the messaging in SQS can assist in managing the situation mentioned in the question. Amazon Simple Queue Service (SQS) is a fully-managed message queuing service for reliably communicating among distributed software components and microservices - at any scale. Building applications from individual components that each perform a discrete function improves scalability and reliability, and is best practice design for modern applications. SQS makes it simple and cost-effective to decouple and coordinate the components of a cloud application. Using SQS, you can send, store, and receive messages between software components at any volume, without losing messages or requiring other services to be always available. For more information on SQS, please refer to the below URL: <https://aws.amazon.com/sqs/>

Question 31: Skipped

You are building a large-scale confidential documentation web server on AWS and all of the documentation for it will be stored on S3. One of the requirements is that it cannot be publicly accessible from S3 directly, and you will need to use CloudFront to accomplish this. Which of the methods listed below would satisfy the requirements as outlined? Choose an answer from the options below

A. Create an Identity and Access Management (IAM) user for CloudFront and grant access to the objects in your S3 bucket to that IAM User.

B. Create an Origin Access Identity (OAI) for CloudFront and grant access to the objects in your S3 bucket to that OAI. (Correct)

C. Create individual policies for each bucket the documents are stored in and in that policy grant access to only CloudFront.

D. Create an S3 bucket policy that lists the CloudFront distribution ID as the Principal and the target bucket as the Amazon Resource Name (ARN).

Explanation

If you want to use CloudFront signed URLs or signed cookies to provide access to objects in your Amazon S3 bucket, you probably also want to prevent users from accessing your Amazon S3 objects using Amazon S3 URLs. If users access your objects directly in Amazon S3, they bypass the controls provided by CloudFront signed URLs or signed cookies, for example, control over the date and time that a user can no longer access your content and control over which IP addresses can be used to access content. In addition, if user's access objects both through CloudFront and directly by using Amazon S3 URLs, CloudFront access logs are less useful because they're incomplete. For more information on Origin Access Identity please see the below link: <http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html>

Question 32: Skipped

Your company is planning on hosting their development, test and production applications on EC2 Instances in AWS. They are worried on how access control can be given to relevant IT Admins for the respective environments. As an architect, what can you suggest for managing the relevant access?

A. Add tags to the instances marking each environment and then segregate access using IAM policies.

(Correct)

B. Add Userdata to the underlying instances to mark each environment

C. Add Metadata to the underlying instances to mark each environment

D. Add each environment to a separate Autoscaling Group

Explanation

The AWS Documentation mentions the following which helps support this requirement Tags enable you to categorize your AWS resources in different ways, for example, by purpose, owner, or environment. This is useful when you have many resources of the same type — you can quickly identify a specific resource based on the tags you've assigned to it. Each tag consists of a key and an optional value, both of which you define. For example, you could define a set of tags for your account's Amazon EC2 instances that helps you track each instance's owner and stack level. We recommend that you devise a set of tag keys that meets your needs for each resource type. Using a consistent set of tag keys makes it easier for you to manage your resources. You can search and filter the resources based on the tags you add. For more information on using tags, please see the below link: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_Tags.html

Question 33: Skipped

You want to set up a public website on AWS. The things that you require are as follows: - You want the database and the application server running on AWS VPC.- You want the database to be able to connect to the Internet, specifically for any patch upgrades.- You do not want to receive any incoming requests from the Internet to the database.Which of the following solutions would be the best to satisfy all the above requirements for your planned public website on AWS? Choose the correct answer from the options below

- A. Set up the database in a private subnet with a security group which only allows outbound traffic.
- B. Set up the database in a public subnet with a security group which only allows inbound traffic.
- C. Set up the database in a local data center and use a private gateway to connect the application to the database.
- D. Set up the public website on a public subnet and set up the database in a private subnet which connects to the Internet via a NAT instance. (Correct)

Explanation

The diagram from the AWS documentation show cases this architecture For more information on the VPC Scenario for public and private subnets please see the below link: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario2.html

Question 34: Skipped

A company has a Redshift cluster for petabyte-scale data warehousing. The data within the cluster is easily reproducible from additional data stored on Amazon S3. The company wants to reduce the overall total cost of running this Redshift cluster. Which scenario would best meet the needs of the running cluster, while still reducing total overall ownership of the cluster? Choose the correct answer from the options below

- A. Instead of implementing automatic daily backups, write a CLI script that creates manual snapshots every few days. Copy the manual snapshot to a secondary AWS region for disaster recovery situations.
- B. Enable automated snapshots but set the retention period to a lower number to reduce storage costs
- C. Implement daily backups, but do not enable multi-region copy to save data transfer costs.

Explanation

Snapshots are point-in-time backups of a cluster. There are two types of snapshots: automated and manual. Amazon Redshift stores these snapshots internally in Amazon S3 by using an encrypted Secure Sockets Layer (SSL) connection. If you need to restore from a snapshot, Amazon Redshift creates a new cluster and imports data from the snapshot that you specify. Now since the question already mentions that the cluster is easily reproducible from additional data stored on Amazon S3 then you don't need to maintain any sort of snapshots. For more information on Redshift snapshots, please visit the below URL:
<http://docs.aws.amazon.com/redshift/latest/mgmt/working-with-snapshots.html>

Question 35: Skipped

You have the following application to be setup in AWS:
a) A web tier hosted on EC2 Instances
b) Session data to be written to DynamoDB
c) Log files to be written to Microsoft SQL Server
How can you allow an application to write data to a DynamoDB table?

- A. Add an IAM user to a running EC2 instance.
- B. Add an IAM user that allows write access to the DynamoDB table.
- C. Create an IAM role that allows read access to the DynamoDB table.
- D. Create an IAM role that allows write access to the DynamoDB table.

(Correct)

Explanation

IAM roles are designed so that your applications can securely make API requests from your instances, without requiring you to manage the security credentials that the applications use. Instead of creating and distributing your AWS credentials. For more information on IAM Roles please refer to the below link: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-foramazon-ec2.html>

Question 36: Skipped

You are doing a load testing exercise on your application hosted on AWS. While testing your Amazon RDS MySQL DB instance, you notice that when you hit 100% CPU utilization on it, your application becomes non-responsive. Your application is read-heavy. What are methods to scale your data tier to meet the application's needs? Choose three answers from the options given below

- A. Add Amazon RDS DB read replicas, and have your application direct read queries to them. (Correct)
- B. Add your Amazon RDS DB instance to an Auto Scaling group and configure your CloudWatch metric based on CPU utilization.
- C. Use an Amazon SQS queue to throttle data going to the Amazon RDS DB instance.

D. Use ElastiCache in front of your Amazon RDS DB to cache common queries.

(Correct)

E. Shard your data set among multiple Amazon RDS DB instances.

(Correct)

F. Enable Multi-AZ for your Amazon RDS DB instance.

Explanation

Amazon RDS Read Replicas provide enhanced performance and durability for database (DB) instances. This replication feature makes it easy to elastically scale out beyond the capacity constraints of a single DB Instance for read-heavy database workloads. You can create one or more replicas of a given source DB Instance and serve high-volume application read traffic from multiple copies of your data, thereby increasing aggregate read throughput. For more information on Read Replica's please refer to the below link: <https://aws.amazon.com/rds/details/read-replicas/>. Sharding is a common concept to split data across multiple tables in a database. For more information on sharding please refer to the below link: <https://forums.aws.amazon.com/thread.jspa?messageID=203052>. Amazon ElastiCache is a web service that makes it easy to deploy, operate, and scale an in-memory data store or cache in the cloud. The service improves the performance of web applications by allowing you to retrieve information from fast, managed, in-memory data stores, instead of relying entirely on slower disk-based databases. For more information on Elastic Cache please refer to the below link: <https://aws.amazon.com/elasticcache/>. Option B is not an ideal way to scale a database. Option C is not ideal to store the data which would go into a database because of the message size. Option F is invalid because Multi-AZ feature is only a failover option.

Question 37: Skipped

You work for a very large company that has multiple applications which are very different and built on different programming languages. How can you deploy applications as quickly as possible?

A. Develop each app in one Docker container and deploy using ElasticBeanstalk

B. Create a Lambda function deployment package consisting of code and any dependencies

C. Develop each app in a separate Docker container and deploy using Elastic Beanstalk

(Correct)

D. Develop each app in a separate Docker containers and deploy using CloudFormation

Explanation

Elastic Beanstalk supports the deployment of web applications from Docker containers. With Docker containers, you can define your own runtime environment. You can choose your own platform, programming language, and any application dependencies (such as package managers or tools), that aren't supported by other platforms. Docker containers are self-contained and include all the configuration information and software your web application requires to run. Option A is an efficient way to use Docker. The entire idea of Docker is that you have a separate environment for various applications. Option B is ideally used to running code and not packaging the applications and dependencies. Option D is not ideal deploying Docker containers using Cloudformation. For more information on Docker and Elastic Beanstalk, please visit the below URL: http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/create_deploy_docker.html.

Question 38: Skipped

You are designing a system which needs, at minimum, 8 m4.large instances operating to service traffic. When designing a system for high availability in the us-east-1 region, which has 6 Availability Zones, you company needs to be able to handle death of a full availability zone. How should you distribute the servers, to save as much cost as possible, assuming all of the EC2 nodes are properly linked to an ELB? Your VPC account can utilize us-east-1's AZ's a through f, inclusive.

A. 3 servers in each of AZ's a through d, inclusive.

B. 8 servers in each of AZ's a and b.

C. 2 servers in each of AZ's a through e, inclusive. (Correct)

D. 4 servers in each of AZ's a through c, inclusive.

Explanation

The best way is to distribute the instances across multiple AZ's to get the best and avoid a disaster scenario. With this scenario, you will always have a minimum of more than 8 servers even if one AZ were to go down. Even though options A and D are also valid options, the best option when it comes to distribution is Option C. For more information on High Availability and Fault tolerance, please refer to the below link: https://media.amazonwebservices.com/architecturecenter/AWS_ac_ra_ftha_04.pdf

Question 39: Skipped

You have been given a business requirement to retain log files for your application for 10 years. You need to regularly retrieve the most recent logs for troubleshooting. Your logging system must be cost-effective, given the large volume of logs. What technique should you use to meet these requirements?

A. Store your log in Amazon CloudWatch Logs.

B. Store your logs in Amazon Glacier.

C. Store your logs in Amazon S3, and use lifecycle policies to archive to Amazon Glacier. (Correct)

D. Store your logs on Amazon EBS, and use Amazon EBS snapshots to archive them.

Explanation

Option A is invalid, because CloudWatch will not store the logs indefinitely and secondly it won't be the cost effective option. Option B is invalid, because it won't serve the purpose of regularly retrieving the most recent logs for troubleshooting. You will need to pay more to retrieve the logs faster from this storage. Option D is invalid, because it is not an ideal or cost effective option. For more information on Lifecycle management please refer to the below link:
<http://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html>

Question 40: Skipped

An application in AWS is currently running in the Singapore region. You have been asked to implement disaster recovery. So

An application in AWS is currently running in the Singapore Region. You have been asked to implement disaster recovery. So if the application goes down in the Singapore region, it has to be started in the Asia region. Your application relies on pre-built AMIs. As part of your disaster recovery strategy, which of the below points should you consider.

A. Nothing, because all AMI's by default are available in any region as long as it is created within the same account

B. Copy the AMI from the Singapore region to the Asia region. Modify the Auto Scaling groups in the backup region to use the new AMI ID in the backup region

(Correct)

C. Modify the image permissions and share the AMI to the Asia region.

D. Modify the image permissions to share the AMI with another account, then set the default region to the backup region

Explanation

If you need an AMI across multiple regions, then you have to copy the AMI across regions. Note that by default AMI's that you have created will not be available across all regions. So option A is automatically invalid. Next you can share AMI's with other users, but they will not be available across regions. So option C and D is invalid. You have to copy the AMI across regions. For more information on copying AMI's, please refer to the below URL:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html>

Question 41: Skipped

You are an AWS Solution Architect and architecting an application environment on AWS. Which service or service feature might you enable to take advantage of monitoring to ensure auditing the environment for compliance is easy and follows the strict security compliance requirements?

A. CloudTrail for security logs

(Correct)

B. SSL Logging

C. Encrypted data storage

D. Multi Factor Authentication

Explanation

AWS Cloudtrail is the defacto service provided by AWS for monitoring all API calls to AWS and is used for logging and monitoring purposes for compliance purposes. Amazon Cloudtrail detects every call made to AWS and creates a log which can then be further used for analysis. For more information on Amazon Cloudtrail, please visit the link: <https://aws.amazon.com/cloudtrail/>

Question 42: Skipped

As part of your application architecture requirements, the company you are working for has requested the ability to run analytics against all combined log files from the Elastic Load Balancer. Which components are used together to collect logs and

analytics against all combined log files from the Elastic Load Balancer. Which services are used together to collect logs and process log file analysis in an AWS environment? Choose the correct option.

- A. Amazon DynamoDB to store the logs and EC2 for running custom log analysis scripts
- B. Amazon EC2 for storing and processing the log files
- C. Amazon S3 for storing the ELB log files and EC2 for processing the log files in analysis
- D. Amazon S3 for storing ELB log files and Amazon EMR for processing the log files in analysis

(Correct)

Explanation

This question is not that complicated, even though if you don't understand the options. By default when you see "collection of logs and processing of logs", directly think of AWS EMR. Amazon EMR provides a managed Hadoop framework that makes it easy, fast, and cost-effective to process vast amounts of data across dynamically scalable Amazon EC2 instances. You can also run other popular distributed frameworks such as Apache Spark, HBase, Presto, and Flink in Amazon EMR, and interact with data in other AWS data stores such as Amazon S3 and Amazon DynamoDB. Amazon EMR securely and reliably handles a broad set of big data use cases, including log analysis, web indexing, data transformations (ETL), machine learning, financial analysis, scientific simulation, and bioinformatics. For more information on EMR, please visit the link: <https://aws.amazon.com/emr/>

Question 43: Skipped

You have the requirement for storing documents in AWS. You need the documents to be versioned controlled. Which of the following storage option would be the ideal case for this scenario

- A. Amazon S3
- B. Amazon EBS
- C. Amazon EFS
- D. Amazon Glacier

(Correct)

Explanation

Amazon S3 is a perfect storage layer for storing documents and other types of objects. Amazon S3 also has the option for versioning as shown below. The versioning is on the bucket level and can be used to recover prior versions of an object. For more information on Amazon S3, please visit the following URL: <https://aws.amazon.com/s3/>

Question 44: Skipped

An application currently consists of an EC2 Instance hosting a web application. The Web application connects to an AWS RDS database. Which of the following can be used to ensure that the database layer is highly available.

A. Create another EC2 Instance in another availability zone and host a replica of the database

B. Create another EC2 Instance in another availability zone and host a replica of the web server

C. Enable Read Replica for the AWS RDS database

D. Enable Multi-AZ for the AWS RDS database

(Correct)

Explanation

The AWS Documentation mentions the following Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Each AZ runs on its own physically distinct, independent infrastructure, and is engineered to be highly reliable. In case of an infrastructure failure, Amazon RDS performs an automatic failover to the standby (or to a read replica in the case of Amazon Aurora), so that you can resume database operations as soon as the failover is complete. Since the endpoint for your DB Instance remains the same after a failover, your application can resume database operation without the need for manual administrative intervention. For more information on AWS RDS Multi-AZ, please visit the following URL: <https://aws.amazon.com/rds/details/multi-az/>

Question 45: Skipped

An application currently accept users to upload files to an S3 bucket. You want to ensure that the file name for each uploaded file is stored in a DynamoDB table. How can this be achieved? Choose 2 answers from the options given below. Each answer forms part of the solution.

A. Create an AWS Lambda function to insert the required entry

(Correct)

B. Use AWS Cloudwatch to probe for any S3 event

C. Add an event to the S3 bucket

(Correct)

D. Add the Cloudwatch event to the DynamoDB table streams section

Explanation

One can create a Lambda function which can contain the code to process the file and add the name of the file to the DynamoDB table. You can then use the Event notification from the S3 bucket to invoke the Lambda function whenever the file is uploaded. For more information on Amazon S3 event notification, please visit the following URL: <https://docs.aws.amazon.com/AmazonS3/latest/dev/NotificationHowTo.html>

Question 46: Skipped

You have an S3 bucket hosted in AWS. This is used to host promotional videos uploaded by yourself. You need to provide access to users for a limited duration of time. How can this be achieved.

A. Use versioning and enable a timestamp for each version

B. Use Pre-signed URL's

(Correct)

C. Use IAM Roles with a timestamp to limit the access

D. Use IAM policies with a timestamp to limit the access

Explanation

The AWS Documentation mentions the following All objects by default are private. Only the object owner has permission to access these objects. However, the object owner can optionally share objects with others by creating a pre-signed URL, using their own security credentials, to grant time-limited permission to download the objects. For more information on pre-signed URL's, please visit the URL <https://docs.aws.amazon.com/AmazonS3/latest/dev/ShareObjectPreSignedURL.html>

Question 47: Skipped

An application is currently writing a large number of records to a DynamoDB table in one region. There is a requirement for a secondary application to just take in the changes to the DynamoDB table every 2 hours and process the updates accordingly. Which of the following is an ideal way to ensure the secondary application can get the relevant changes from the DynamoDB table.

A. Insert a timestamp for each record and then scan the entire table for the timestamp as per the last 2 hours.

B. Create another DynamoDB table with the records modified in the last 2 hours.

C. Use DynamoDB streams to monitor the changes in the DynamoDB table.

(Correct)

D. Transfer the records to S3 which were modified in the last 2 hours

Explanation

The AWS Documentation mentions the following A DynamoDB stream is an ordered flow of information about changes to items in an Amazon DynamoDB table. When you enable a stream on a table, DynamoDB captures information about every modification to data items in the table. Whenever an application creates, updates, or deletes items in the table, DynamoDB Streams writes a stream record with the primary key attribute(s) of the items that were modified. A stream record contains information about a data modification to a single item in a DynamoDB table. You can configure the stream so that the stream records capture additional information, such as the "before" and "after" images of modified items. For more information on DynamoDB streams , please visit the below url
<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Streams.html>

Question 48: Skipped

Your company has just started using a host of AWS services. There is now a drive from a costing perspective to ensure cost is

optimized for all services used by the company. Which of the below service would give a cost optimization perspective for resources hosted on the AWS Cloud.

A. AWS Inspector

B. AWS Trusted Advisor

(Correct)

C. AWS WAF

D. AWS Config

Explanation

The AWS Documentation mentions the following on the Trusted Advisor An online resource to help you reduce cost, increase performance, and improve security by optimizing your AWS environment, Trusted Advisor provides real time guidance to help you provision your resources following AWS best practices. For more information on the Trusted Advisor , please visit the below URL: <https://aws.amazon.com/premiumsupport/trustedadvisor/>

Question 49: Skipped

Your IT Security department has mandated that all traffic flowing from the EC2 Instances need to be monitored. Which of the below service can help achieve this.

A. Trusted Advisor

B. VPC Flow Logs

(Correct)

C. Use Cloudwatch metrics

D. Use Cloudtrail

Explanation

The AWS Documentation mentions the following VPC Flow Logs is a feature that enables you to capture information about the IP traffic going to and from network interfaces in your VPC. Flow log data is stored using Amazon CloudWatch Logs. After you've created a flow log, you can view and retrieve its data in Amazon CloudWatch Logs. For more information on VPC Flow Logs, please visit the following URL: <https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/flow-logs.html>

Question 50: Skipped

A company has a redshift cluster defined in AWS. They need to have a disaster recovery mechanism in place for the event the redshift cluster goes down for any reason. Which of the following can help get the cluster available immediately in the event the primary one goes down.

A. Take a copy of the underlying EBS volumes to S3 and then do cross region replication

B. Enable cross region snapshots for the Redshift Cluster

(Correct)

C. Create a Cloudformation template to restore the Cluster in another region

D. Enable cross availability zone snapshots for the Redshift Cluster

Explanation

The diagram shows that snapshots are available for Redshift clusters which enables clusters to be available in different regions. For more information on managing Redshift snapshots, please visit the following URL:

<https://docs.aws.amazon.com/redshift/latest/mgmt/managing-snapshots-console.html>

Question 51: Skipped

You have an AWS RDS database hosted in the Singapore region. You need to ensure that a backup database is in place and the data is asynchronously copied. Which of the following would help fulfil this requirement

A. Enable Multi-AZ for the database

B. Enable Read Replica's for the database

(Correct)

C. Enable Asynchronous replication for the database

D. Enable manual backups for the database

Explanation

The AWS Documentation mentions the following Amazon RDS Read Replicas enable you to create one or more read-only copies of your database instance within the same AWS Region or in a different AWS Region. Updates made to the source database are then asynchronously copied to your Read Replicas. In addition to providing scalability for read-heavy workloads, Read Replicas can be promoted to become a standalone database instance when needed. For more information on Read Replica's, please visit the following URL: <https://aws.amazon.com/rds/details/read-replicas/>

Question 52: Skipped

Your current log analysis application takes more than four hours to generate a report of the top 10 users of your web application. You have been asked to implement a system that can report this information in real time, ensure that the report is always up to date, and handle increases in the number of requests to your web application. Choose the option that is cost-effective and can fulfill the requirements.

A. Publish your data to CloudWatch Logs, and configure your application to autoscale to handle the load on demand.

B. Publish your log data to an Amazon S3 bucket. Use AWS CloudFormation to create an Auto Scaling group to scale your post-processing application which is configured to pull down your log files stored in Amazon S3.

C. Post your log data to an Amazon Kinesis data stream, and subscribe your log-processing application so that is configured to process your logging data. (Correct)

D. Configure an Auto Scaling group to increase the size of your Amazon EMR cluster

Explanation

The AWS Documentation mentions the below Amazon Kinesis makes it easy to collect, process, and analyze real-time, streaming data so you can get timely insights and react quickly to new information. Amazon Kinesis offers key capabilities to cost effectively process streaming data at any scale, along with the flexibility to choose the tools that best suit the requirements of your application. With Amazon Kinesis, you can ingest real-time data such as application logs, website clickstreams, IoT telemetry data, and more into your databases, data lakes and data warehouses, or build your own real-time applications using this data. Amazon Kinesis enables you to process and analyze data as it arrives and respond in real-time instead of having to wait until all your data is collected before the processing can begin. For more information on AWS Kinesis please see the below link: <https://aws.amazon.com/kinesis/>

Question 53: Skipped

Your company wants to automate the deployment of new EC2 Instances. They want to have pre-baked Images so that the deployment of instances can be done in a faster manner. Which of the following can help achieve this?

A. Create an Elastic Beanstalk image

B. Create an Opswork image

C. Create an Amazon Machine Image (Correct)

D. Create an EC2 Image

Explanation

The AWS Documentation mentions the below An Amazon Machine Image (AMI) provides the information required to launch an instance, which is a virtual server in the cloud. You must specify a source AMI when you launch an instance. You can launch multiple instances from a single AMI when you need multiple instances with the same configuration. You can use different AMIs to launch instances when you need instances with different configurations. For more information on AMI's please see the below link: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIs.html>

Question 54: Skipped

There is a requirement to load a lot of data from your on-premise network on to AWS Redshift. Which of the below can be used for this data transfer. Choose 2 answers from the options given below.

A. Data Pipeline

B. Direct Connect

(Correct)

C. Snowball

(Correct)

D. AWS VPN

Explanation

The AWS documentation mentions the following about the respective services With a Snowball, you can transfer hundreds of terabytes or petabytes of data between your on-premises data centers and Amazon Simple Storage Service (Amazon S3). AWS Snowball uses Snowball appliances and provides powerful interfaces that you can use to create jobs, transfer data, and track the status of your jobs through to completion. By shipping your data in Snowballs, you can transfer large amounts of data at a significantly faster rate than if you were transferring that data over the Internet, saving you time and money. AWS Direct Connect links your internal network to an AWS Direct Connect location over a standard 1-gigabit or 10-gigabit Ethernet fiber-optic cable. One end of the cable is connected to your router, the other to an AWS Direct Connect router. With this connection in place, you can create virtual interfaces directly to public AWS services (for example, to Amazon S3) or to Amazon VPC, bypassing Internet service providers in your network pat For more information on Direct Connect, please refer to the below URL:

<http://docs.aws.amazon.com/directconnect/latest/UserGuide/Welcome.html> For more information on AWS Snowball, please refer to the below URL: <http://docs.aws.amazon.com/snowball/latest/ug/whatissnowball.html>

Question 55: Skipped

You have just created a Redshift cluster in AWS. You are trying to use SQL Client tools from an EC2 Instance, but you are not able to connect to the Redshift Cluster. What must you do to ensure that you are able to connect to the Redshift Cluster from the EC2 Instance?

A. Install Redshift client tools on the EC2 Instance first.

B. Modify the VPC Security Groups

(Correct)

C. Use the AWS CLI instead of the Redshift client tools.

D. Modify the NACL on the subnet

Explanation

The AWS Documentation mentions the following By default, any cluster that you create is closed to everyone. IAM credentials only control access to the Amazon Redshift API-related resources: the Amazon Redshift console, command line interface (CLI), API, and SDK. To enable access to the cluster from SQL client tools via JDBC or ODBC, you use security groups: · If you are using the EC2-Classic platform for your Amazon Redshift cluster, you must use Amazon Redshift security groups. · If you are using the EC2-VPC platform for your Amazon Redshift cluster, you must use VPC security groups. For more information on Amazon Redshift, please refer to the below URL: <http://docs.aws.amazon.com/redshift/latest/mgmt/overview.html>

Question 56: Skipped

You currently work for a company that looks at baggage handling. There are GPS devices located on the baggage delivery units to deliver the coordinates of the unit every 10 seconds. You need to process these coordinates in real-time from multiple sources. Which tool should you use to digest the data

A. Amazon EMR

B. Amazon SQS

C. AWS Data Pipeline

D. Amazon Kinesis

(Correct)

Explanation

The AWS Documentation mentions the following Amazon Kinesis makes it easy to collect, process, and analyze real-time, streaming data so you can get timely insights and react quickly to new information. Amazon Kinesis offers key capabilities to cost-effectively process streaming data at any scale, along with the flexibility to choose the tools that best suit the requirements of your application. With Amazon Kinesis, you can ingest real-time data such as video, audio, application logs, website clickstreams, and IoT telemetry data for machine learning, analytics, and other applications. Amazon Kinesis enables you to process and analyze data as it arrives and respond instantly instead of having to wait until all your data is collected before the processing can begin For more information on Amazon Kinesis , please visit the link: <https://aws.amazon.com/kinesis/>

Question 57: Skipped

You are planning on hosting a web and database application in an AWS VPC. The database should only be able to talk to the web server. Which of the following would you change to fulfil this requirement?

A. Network Access Control Lists

B. AWS RDS parameter groups

C. Route Tables

D. Security groups

(Correct)

Explanation

You would use VPC Security Groups for this. The AWS Documentation additionally mentions the following A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. When you launch an instance in a VPC, you can assign up to five security groups to the instance. Security groups act at the instance level, not the subnet level. Therefore, each instance in a subnet in your VPC could be assigned to a different set of security groups. If you don't specify a particular group at launch time, the instance is automatically assigned to the default security group for the VPC. For more information on VPC Security Groups , please visit the link: https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_SecurityGroups.html

Question 58: Skipped

A company has a requirement for block level storage which would be able to store 800GB of data. Also encryption of the data is required. Which of the following can be used in such a case

A. AWS EBS Volumes

(Correct)

B. AWS S3

C. AWS Glacier

D. AWS EFS

Explanation

When you consider block level storage , then you need to consider EBS Volumes. Option B and C is incorrect since they are object level storage. Option D is incorrect since this is file level storage For more information on EBS volumes, please visit the following URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumes.html>

Question 59: Skipped

An application requires storage for an EC2 Instance which would be used to store infrequently accessed data. Which of the following is the best storage option for this which is COST effective?

A. EBS IOPS

B. EBS SSD

C. EBS Throughput Optimized

D. EBS Cold HDD

(Correct)

Explanation

If you need storage for infrequently accessed storage , then EBS Cold HDD is the best option for this This is also mentioned in the AWS Documentation For more information on EBS volume types, please visit the following URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html>

Question 60: Skipped

There are multiple issues reported from an EC2 instance. It is required to analyze the logs files. What can be used in AWS to store and analyze the log files from the EC2 Instance? Choose one answer from the options below

A. AWS SOS

B. AWS S3

C. AWS Cloudtrail

D. AWS Cloudwatch Logs

(Correct)

Explanation

You can use Amazon CloudWatch Logs to monitor, store, and access your log files from Amazon Elastic Compute Cloud (Amazon EC2) instances, AWS CloudTrail, and other sources. For more information on Cloudwatch Logs, please visit the following URL: <https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/WhatIsCloudWatchLogs.html>

Question 61: Skipped

You are currently hosting an infrastructure and most of the EC2 instances are near 90 - 100% utilized. What is the type of EC2 instances you would utilize to ensure costs are minimized?

A. Reserved instances

(Correct)

B. On-demand instances

C. Spot instances

D. Regular instances

Explanation

When you have instances that will be used continuously and throughout the year, the best option is to buy reserved instances. By buying reserved instances, you are actually allocated an instance for the entire year or the duration you specify with a reduced cost. To understand more on reserved instances, please visit the below URL: <https://aws.amazon.com/ec2/pricing/reserved-instances/>

Question 62: Skipped

As a Solutions architect, it is your job to design for high availability and fault tolerance. Company-A is utilizing Amazon S3 to store large amounts of file data. What steps would you take to ensure that if an availability zone was lost due to a natural disaster your files would still be in place and accessible

A. Copy the S3 bucket to an EBS optimized backed EC2 instance

B. Amazon S3 is highly available and fault tolerant by design and requires no additional configuration

(Correct)

C. Enable AWS Storage Gateway using gateway-stored setup

D. Enable Cross region replication for the S3 bucket

Explanation

AWS S3 is already highly available and fault tolerant. This is very clearly mentioned in its FAQ's, the link is given below
<https://aws.amazon.com/s3/faqs/>

Question 63: Skipped

A company wants to utilize AWS storage. For them low storage cost is paramount, the data is rarely retrieved, and data retrieval times of several hours are acceptable for them. What is the best storage option to use?

A. Amazon Glacier (Correct)

B. S3-Reduced Redundancy Storage

C. EBS backed storage connected to EC2

D. AWS Cloud Front

Explanation

With the above requirements, the best option is to opt for Amazon Glacier. The AWS Documentation further mentions the following Amazon Glacier is a secure, durable, and extremely low-cost cloud storage service for data archiving and long-term backup. It is designed to deliver 99.999999999% durability, and provides comprehensive security and compliance capabilities that can help meet even the most stringent regulatory requirements. For more information on Amazon Glacier, please refer to the below URL: <https://aws.amazon.com/glacier/>

Question 64: Skipped

A company is building a service in which Amazon EC2 worker instances process an uploaded audio file and generate a text file. You must store both of these files in the same durable storage until the text file is retrieved. You do not know what the storage capacity requirements are. Which storage option is both cost-efficient and scalable?

A. Multiple Amazon EBS volume with snapshots

B. A single Amazon Glacier vault

C. A single Amazon S3 bucket (Correct)

Explanation

Amazon S3 is the best storage option for this. It is durable and highly available. For more information on Amazon S3, please refer to the below URL: <https://aws.amazon.com/s3/>

Question 65: Skipped

You have an application currently running on five EC2 instances as part of an Auto Scaling group. For the past 30 minutes all five instances have been running at 100 CPU Utilization; however, the Auto Scaling group has not added any more instances to the group. What is the most likely cause? Choose 2 likely answers from the options given below

A. You already have 20 on-demand instances running.

(Correct)

B. The Auto Scaling group's MAX size is set at five.

(Correct)

C. The Auto Scaling group's scale down policy is too high.

D. The Auto Scaling group's scale up policy has not yet been reached.

Explanation

This is provided in the AWS documentation. For more information on troubleshooting Autoscaling, please refer to the following link: <http://docs.aws.amazon.com/autoscaling/latest/userguide/ts-as-capacity.html>

Question 66: Skipped

Your CloudFront distribution is performing well, but you are still getting too many requests at the origin locations. What could be one way to increase CloudFront performance? Choose the correct answer from the options below

A. Change the origin location from an S3 bucket to an ELB

B. Use a faster Internet connection

C. Increase the cache expiration time

(Correct)

D. Create an "invalidation" for all your objects, and recache them

Explanation

You can control how long your objects stay in a CloudFront cache before CloudFront forwards another request to your origin. Reducing the duration allows you to serve dynamic content. Increasing the duration means your users get better performance because your objects are more likely to be served directly from the edge cache. A longer duration also reduces the load on your

because your objects are more likely to be served directly from the edge cache. A longer duration also reduces the load on your origin. For more information on Cloudfront cache expiration, please refer to the following link:
<http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Expiration.html>

Question 67: Skipped

You have been instructed by your supervisor to devise a disaster recovery model for the resources in their AWS account. The key requirement is to ensure that the cost is at a minimum when devising the solution. Which of the following disaster recovery mechanism would you employ in such a scenario?

A. Backup and Restore

(Correct)

B. Pilot Light

C. Warm standby

D. Multi-Site

Explanation

Since the cost needs to be at a minimum, the best option is to back up all the resources and then perform a restore in the event of a disaster. For more information on disaster recovery, please refer to the below link:
https://media.amazonaws.com/AWS_Disaster_Recovery.pdf

Question 68: Skipped

An application consists of the following architecture.a. EC2 Instances in multiple AZ's behind an ELB.b. The EC2 Instances are launched via an Autoscaling Groupc. There is a NAT instance which is used to ensure that instances can download updates from the internet.Due to the high bandwidth being consumed by the NAT instance, it has been decided to use a NAT gateway. How should this be implemented?

A. Use NAT Instances along with the NAT gateway

B. Host the NAT instance in the private subnet

C. Migrate the NAT Instance to NAT Gateway and host the NAT Gateway in the public subnet

(Correct)

D. Convert the NAT instance to a NAT gateway

Explanation

Once can simple start using the NAT gateway service and stop using the deployed NAT instances. But you need to ensure that the NAT gateway is deployed in the public subnet For more information on migrating to a NAT gateway, please visit the following URL: <https://aws.amazon.com/premiumsupport/knowledge-center/migrate-nat-instance-gateway/>

Question 69: Skipped

A company has an application hosted in AWS. This application consists of EC2 Instances which sits behind an ELB with EC2 Instances. The following are requirements from an administrative perspective
a) Investigate any issues for the ELB by searching through the relevant logs
b) Ensure notifications are sent when the latency goes beyond 10 seconds
Which of the following can be used to achieve this requirement. Choose 2 answers from the options given below

- A. Use Cloudwatch metrics for whatever metrics need to be monitored. (Correct)
- B. Enable Cloudwatch logs and then investigate the logs whenever there is an issue.
- C. Enable the logs on the ELB and then investigate the logs whenever there is an issue. (Correct)
- D. Use Cloudtrail to monitor whatever metrics need to be monitored.

Explanation

When you use Cloudwatch metrics for an ELB, you can get the amount of read requests and latency out of the box. For more information on using Cloudwatch with the ELB, please visit the following URL:

<https://docs.aws.amazon.com/elasticloadbalancing/latest/classic/elb-cloudwatch-metrics.html> Elastic Load Balancing provides access logs that capture detailed information about requests sent to your load balancer. Each log contains information such as the time the request was received, the client's IP address, latencies, request paths, and server responses. You can use these access logs to analyze traffic patterns and to troubleshoot issues. For more information on using ELB logs, please visit the following URL: <https://docs.aws.amazon.com/elasticloadbalancing/latest/classic/access-log-collection.html>

Question 70: Skipped

A company has a requirement to extend their storage model to the AWS cloud. They should be able to connect their On-premise servers to the storage layers via iSCSI. Which of the following would be best suited for this?

- A. Configure the Simple storage service
- B. Configure Storage gateway cached volume
- C. Configure Storage gateway stored volume (Correct)
- D. Configure Amazon Glacier

Explanation

The AWS Documentation mentions the following If you need low-latency access to your entire dataset, first configure your on-premises gateway to store all your data locally. Then asynchronously back up point-in-time snapshots of this data to Amazon S3. This configuration provides durable and inexpensive offsite backups that you can recover to your local data center or Amazon EC2. For example, if you need replacement capacity for disaster recovery, you can recover the backups to Amazon EC2. For more information on the Storage gateway, please visit the following URL:

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

Question 71: Skipped

An IT company has a set of EC2 Instances hosted in a VPC. They are hosted in a private subnet. These instances now need to access resources hosted on an S3 bucket. The traffic should not traverse the internet. The addition of which of the following would help fulfil this requirement

A. VPC endpoint

(Correct)

B. NAT Instance

C. NAT gateway

D. Internet gateway

Explanation

A VPC endpoint enables you to privately connect your VPC to supported AWS services and VPC endpoint services powered by PrivateLink without requiring an internet gateway, NAT device, VPN connection, or AWS Direct Connect connection. Instances in your VPC do not require public IP addresses to communicate with resources in the service. Traffic between your VPC and the other service does not leave the Amazon network. For more information on AWS VPC endpoints, please visit the following URL: <https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-endpoints.html>

Question 72: Skipped

You need to host a set of web servers and database servers in an AWS VPC. Which of the following is the proper architecture design for supporting such a set of servers.

A. Use a public subnet for the web tier and a public subnet for the database layer

B. Use a public subnet for the web tier and a private subnet for the database layer

(Correct)

C. Use a private subnet for the web tier and a private subnet for the database layer

D. Use a private subnet for the web tier and a public subnet for the database layer

Explanation

The ideal setup is to ensure that the web server is hosted in the public subnet so that it can be accessed by users on the internet. The database server can be hosted in the private subnet. The diagram from the AWS Documentation shows how this can be setup For more information on public and private subnets in AWS, please visit the following URL: https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario2.html

Question 73: Skipped

An IT company is looking at ways it can secure their resources in their AWS Account. Which of the following are ways to secure data at rest and in transit in AWS. Choose 3 answers from the options given below

A. Encrypt all EBS volumes attached to EC2 Instances

(Correct)

B. Use server side encryption for S3

(Correct)

C. Use SSL/HTTPS when using the Elastic Load Balancer

(Correct)

D. Use IOPS volumes when working with EBS volumes on EC2 Instances

Explanation

The AWS documentation mentions the following Amazon EBS encryption offers you a simple encryption solution for your EBS volumes without the need for you to build, maintain, and secure your own key management infrastructure. When you create an encrypted EBS volume and attach it to a supported instance type, the following types of data are encrypted:

- Data at rest inside the volume
- All data moving between the volume and the instance
- All snapshots created from the volume

Data protection refers to protecting data while in-transit (as it travels to and from Amazon S3) and at rest (while it is stored on disks in Amazon S3 data centers). You can protect data in transit by using SSL or by using client-side encryption. You have the following options of protecting data at rest in Amazon S3:

- Use Server-Side Encryption – You request Amazon S3 to encrypt your object before saving it on disks in its data centers and decrypt it when you download the objects.
- Use Client-Side Encryption – You can encrypt data client-side and upload the encrypted data to Amazon S3. In this case, you manage the encryption process, the encryption keys, and related tools. You can create a load balancer that uses the SSL/TLS protocol for encrypted connections (also known as SSL offload). This feature enables traffic encryption between your load balancer and the clients that initiate HTTPS sessions, and for connections between your load balancer and your EC2 instances. For more information on securing data at rest , please refer to the below link: <https://d0.awsstatic.com/whitepapers/aws-securig-data-at-rest-with-encryption.pdf>

Question 74: Skipped

Your company currently has a set of EC2 Instances running a web application which sits behind an Elastic Load Balancer. You also have an Amazon RDS instance which is used by the web application. You have been asked to ensure that this architecture is self-healing in nature and cost effective. Which of the following would fulfil this requirement. Choose 2 answers from the option given below

A. Use Cloudwatch metrics to check the utilization of the web layer. Use Autoscaling Group to scale the web instances accordingly based on the CloudWatch metrics.

(Correct)

B. Use Cloudwatch metrics to check the utilization of the databases servers. Use Autoscaling Group to scale the database instances accordingly based on the CloudWatch metrics.

C. Utilize the Read Replica feature for the Amazon RDS layer

D. Utilize the Multi-AZ feature for the Amazon RDS layer

(Correct)

Explanation

AWS showcases a self-healing architecture where you have a set of EC2 servers as Web server being launched by an Autoscaling Group. The AWS Documentation mentions the following Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Each AZ runs on its own physically distinct, independent infrastructure, and is engineered to be highly reliable. In case of an infrastructure failure, Amazon RDS performs an automatic failover to the standby (or to a read replica in the case of Amazon Aurora), so that you can resume database operations as soon as the failover is complete. Since the endpoint for your DB Instance remains the same after a failover, your application can resume database operation without the need for manual administrative intervention. For more information on Multi-AZ RDS, please refer to the below link: <https://aws.amazon.com/rds/details/multi-az/>

Question 75: Skipped

Your company has a set of EC2 Instances that access data objects stored in an S3 bucket. Your IT Security department is concerned about the security of this architecture and wants you to implement the following
1) Ensure that the EC2 Instance securely accesses the data objects stored in the S3 bucket
2) Prevent accidental deletion of objects
Which of the following would help fulfil the requirements of the IT Security department. Choose 2 answers from the options given below

A. Create an IAM user and ensure the EC2 Instances uses the IAM user credentials to access the data in the bucket.

B. Create an IAM Role and ensure the EC2 Instances uses the IAM Role to access the data in the bucket.

(Correct)

C. Use S3 Cross Region replication to replicate the objects so that the integrity of data is maintained.

D. Use an S3 bucket policy that ensures that MFA Delete is set on the objects in the bucket

(Correct)

Explanation

The AWS Documentation mentions the following IAM roles are designed so that your applications can securely make API requests from your instances, without requiring you to manage the security credentials that the applications use. Instead of creating and distributing your AWS credentials, you can delegate permission to make API requests using IAM roles. For more information on IAM Roles, please refer to the below link: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-foramazon-ec2.html> MFA Delete can be used to add another layer of security to S3 Objects to prevent accidental deletion of objects. For more information on MFA Delete, please refer to the below link: <https://aws.amazon.com/blogs/security/securing-access-to-aws-using-mfa-part-3/>

Question 76: Skipped

You have the requirement to get a snapshot of the current configuration of the resources in your AWS Account. Which of the following services can be used for this purpose

A. AWS CodeDeploy

B. AWS Trusted Advisor

C. AWS CloudWatch Metrics

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C. AWS Config

(Correct)

D. AWS IAM

Explanation

The AWS Documentation mentions the following With AWS Config, you can do the following:

- Evaluate your AWS resource configurations for desired settings.
- Get a snapshot of the current configurations of the supported resources that are associated with your AWS account.
- Retrieve configurations of one or more resources that exist in your account.
- Retrieve historical configurations of one or more resources.
- Receive a notification whenever a resource is created, modified, or deleted.
- View relationships between resources. For example, you might want to find all resources that use a particular security group.

For more information on AWS Config , please visit the below URL:
<http://docs.aws.amazon.com/config/latest/developerguide/WhatIsConfig.html>

Question 77: Skipped

Your company is hosting an application in AWS. The application consists of a set of web servers and AWS RDS. The application is a read intensive application. It has been noticed that the response time of the application decreases due to the load on the AWS RDS instance. Which of the following measures can be taken to scale the data tier. Choose 2 answers from the options given below

A. Create Amazon DB Read Replica's. Configure the application layer to query the read replicas for query needs.

(Correct)

B. Use Autoscaling to scale out and scale in the database tier

C. Use SQS to cache the database queries

D. Use ElastiCache in front of your Amazon RDS DB to cache common queries.

(Correct)

Explanation

The AWS documentation mentions the following Amazon RDS Read Replicas provide enhanced performance and durability for database (DB) instances. This replication feature makes it easy to elastically scale out beyond the capacity constraints of a single DB Instance for read-heavy database workloads. You can create one or more replicas of a given source DB Instance and serve high-volume application read traffic from multiple copies of your data, thereby increasing aggregate read throughput. Read replicas can also be promoted when needed to become standalone DB instances. For more information on AWS RDS Read Replica's, please visit the below URL: <https://aws.amazon.com/rds/details/read-replicas/> Amazon ElastiCache is a web service that makes it easy to deploy, operate, and scale an in-memory data store or cache in the cloud. The service improves the performance of web applications by allowing you to retrieve information from fast, managed, in-memory data stores, instead of relying entirely on slower disk-based databases. For more information on AWS Elastic Cache, please visit the below URL: <https://aws.amazon.com/elasticcache/>

Question 78: Skipped

Which of the following use cases are suitable for Amazon DynamoDB? Choose 2 answers

Managing web sessions.

(Correct)

Storing JSON documents.

(Correct)

 Storing metadata for Amazon S3 objects.

(Correct)

 Running relational joins and complex updates.

Explanation

If all your JSON data have the same fields eg [id,name,age] then it would be better to store it in a relational database, the metadata on the other hand is unstructured, also running relational joins or complex updates would work on DynamoDB as well.

Question 79: Skipped

If I want my instance to run on a single-tenant hardware, which value do I have to set the instance's tenancy attribute to?

 Dedicated

(Correct)

 Isolated One Reserved

Explanation

The Instance tenancy attribute should be set to Dedicated Instance. The rest of the values are invalid.

Question 80: Skipped

"You have a distributed application that periodically processes large volumes of data across multiple Amazon EC2 Instances. The application is designed to recover gracefully from Amazon EC2 instance failures. You are required to accomplish this task in the most cost effective way. Which of the following will meet your requirements?"

 Spot Instances

(Correct)

 Reserved instances Dedicated instances On-Demand instances

Explanation

Since the work we are addressing here is not continuous, a reserved instance shall be idle at times, same goes with On Demand instances. Also it does not make sense to launch an On Demand instance whenever work comes up, since it is expensive. Hence Spot Instances will be the right fit because of their low rates and no long term commitments.

Question 81: Skipped

Are the Reserved Instances available for Multi-AZ Deployments?

Multi-AZ Deployments are only available for Cluster Compute instances types

Available for all instance types

(Correct)

Only available for M3 instance types

Not Available for Reserved Instances

Explanation

Reserved Instances is a pricing model, which is available for all instance types in EC2

Question 82: Skipped

A company is migrating an on-premise MySQL database to AWS. Following are the key requirements
a) Ability to support an initial size of 5TB
b) Ability for the database to double in size
c) Replication Lag to be kept under 100 milliseconds. Which Amazon RDS engine meets these requirements?

A. MySQL

B. Microsoft SQL Server

C. Oracle

D. Amazon Aurora

(Correct)

Explanation

The AWS Documentation supports the mentioned requirements which is supported by AWS Aurora. Amazon Aurora (Aurora) is a fully managed, MySQL- and PostgreSQL-compatible, relational database engine. It combines the speed and reliability of high-end commercial databases with the simplicity and cost-effectiveness of open-source databases. It delivers up to five times the throughput of MySQL and up to three times the throughput of PostgreSQL without requiring changes to most of your existing applications. All Aurora engines are replicated from the primary engine and have less than 100ms lag.

applications. All Aurora Replicas return the same data for query results with minimal replica lag—usually much less than 100 milliseconds after the primary instance has written an update For more information on AWS Aurora, please visit the following URL: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Aurora.Overview.html>

Question 83: Skipped

A company has a requirement to host a static web site in AWS. Which of the following would be an easy and cost effective way to have this setup in AWS.

- A. Use Cloudformation templates to have the web site setup
- B. Create an EC2 Instance , install the web server and then have the site setup
- C. Use S3 web site hosting to host the web site
- D. Use Elastic beanstalk to host the web site

(Correct)

Explanation

The AWS Documentation mentions the following You can host a static website on Amazon Simple Storage Service (Amazon S3). On a static website, individual webpages include static content. They might also contain client-side scripts For more information on AWS S3 web site hosting, please visit the following URL:
<https://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteHosting.html>

Question 84: Skipped

An application needs to have a database hosted in AWS. The database will be hosted on an EC2 Instance. The application itself does not have a high usage ratio, hence the reads and writes on the database would be to a bare minimum. What is the MOST cost effective storage type that could be used by the underlying EC2 instance hosting the database?

- A. Amazon EBS provisioned IOPS SSD
- B. Amazon EBS Throughput Optimized HDD
- C. Amazon EBS General Purpose SSD
- D. Amazon EFS

(Correct)

Explanation

Since the database is not going to be used that frequently you should ideally choose the EBS General Purpose SSD over EBS provisioned IOPS SSD For more information on AWS EBS Volumes, please visit the following URL:
<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumes.html>

Question 85: Skipped

An application needs to have files stored in AWS. The file system need to have the ability to be mounted from various linux EC2 Instances. Which of the following would be the ideal storage service that can be used for this requirement.

A. Amazon EBS

B. Amazon EFS (Correct)

C. Amazon S3

D. Amazon EC2 Instance store

Explanation

The AWS Documentation mentions the following Amazon EFS provides scalable file storage for use with Amazon EC2. You can create an EFS file system and configure your instances to mount the file system. You can use an EFS file system as a common data source for workloads and applications running on multiple instances For more information on AWS EFS, please visit the following URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AmazonEFS.html>

Question 86: Skipped

An application allows users to upload images to an S3 bucket. Initially these images will be downloaded quite frequently, but after some time, the images might only be accessed once a week. What could be done to ensure that a COST effective solution? Choose 2 answers from the options below. Each answer forms part of the solution

A. Store the objects in Amazon Glacier

B. Store the objects in S3 – Standard storage (Correct)

C. Create a lifecycle policy to transfer the objects to S3 – Standard storage after a certain duration of time

D. Create a lifecycle policy to transfer the objects to S3 – Infrequent Access storage after a certain duration of time (Correct)

Explanation

Store the images initially in Standard storage since they are accessed frequently. Define Lifecycle policies to move the images to Infrequent Access storage to save on costs. Amazon S3 Infrequent access is perfect if you want to store data that is not frequently accessed. It is more cost effective than Option D of Amazon S3 Standard. And if you choose Amazon Glacier with expedited retrievals, then you defeat the whole purpose of the requirement, because you would have an increased cost with this option For more information on AWS Storage classes, please visit the following URL: <https://aws.amazon.com/s3/storage-classes/>

Question 87: Skipped

A company needs a solution to store and archive corporate documents and has determined that Amazon Glacier is the right solution. Data must be delivered within 5 minutes of a retrieval request. Which feature in Amazon Glacier can help meet this requirement?

A. Defining a Vault Lock

B. Using Expedited retrieval

(Correct)

C. Using Bulk retrieval

D. Using Standard retrieval

Explanation

The AWS Documentation mentions the following Expedited retrievals allow you to quickly access your data when occasional urgent requests for a subset of archives are required. For more information on AWS Glacier Retrieval, please visit the following URL: <https://docs.aws.amazon.com/amazonglacier/latest/dev/downloading-an-archive-two-steps.html>

Question 88: Skipped

A company wants to use Kubernetes as an orchestration tool for their application containers. They need to have a fully managed solution for this. Which of the following service would help fulfil this requirement

A. AWS ECS

(Correct)

B. AWS Lambda

C. AWS API Gateway

D. AWS ELB

Explanation

The AWS Documentation mentions the following Amazon Elastic Container Service for Kubernetes (Amazon EKS) is a managed service that makes it easy for you to run Kubernetes on AWS without needing to install and operate your own Kubernetes clusters. For more information on AWS Elastic Container service for Kubernetes, please visit the following URL: <https://aws.amazon.com/eks/>

Question 89: Skipped

You are currently planning on using Autoscaling Groups for processing purposes for an application. How can you ensure that when an instance is spun up via the Autoscaling Group, that sufficient time is provided for the application to stabilize.

A. Modify the Instance User Data property with a timeout interval

B. Increase the Autoscaling cool down timer value

(Correct)

C. Enable the Autoscaling cross zone balancing feature

D. Disable Cloudwatch alarms till the application stabilizes

Explanation

The AWS Documentation mentions the following The cooldown period is a configurable setting for your Auto Scaling group that helps to ensure that it doesn't launch or terminate additional instances before the previous scaling activity takes effect. After the Auto Scaling group dynamically scales using a simple scaling policy, it waits for the cooldown period to complete before resuming scaling activities. For more information on Autoscaling cooldown, please visit the following URL:
<https://docs.aws.amazon.com/autoscaling/ec2/userguide/Cooldown.html>

Question 90: Skipped

A company hosts a popular web application that connects to an Amazon RDS MySQL DB instance running in a private VPC subnet that was created with default ACL settings. The IT Security department has a suspicion that a DDoS attack is coming from a suspecting IP. How can you protect the subnets from this attack?

A. Change the Inbound Security Groups to deny access from the suspecting IP

B. Change the Outbound Security Groups to deny access from the suspecting IP

C. Change the Inbound NACL to deny access from the suspecting IP

(Correct)

D. Change the Outbound NACL to deny access from the suspecting IP

Explanation

Option A and B are invalid because by default the Security Groups already block traffic. You can use NACL's as an additional security layer for the subnet to deny traffic. Option D is invalid since just changing the Inbound Rules is sufficient. The AWS Documentation mentions the following A network access control list (ACL) is an optional layer of security for your VPC that acts as a firewall for controlling traffic in and out of one or more subnets. You might set up network ACLs with rules similar to your security groups in order to add an additional layer of security to your VPC. For more information on Network Access Control Lists, please visit the following URL: https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_ACLs.html

Question 91: Skipped

A company is planning on allowing their users to upload and read objects from an S3 bucket. Due to the numerous amount of users, the read/write traffic will be very high. How should the architect maximize Amazon S3 performance?

A. Prefix each object name with a random string

(Correct)

B. Use the STANDARD_IA storage class

C. Prefix each object name with the current date

D. Enable versioning on the S3 bucket

Explanation

If the request rate is high, then you can use hash keys or random strings to prefix the object name. In such a case, the partitions used to store the objects will be better distributed and hence allow for better read/write performance for your objects. For more information on how to ensure performance in S3, please visit the following URL:
<https://docs.aws.amazon.com/AmazonS3/latest/dev/request-rate-perf-considerations.html>

Question 92: Skipped

An EC2 Instance is setup in AWS. It will host an application that will make API calls to the Simple Storage Service. Which is the ideal way for the application to access the Simple Storage Service

A. Pass API credentials to the instance using instance userdata

B. Store API credentials as an object in a separate Amazon S3 bucket

C. Embed the API credentials into your application

D. Create and Assign an IAM role to the EC2 Instance

(Correct)

Explanation

The AWS Documentation mentions the following You can use roles to delegate access to users, applications, or services that don't normally have access to your AWS resources Its not a best practice to use IAM credentials for any production based application. It's always a good practice to use IAM Roles. For more information on IAM Roles, please visit the following URL:
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html

Question 93: Skipped

You have videos which you upload to an S3 bucket. You want to provide access to users to view the videos. You want to provide the best user experience no matter where the user is located. What is the best way to achieve this?

A. Enable Cross region replication for the S3 bucket to all regions

B. Use Cloudfront with the S3bucket as the source

(Correct)

C. Use API gateway with S3 bucket as the source

D. Use AWS Lambda functions to deliver the content to users

Explanation

The AWS Documentation mentions the following to backup this requirement Amazon CloudFront is a web service that speeds up distribution of your static and dynamic web content, such as .html, .css, .js, and image files, to your users. CloudFront delivers your content through a worldwide network of data centers called edge locations. When a user requests content that you're serving with CloudFront, the user is routed to the edge location that provides the lowest latency (time delay), so that content is delivered with the best possible performance. If the content is already in the edge location with the lowest latency, CloudFront delivers it immediately. If the content is not in that edge location, CloudFront retrieves it from an Amazon S3 bucket or an HTTP server (for example, a web server) that you have identified as the source for the definitive version of your content. For more information on Amazon Cloudfront, please visit the following URL:

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

Question 94: Skipped

An organization has the requirement to store 10TB worth of scanned files. There is a requirement to have a search application in place which can be used to search through the scanned files? Which of the below mentioned options is the best option for implementing the search facility.

A. Use S3 with reduced redundancy to store and serve the scanned files. Install a commercial search application on EC2 Instances and configure with auto-scaling and an Elastic Load Balancer.

B. Model the environment using CloudFormation. Use an EC2 instance running Apache webserver and an open source search application, stripe multiple standard EBS volumes together to store the scanned files with a search index.

C. Use S3 with standard redundancy to store and serve the scanned files. Use CloudSearch for query processing, and use Elastic Beanstalk to host the website across multiple availability zones. (Correct)

D. Use a single-AZ RDS MySQL instance to store the search index for the scanned files and use an EC2 instance with a custom application to search based on the index.

Explanation

With Amazon CloudSearch, you can quickly add rich search capabilities to your website or application. You don't need to become a search expert or worry about hardware provisioning, setup, and maintenance. With a few clicks in the AWS Management Console, you can create a search domain and upload the data that you want to make searchable, and Amazon CloudSearch will automatically provision the required resources and deploy a highly tuned search index. You can easily change your search parameters, fine tune search relevance, and apply new settings at any time. As your volume of data and traffic fluctuates, Amazon CloudSearch seamlessly scales to meet your needs. For more information on AWS cloudsearch , please visit the below link: <https://aws.amazon.com/cloudsearch/>

Question 95: Skipped

You have completed 95% of your practice test. Good job! You can now move on to the next section or take a break.

You work as an AWS Architect for a company that has an On-premise data center. They want to connect this setup to the AWS Cloud. How could this be achieved? Note that the connection must have the maximum throughput and be dedicated for the company

A. Use AWS Express Route

B. Use AWS Direct Connect

(Correct)

C. Use AWS VPC Peering

D. Use AWS VPN

Explanation

The AWS Documentation mentions the following AWS Direct Connect makes it easy to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your datacenter, office, or colocation environment, which in many cases can reduce your network costs, increase bandwidth throughput, and provide a more consistent network experience than Internet-based connections. For more information on AWS Direct Connect , please visit the below link: <https://aws.amazon.com/directconnect/>

Question 96: Skipped

You currently have developers who have access to your production AWS account? There is a concern raised that the developers could potentially delete the production based EC2 resources. Which of the below options could help alleviate this concern?

A. Tag the production instances with a production-identifying tag and add resource-level permissions to the developers with an explicit deny on the terminate API call to instances with the production tag.

(Correct)

B. Create a separate AWS account and add the developers to that account.

(Correct)

C. Modify the IAM policy on the developers to require MFA before deleting EC2 instances and disable MFA access to the employee

D. Modify the IAM policy on the developers to require MFA before deleting EC2 instances

Explanation

Tags enable you to categorize your AWS resources in different ways, for example, by purpose, owner, or environment. This is useful when you have many resources of the same type — you can quickly identify a specific resource based on the tags you've assigned to it. Each tag consists of a key and an optional value, both of which you define For more information on tagging aws resources please refer to the below URL: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_Tags.html

Question 97: Skipped

A company needs to monitor the read and write IOPs metrics for their AWS MySQL RDS instance and send real-time alerts to their operations team. Which AWS services can accomplish this? Choose 2 answers from the options given below.

A. Amazon Simple Email Service

B. Amazon CloudWatch (Correct)

C. Amazon Simple Queue Service

D. Amazon Route 53

E. Amazon Simple Notification Service (Correct)

Explanation

Amazon Cloudwatch will be used to monitor the IOP's metrics from the RDS instance and Amazon Simple Notification Service will be used to send the notification if any alarm is triggered. For more information on cloudwatch metrics, please refer to the link: http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CW_Support_For_AWS.html

Question 98: Skipped

You run an ad-supported photo sharing website using S3 to serve photos to visitors of your site. At some point you find out that other sites have been linking to the photos on your site, causing loss to your business. What is an effective method to mitigate this? Choose the correct answer from the options below

A. Use CloudFront distributions for static content.

B. Store photos on an EBS volume of the web server.

C. Remove public read access and use signed URLs with expiry dates. (Correct)

D. Block the IPs of the offending websites in Security Groups.

Explanation

You can distribute private content using a signed URL that is valid for only a short time—possibly for as little as a few minutes. Signed URLs that are valid for such a short period are good for distributing content on-the-fly to a user for a limited purpose, such as distributing movie rentals or music downloads to customers on demand. For more information on Signed URL's please visit the below link: <http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-signed-urls.html>

Question 99: Skipped

A company wants to setup a template for deploying resources to AWS. They want this to be dynamic in nature so that the template can pick up parameters and then spin up resources based on those parameters. Which of the following AWS

service would be ideal for this requirement

A. AWS Beanstalk

B. AWS Cloudformation

(Correct)

C. AWS CodeBuild

D. AWS CodeDeploy

Explanation

The AWS Documentation mentions the below on AWS Cloudformation. This supplements the requirement in the question for the consultants to use their architecture diagrams to construct cloudformation templates. AWS CloudFormation is a service that helps you model and set up your Amazon Web Services resources so that you can spend less time managing those resources and more time focusing on your applications that run in AWS. You create a template that describes all the AWS resources that you want (like Amazon EC2 instances or Amazon RDS DB instances), and AWS CloudFormation takes care of provisioning and configuring those resources for you. For more information on AWS Cloudformation, please visit the following URL: <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide>Welcome.html>

Question 100: Skipped

Your IT Security department has mandated that all data on EBS volumes created for underlying EC2 Instances need to be encrypted. Which of the following can help achieve this?

A. AWS KMS API

(Correct)

B. AWS Certificate Manager

C. API Gateway with STS

D. IAM Access Key

Explanation

Option B is incorrect - The AWS Certificate manager can be used to generate SSL certificates that can be used to encrypt traffic in transit, but not at rest Option C is incorrect is again used for issuing tokens when using API gateway for traffic in transit. Option D is used for secure access to EC2 Instances The AWS Documentation mentions the following on AWS KMS AWS Key Management Service (AWS KMS) is a managed service that makes it easy for you to create and control the encryption keys used to encrypt your data. AWS KMS is integrated with other AWS services including Amazon Elastic Block Store (Amazon EBS), Amazon Simple Storage Service (Amazon S3), Amazon Redshift, Amazon Elastic Transcoder, Amazon WorkMail, Amazon Relational Database Service (Amazon RDS), and others to make it simple to encrypt your data with encryption keys that you manage For more information on AWS KMS, please visit the following URL: <https://docs.aws.amazon.com/kms/latest/developerguide/overview.html>

Question 101: Skipped

A company's Business Continuity department is worried about the EBS volumes hosted in AWS. They want to ensure that redundancy is achieved for the underlying EBS Volumes. What must be done to achieve this in a COST effective manner?

A. Nothing, since by default EBS Volumes are replicated across Availability zones.

B. Copy the data to S3 bucket for data redundancy

C. Create EBS Snapshots in another Availability Zone for data redundancy

(Correct)

D. Copy the data to a DynamoDB table for data redundancy

Explanation

The AWS Documentation mentions the following You can back up the data on your Amazon EBS volumes to Amazon S3 by taking point-in-time snapshots. Snapshots are incremental backups, which means that only the blocks on the device that have changed after your most recent snapshot are saved. This minimizes the time required to create the snapshot and saves on storage costs by not duplicating data. For more information on EBS snapshots, please visit the following URL:

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

Question 102: Skipped

A mobile application hosted on AWS needs to a data store on AWS. Each item will be around 10KB in size. Latency of data access must remain consistent despite very high application traffic. Which would be the ideal data store for the application

A. AWS DynamoDB

(Correct)

B. AWS EBS Volumes

C. AWS Glacier

D. AWS Redshift

Explanation

The AWS Documentation mentions the following Amazon DynamoDB is a fast and flexible NoSQL database service for all applications that need consistent, single-digit millisecond latency at any scale. It is a fully managed cloud database and supports both document and key-value store models. Its flexible data model, reliable performance, and automatic scaling of throughput capacity, makes it a great fit for mobile, web, gaming, ad tech, IoT, and many other applications For more information on AWS DynamoDB, please visit the following URL: <https://aws.amazon.com/dynamodb/>

Question 103: Skipped

A company is planning to design a micro services architected application that will be hosted in AWS. The entire architecture needs to be decoupled. Which of the following service can help achieve this

needs to be decoupled. Which of the following service can help achieve this.

A. AWS SNS

B. AWS ELB

C. AWS AutoScaling

D. AWS SQS

(Correct)

Explanation

The AWS Documentation mentions the following Amazon Simple Queue Service (SQS) is a fully managed message queuing service that makes it easy to decouple and scale microservices, distributed systems, and serverless applications. Building applications from individual components that each perform a discrete function improves scalability and reliability, and is best practice design for modern applications. SQS makes it simple and cost-effective to decouple and coordinate the components of a cloud application. Using SQS, you can send, store, and receive messages between software components at any volume, without losing messages or requiring other services to be always available. For more information on AWS SQS, please visit the following URL: <https://aws.amazon.com/sqs/>

Question 104: Skipped

You are developing a mobile application that needs to issue temporary security credentials to users. This is so that security is not compromised on the application. Which of the below service can help achieve this

A. AWS STS

(Correct)

B. AWS Config

C. AWS Trusted Advisor

D. AWS Inspector

Explanation

The AWS Documentation mentions the following You can use the AWS Security Token Service (AWS STS) to create and provide trusted users with temporary security credentials that can control access to your AWS resources. Temporary security credentials are short-term, as the name implies. They can be configured to last for anywhere from a few minutes to several hours. After the credentials expire, AWS no longer recognizes them or allows any kind of access from API requests made with them. For more information on the Secure Token Service, please visit the following URL: https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_temp.html

Question 105: Skipped

Your architecture for an application currently consists of EC2 Instances siting behind a classic ELB. The EC2 Instances are used to serve an application to Internet users. How can you scale this architecture in the event the number of users

used to serve an application to internet users. How can you scale this architecture in the event the number of users accessing the application increases?

A. Add a another ELB to the architecture

B. Use Autoscaling Groups

(Correct)

C. Use an Application Load balancer instead

D. Use the Elastic container service

Explanation

The AWS Documentation mentions the following AWS Auto Scaling monitors your applications and automatically adjusts capacity to maintain steady, predictable performance at the lowest possible cost. Using AWS Auto Scaling, it's easy to setup application scaling for multiple resources across multiple services in minutes For more information on AWS Autoscaling, please visit the following URL: <https://aws.amazon.com/autoscaling/>

Question 106: Skipped

You are an architect for a gaming application. This application is still in the design phase. Which of the following services can be used to ensure optimal performance and least latency for the gaming users.

A. AWS Autoscaling

B. AWS ELB

C. AWS ElastiCache

(Correct)

D. AWS VPC

Explanation

The AWS Documentation mentions the following Amazon ElastiCache offers fully managed Redis and Memcached. Seamlessly deploy, operate, and scale popular open source compatible in-memory data stores. Build data-intensive apps or improve the performance of your existing apps by retrieving data from high throughput and low latency in-memory data stores. Amazon ElastiCache is a popular choice for Gaming, Ad-Tech, Financial Services, Healthcare, and IoT apps. For more information on AWS ElastiCache, please visit the following URL: <https://aws.amazon.com/elasticache/>

Question 107: Skipped

You are the architect for a business intelligence application. The application reads data from a MySQL database. The database is hosted on an EC2 Instance. The application experience a high number of read and write requests. Which Amazon EBS volume type can meet the performance requirements of this database?

A. EBS Provisioned IOPS SSD

(Correct)

B. EBS Throughput Optimized HDD

C. EBS General Purpose SSD

D. EBS Cold HDD

Explanation

Since there is a high performance requirement with high IOPS needed, one needs to opt for EBS Provisioned IOPS SSD. The snapshot from the AWS Documentation mentions the need of using Provisioned IOPS for better IOPS performance for database based applications. For more information on AWS EBS Volume types, please visit the following URL:
<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html>

Question 108: Skipped

An organization is planning to use AWS for their production roll out. The organization wants to implement automation for deployment such that it will automatically create a LAMP stack, download the latest PHP installable from S3 and setup the ELB. Which of the below mentioned AWS services meets the requirement for making an orderly deployment of the software?

A. AWS Elastic Beanstalk

B. AWS Cloudfront

C. AWS Cloudformation

(Correct)

D. AWS DevOps

Explanation

When you want to automate deployment, the automatic choice is Cloudformation. Below is the excerpt from AWS on cloudformation. AWS CloudFormation gives developers and systems administrators an easy way to create and manage a collection of related AWS resources, provisioning and updating them in an orderly and predictable fashion. You can use AWS CloudFormation's sample templates or create your own templates to describe the AWS resources, and any associated dependencies or runtime parameters, required to run your application. You don't need to figure out the order for provisioning AWS services or the subtleties of making those dependencies work. CloudFormation takes care of this for you. After the AWS resources are deployed, you can modify and update them in a controlled and predictable way, in effect applying version control to your AWS infrastructure the same way you do with your software. For more information on Cloud Formation, please visit the URL: <https://aws.amazon.com/cloudformation/>

Question 109: Skipped

Your company is planning on using the API Gateway service to manage API's for developers and users. There needs to be a segregation of control of what the developers and users can access for the API's itself. How can this be accomplished?

A. Use IAM permissions to control the access

(Correct)

B. Use AWS Access keys to manage the access

C. Use AWS KMS service to manage the access

D. Use AWS config service to control the access

Explanation

The AWS Documentation mentions the following You control access to Amazon API Gateway with IAM permissions by controlling access to the following two API Gateway component processes: · To create, deploy, and manage an API in API Gateway, you must grant the API developer permissions to perform the required actions supported by the API management component of API Gateway. · To call a deployed API or to refresh the API caching, you must grant the API caller permissions to perform required IAM actions supported by the API execution component of API Gateway. For more information on permissions for the API gateway, please visit the URL: <https://docs.aws.amazon.com/apigateway/latest/developerguide/permissions.html>

Question 110: Skipped

You currently have 2 development environments hosted in 2 different VPC's in an AWS account, in the same region. There is now a need for resources from one VPC to access another. How can this be accomplished

A. Establish a Direct Connect connection

B. Establish a VPN connection

C. Establish VPC Peering

(Correct)

D. Establish subnet peering

Explanation

The AWS Documentation mentions the following A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, with a VPC in another AWS account, or with a VPC in a different AWS Region. For more information on VPC peering, please visit the URL: <https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-peering.html>

Question 111: Skipped

Your company is planning on using the EMR service available in AWS for running their big data framework. They want to minimize the cost for running the EMR service itself. Which of the following could be a factor that could help achieve this

A. Running the EMR cluster in a dedicated VPC

B. Choosing Spot Instances for the underlying nodes

C. Choosing On-Demand Instances for the underlying nodes

(Correct)

D. Disable automated backups

Explanation

The AWS Documentation mentions the following Spot Instances in Amazon EMR provide an option for you to purchase Amazon EC2 instance capacity at a reduced cost as compared to On-Demand purchasing. For more information on Instance types for EMR, please visit the URL: <https://docs.aws.amazon.com/emr/latest/ManagementGuide/emr-instance-purchasing-options.html>

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