

Q1)

You have a web application running on six Amazon EC2 instances, consuming about 45% of resources on each instance. You are using auto-scaling to make sure that six instances are running at all times. The number of requests this application processes is consistent and does not experience spikes. The application is critical to your business and you want high availability at all times. You want the load to be distributed evenly between all instances. You also want to use the same Amazon Machine Image (AMI) for all instances.

Which of the following architectural choices should you make?

- ☒ Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer.
- ☐ Deploy 3 EC2 instances in one region and 3 in another region and use Amazon Elastic Load Balancer.
- ☐ Deploy 6 EC2 instances in one availability zone and use Amazon Elastic Load Balancer.
- ☐ Deploy 2 EC2 instances in three regions and use Amazon Elastic Load Balancer.

Q2) For each DB Instance class, what is the maximum size of associated storage capacity?

- ☒ 1TB

Explanation:-Amazon RDS also supports magnetic storage for backward compatibility. We recommend that you use General Purpose SSD or Provisioned IOPS SSD for any new storage needs. The following are some limitations for magnetic storage:

Doesn't allow you to scale storage when using the SQL Server database engine.

Doesn't support storage autoscaling.

Doesn't support elastic volumes.

Limited to a maximum size of 3 TiB.

Limited to a maximum of 1,000 IOPS.

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

- ☐ 5GB
- ☐ 2TB
- ☐ 500GB

Q3) What are the Amazon EC2 API tools?

- ☐ They don't exist. The Amazon API tools are a client interface to Amazon Web Services.
- ☐ They are a set of graphical tools to manage EC2 instances.
- ☒ Command-line tools to the Amazon EC2 web service.
- ☐ They don't exist. The Amazon EC2 AMI tools, instead, are used to manage permissions.

Q4) Changes to the backup window take effect _____.

- ☒ immediately

Explanation:-Refer: <https://aws.amazon.com/rds/faqs/>

- ☐ after 30 minutes
- ☐ from the next billing cycle
- ☐ after 24 hours

Q5) While creating the snapshots using the API, which Action should I be using?

- ☒ CreateSnapshot
- ☐ DeploySnapshot
- ☐ FreshSnapshot
- ☐ MakeSnapShot

Q6) Every user you create in the IAM system starts with _____.

- ☐ Full permissions
- ☐ Partial permissions
- ☒ No permissions

Q7) What does Amazon EC2 provide?

- ☐ A platform to run code (Java, PHP, Python), paying on an hourly basis.
- ☐ Computer Clusters in the Cloud.
- ☒ Virtual servers in the Cloud.

Explanation:-Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Amazon EC2's simple web service interface allows you to obtain and configure capacity with minimal friction. Refer:

[https://aws.amazon.com/ec2/#:~:text=Amazon%20Elastic%20Compute%20Cloud%20\(Amazon,configure%20capacity%20with%20minimal%20friction.](https://aws.amazon.com/ec2/#:~:text=Amazon%20Elastic%20Compute%20Cloud%20(Amazon,configure%20capacity%20with%20minimal%20friction.)

- ☐ Physical servers, remotely managed by the customer.

Q8) Will my standby RDS instance be in the same Region as my primary?

- ☐ Only if configured at launch
- ☒ Yes
- ☐ Only for Oracle RDS types
- ☐ No

Q9) While creating the snapshots using the command line tools, which command should I be using?

- ✔ ec2-create-snapshot

Explanation:-Refer: <https://docs.aws.amazon.com/cli/latest/reference/ec2/create-snapshot.html>

- ec2-fresh-snapshot
- ec2-deploy-snapshot
- ec2-new-snapshot

Q10) What is associated with Microservices? (Select two)

- Kinesis
- ✔ Application Load Balancer

Explanation:-Microservices are an architectural and organizational approach to software development where software is composed of small independent services that communicate over well-defined APIs. These services are owned by small, self-contained teams. Microservice architecture allowed Amazon to transition to continuous deployment, and now Amazon engineers deploy code every 11.7 seconds. Refer:

<https://aws.amazon.com/microservices/#:~:text=Microservices%20are%20an%20architectural%20and,small%2C%20self%2Dcontained%20teams.>

- RDS
- DynamoDB
- ✔ ECS

Q11) Where does Amazon retrieve web content when it is not in the nearest CloudFront edge location?

- Secondary location
- File server
- EBS
- ✔ S3 bucket

Explanation:-CloudFront compares the request with the specifications in your distribution and forwards the request for the files to your origin server for the corresponding file type—for example, to your Amazon S3 bucket for image files and to your HTTP server for HTML files. Refer:

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

Q12) What two features of an API Gateway minimize the effects of peak traffic events and minimize latency?

- ✔ Caching
- Scaling
- ✔ Throttling
- Firewalling
- Load balancing

Q13) What three characteristics differentiate Lambda from traditional EC2 deployment or containerization?

- Lambda supports only S3 and Glacier
- ✔ Lambda is a code-based service
- ✔ Tenant has no control of EC2 instances
- Tenant has ownership of EC2 instances
- ✔ Lambda is serverless
- Lambda is based on Kinesis scripts

Q14) How is code uploaded to Lambda?

- Lambda container
- Lambda entry point
- ✔ Lambda function

Explanation:-After you choose Finish, your project's directory and source files are generated in your Eclipse workspace. A new web browser window opens, displaying README.html (which was created for you in your project's root directory). README.html provides instructions to guide you through the next steps of implementing, testing, uploading, and invoking your new Lambda function. Read through it to gain some familiarity with the steps that are described here. Refer: <https://docs.aws.amazon.com/toolkit-for-eclipse/v1/user-guide/lambda-tutorial.html>

- Lambda instance
- Lambda AMI

Q15) How are Lambda functions triggered?

- EC2 instance
- Hypervisor
- Kinesis
- Operating system
- ✔ Event source

Explanation:-Lambda can pull records from an Amazon Kinesis stream or an Amazon SQS queue and execute a Lambda function for each fetched message. Many other services, such as AWS CloudTrail, can act as event sources simply by logging to Amazon S3 and using S3 bucket notifications to trigger AWS Lambda functions. Refer:

<https://aws.amazon.com/lambda/faqs/#:~:text=For%20example%2C%20Lambda%20can%20pull,to%20trigger%20AWS%20Lambda%20functions.>

Q16) What three statements correctly describe standard Lambda operation?

- ✔ maximum execution time is 300 seconds
- Lambda stores code in containers
- Lambda stores code in a Glacier vault
- ✔ Lambda stores code in S3
- Lambda function is allocated 100 MB EBS storage
- ✔ Lambda function is allocated 500 MB ephemeral disk space

Q17) State whether the following statement is True or False. "Automated backups are enabled by default for a new DB Instance."

- INCORRECT
- ✔ CORRECT

Q18) What are the two types of licensing options available for using Amazon RDS for Oracle?

- ☐ Enterprise License and License Included
- ☒ BYOL and License Included

Explanation:-There are two licensing options available for Amazon RDS for Oracle: License Included and Bring Your Own License (BYOL). Refer: [https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Oracle.html#:~:text=There%20are%20two%20licensing%20options,Your%20Own%20License%20\(BYOL\).](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Oracle.html#:~:text=There%20are%20two%20licensing%20options,Your%20Own%20License%20(BYOL).)

- ☐ BYOL and Enterprise License
- ☐ Role based License and License Included

Q19) When running my DB Instance as a Multi-AZ deployment, can I use the standby for read or write operations?

- ☐ Only for Oracle RDS instances
- ☐ Only with MSSQL based RDS
- ☐ Yes
- ☒ No

Q20) In the Amazon cloudwatch, which metric should I be checking to ensure that your DB Instance has enough free storage space?

- ☒ FreeStorageSpace

Explanation:-Create alarms in the CloudWatch console or use the AWS Command Line Interface (AWS CLI) to create alarms that monitor free storage space. By creating CloudWatch alarms that notify you when the FreeStorageSpace metric reaches a defined threshold, you can prevent storage full issues. This can prevent downtime that occurs when your RDS DB instance runs out of storage. Refer: <https://aws.amazon.com/premiumsupport/knowledge-center/storage-full-rds-cloudwatch-alarm/>

- ☐ FreeStorage
- ☐ FreeStorageVolume
- ☐ FreeDBStorageSpace

Q21) If I modify a DB Instance or the DB parameter group associated with the instance, should I reboot the instance for the changes to take effect?

- ☒ Yes
- ☐ No

Q22) How is CloudWatch integrated with Lambda? (Select two)

- ☐ Log group is created for each event source
- ☒ Lambda functions are automatically monitored through Lambda service
- ☐ Network metrics such as latency are not monitored
- ☐ Tenant must enable CloudWatch monitoring
- ☒ Log group is created for each function

Q23) What two statements correctly describe AWS monitoring and audit operations?

- ☐ CloudTrail captures all AWS events and stores them in a log file function
- ☒ CloudWatch alarm can send a message to an SNS Topic that triggers an event for a Lambda Function
- ☐ CloudWatch alarm can send a message to a Lambda function
- ☒ CloudTrail captures API calls, stores them in an S3 bucket and generates a Cloudwatch event
- ☐ VPC logs do not support events for security groups

Q24) What is required for remote management access to your Linux-based instance?

- ☒ SSH

Explanation:-Refer: <https://aws.amazon.com/blogs/compute/new-using-amazon-ec2-instance-connect-for-ssh-access-to-your-ec2-instances/>

- ☐ Telnet
- ☐ ACL
- ☐ RDP

Q25) Your application is using an ELB in front of an Auto Scaling group of web/application servers deployed across two AZs and a Multi-AZ RDS Instance for data persistence. The database CPU is often above 80% usage and 90% of I/O operations on the database are reads. To improve performance you recently added a single-node Memcached ElastiCache Cluster to cache frequent DB query results. In the next weeks the overall workload is expected to grow by 30%. Do you need to change anything in the architecture to maintain the high availability or the application with the anticipated additional load? (Choose an appropriate reason to support your answer)

- ☐ No if the cache node fails you can always get the same data from the DB without having any availability impact.
- ☐ Yes you should deploy the Memcached ElastiCache Cluster with two nodes in the same AZ as the RDS DB master instance to handle the load if one cache node fails.
- ☒ No. if the cache node fails the automated ElastiCache node recovery feature will prevent any availability impact.
- ☐ Yes. you should deploy two Memcached ElastiCache Clusters in different AZs because the RDS Instance will not Be able to handle the load If me cache node fails

Q26) A 3-tier e-commerce web application is current deployed on-premises and will be migrated to AWS for greater scalability and elasticity The web server currently shares read-only data using a network distributed file system The app server tier uses a clustering mechanism for discovery and shared session state that depends on IP multicast The database tier uses shared-storage clustering to provide database fail over capability, and uses several read slaves for scaling Data on all servers and the distributed file system directory is backed up weekly to off-site tapes Which AWS storage and database architecture meets the requirements of the application?

- ☐ Web servers, store read-only data in an EC2 NFS server, mount to each web server at boot time App servers share state using a combination of DynamoDB and IP multicast Database use RDS with multi-AZ deployment and one or more Read Replicas Backup web and app servers backed up weekly via Mils database backed up via DB snapshots
- ☐ Web servers store read-only data In S3 and copy from S3 to root volume at boot time App servers share state using a combination of DynamoDB and IP unicast Database use RDS with multi-AZ deployment Backup web and app servers backed up weekly via AM is. Database backed up via DB snapshots
- ☒ Web servers store -read-only data in S3, and copy from S3 to root volume at boot time App servers share state using a combination of DynamoDB and

IP unicast Database, use RDS with multi-AZ deployment and one or more read replicas Backup web servers app servers, and database backed up weekly to Glacier using snapshots.

● Web servers, store read-only data in S3, and copy from S3 to root volume at boot time App servers snare state using a combination of DynamoDB and IP unicast Database use RDS with multi-AZ deployment and one or more Read Replicas Backup web and app servers backed up weekly via Mils database backed up via DB snapshots.

Q27)

Your company hosts a social media site supporting users in multiple countries. You have been asked to provide a highly available design tor the application that leverages multiple regions tor the most recently accessed content and latency sensitive portions of the wet) site The most latency sensitive component of the application involves reading user preferences to support web site personalization and ad selection.

In addition to running your application in multiple regions, which option will support this application's requirements?

- Serve user content from S3. CloudFront with dynamic content, and an ELB in each region Retrieve user preferences from an ElastiCache cluster in each region and leverage Simple Workflow (SWF) to manage the propagation of user preferences from a centralized OB to each ElastiCache cluster.
- Use the S3 Copy API to copy recently accessed content to multiple regions and serve user content from S3 CloudFront and Route53 latency-based routing Between ELBs In each region Retrieve user preferences from a DynamoDB table and leverage SQS to capture changes to user preferences with SOS workers for propagating DynamoDB updates.
- Use the S3 Copy API to copy recently accessed content to multiple regions and serve user content from S3. CloudFront with dynamic content and an ELB in each region Retrieve user preferences from an ElasticCache cluster in each region and leverage SNS notifications to propagate user preference changes to a worker node in each region.
- ✔ Serve user content from S3. CloudFront and use Route53 latency-based routing between ELBs in each region Retrieve user preferences from a local DynamoDB table in each region and leverage SQS to capture changes to user preferences with SOS workers for propagating updates to each table.

Q28) Amazon RDS supports SOAP only through _____.

- HTTP
- TCP/IP
- HTTP or HTTPS
- ✔ HTTPS

Q29) When should I choose Provisioned IOPS over Standard RDS storage?

- If you have batch-oriented workloads
- If you have workloads that are not sensitive to consistent performance
- ✔ If you use production online transaction processing (OLTP) workloads.

Explanation:-Amazon RDS provisions that IOPS rate and storage for the lifetime of the DB instance or until you change it. Provisioned IOPS storage is optimized for I/O intensive, online transaction processing (OLTP) workloads that have consistent performance requirements. Provisioned IOPS helps performance tuning.

Q30) _____ is a durable, block-level storage volume that you can attach to a single, running Amazon EC2 instance.

- ✔ Amazon EBS

Explanation:-Amazon EBS provides durable, block-level storage volumes that you can attach to a running instance. You can use Amazon EBS as a primary storage device for data that requires frequent and granular updates. For example, Amazon EBS is the recommended storage option when you run a database on an instance. Refer:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Storage.html#:~:text=Amazon%20EBS%20provides%20durable%2C%20block,a%20database%20on%20an%20instance.>

- Amazon S3
- None of these
- All of these

Q31) What does RDS use for database and log storage?

- Instance store
- S3
- ✔ EBS

Explanation:-DB instances for Amazon RDS for MySQL, MariaDB, PostgreSQL, Oracle, and Microsoft SQL Server use Amazon Elastic Block Store (Amazon EBS) volumes for database and log storage. Depending on the amount of storage requested, Amazon RDS automatically stripes across multiple Amazon EBS volumes to enhance performance. Refer:

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Storage.html#:~:text=DB%20instances%20for%20Amazon%20RDS,EBS%20volumes%20to%20enhance%20perform

- Local store
- SSD

Q32) What statements correctly describe support for Microsoft SQLServer within Amazon VPC? (Select three)

- EBS storage only
- ✔ Native load balancing
- ✔ Vertical scaling
- ✔ Read replica only
- Read/write replica
- S3 storage only

Q33) What are three examples of using Lambda functions to move data between AWS services?

- ✔ Read data from S3 and write metadata to DynamoDB
- ✔ Read data from DynamoDB stream to Firehose and write to S3
- ✔ Read data from Kinesis stream and write data to DynamoDB

Explanation:-When building applications on AWS Lambda the core components are Lambda functions and triggers. A trigger is the AWS service or application that invokes a function, and a Lambda function is the code and runtime that process events. Refer:

<https://docs.aws.amazon.com/lambda/latest/dg/applications-usecases.html>

- Read data directly from DynamoDB streams to RDS
- Read data from Kinesis Firehose to Kinesis data stream

Q34) You have enabled Amazon RDS database services in VPC1 for an application with public web servers in VPC2. How do you connect the web servers to the RDS database instance so they can communicate considering the VPC's are in different regions?

- ☐ VPN gateway
- ☐ path-based routing
- ☒ publicly accessible database

Explanation:-A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them using private IPv4 addresses or IPv6 addresses. Instances in either VPC can communicate with each other as if they are within the same network.

- ☐ VPC endpoints
- ☐ VPC peering

Q35)

You have a requirement to create an index to search customer objects stored in S3 buckets. The solution should enable you to create a metadata search index for each object stored to an S3 bucket.

Select the most scalable and cost effective solution?

- ☐ RDS, EMR, ALB
- ☒ DynamoDB, Lambda
- ☐ RDS, ElastiCache
- ☐ RedShift

Q36) What are three advantages of using DynamoDB over S3 for storing IoT sensor data where there are 100,000 data point samples sent per minute?

- ☐ IoT can write data directly to S3
- ☐ S3 is designed for frequent access and fast lookup of smaller records
- ☒ DynamoDB is designed for frequent access and fast lookup of small records
- ☒ DynamoDB provides fast read/writes to a structured table for queries
- ☒ IoT can write data directly to DynamoDB
- ☐ S3 must create a single file for each event

Q37) Your company is a provider of online gaming that customers access with various network access devices including mobile phones. What is a data warehousing solutions for large amounts of information on player behavior, statistics and events for analysis using SQLtools?

- ☐ DynamoDB
- ☒ RedShift

Explanation:-Amazon Redshift is a fully managed, petabyte-scale data warehouse service in the cloud. You can start with just a few hundred gigabytes of data and scale to a petabyte or more. This enables you to use your data to acquire new insights for your business and customers. Refer:

<https://docs.aws.amazon.com/redshift/latest/mgmt/welcome.html>

- ☐ RDS
- ☐ DynamoDB
- ☐ Elasticsearch

Q38) What two statements are correct when comparing Elasticsearch and RedShift as analytical tools?

- ☐ RedShift provides only basic analytical services
- ☐ Elasticsearch supports SQLqueries
- ☒ RedShift supports complex SQL-based queries with Petabyte sized data store
- ☒ Elasticsearch is a text search engine and document indexing tool

Explanation:-Refer:<https://aws.amazon.com/big-data/datalakes-and-analytics/>

- ☐ Elasticsearch does not support JSON data type

Q39) Is it possible to access your EBS snapshots?

- ☐ No, EBS snapshots cannot be accessed; they can only be used to create a new EBS volume.
- ☒ Yes, through the Amazon EC2 APIs.
- ☐ Yes, through the Amazon S3 APIs.
- ☐ EBS doesn't provide snapshots.

Q40) Will I be charged if the DB instance is idle?

- ☐ Only is running in GovCloud
- ☒ Yes
- ☐ No
- ☐ Only if running in VPC

Q41)

My Read Replica appears "stuck" after a Multi-AZ failover and is unable to obtain or apply updates from the source DB Instance.

What do I do?

- ☐ The instance should be deployed to Single AZ and then moved to Multi- AZ once again
- ☐ You will need to disassociate the DB Engine and re associate it.
- ☒ You will need to delete the Read Replica and create a new one to replace it.
- ☐ You will need to delete the DB Instance and create a new one to replace it.

Q42)

You are working with a customer who has 10 TB of archival data that they want to migrate to Amazon Glacier. The customer has a 1-Mbps connection to the Internet.

Which service or feature provides the fastest method of getting the data into Amazon Glacier?

- ☐ Amazon Glacier multipart upload
- ☐ AWS Storage Gateway
- ☐ VM Import/Export
- ☒ AWS Import/Export

Explanation:-AWS Import/Export is a service you can use to transfer large amounts of data from physical storage devices into AWS. You mail your portable storage devices to AWS and AWS Import/Export transfers data directly off of your storage devices using Amazon's high-speed internal network. Refer: <https://docs.aws.amazon.com/emr/latest/ManagementGuide/emr-plan-input-import-export.html#:~:text=AWS%20Import%2FExport%20is%20a,Amazon's%20high%2Dspeed%20internal%20network>.

Q43) What DNS records can be used for pointing a zone apex to an Elastic Load Balancer or CloudFront distribution? (Select two)

- ☐ CNAME
- ☒ Alias

Explanation:-Route 53 supports the alias resource record set, which lets you map your zone apex (e.g. example.com) DNS name to your load balancer DNS name. IP addresses associated with Elastic Load Balancing can change at any time due to scaling or software updates. Route 53 responds to each request for an alias resource record set with one IP address for the load balancer. If a load balancer has more than one IP address, Elastic Load Balancing selects one of the IP addresses in a round-robin fashion and returns it to Route 53; Route 53 then responds to the request with that IP address. Refer: <https://docs.aws.amazon.com/govcloud-us/latest/UserGuide/setting-up-route53-zoneapex-elb.html>

- ☐ MX
- ☒ A
- ☐ Name Server

Q44) What services are primarily provided by DNS Route 53? (Select three)

- ☐ Load balancing data replication requests between ECS containers
- ☐ Load balancing web servers within a public subnet
- ☒ Resolve hostnames and IP addresses
- ☐ Load balancing web servers within a private subnet
- ☒ Resolve queries and route internet traffic to AWS resources
- ☒ automated health checks to EC2 instances

Q45) What are two features that correctly describe Availability Zone (AZ) architecture?

- ☐ Data auto-replicated between zones in different regions
- ☐ Interconnected with public WAN links
- ☒ Multiple AZ per region
- ☒ Interconnected with private WAN links
- ☐ Multiple regions per AZ
- ☐ Direct Connect supports Layer 2 connectivity to region

Q46) How is Route 53 configured for Warm Standby fault tolerance? (Select two)

- ☒ Failover records
- ☐ Path-based routing
- ☒ Automated health checks
- ☐ Alias records

Q47) You can modify the backup retention period; valid values are 0 (for no backup retention) to a maximum of _____ days.

- ☒ 35

Explanation:-After you create a DB instance, you can modify the backup retention period. You can set the backup retention period to between 0 and 35 days. Setting the backup retention period to 0 disables automated backups. Manual snapshot limits (100 per region) do not apply to automated backups. Refer: https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithAutomatedBackups.html

- ☐ 45
- ☐ 15
- ☐ 5

Q48) Because of the extensibility limitations of striped storage attached to Windows Server, Amazon RDS does not currently support increasing storage on a _____ DB Instance.

- ☒ SQL Server

Explanation:-DB instances for Amazon RDS for MySQL, MariaDB, PostgreSQL, Oracle, and Microsoft SQL Server use Amazon Elastic Block Store (Amazon EBS) volumes for database and log storage. Depending on the amount of storage requested, Amazon RDS automatically stripes across multiple Amazon EBS volumes to enhance performance. Refer: https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Storage.html

- ☐ MySQL
- ☐ Oracle

Q49) Every user you create in the IAM system starts with _____.

- ☒ No permissions

Explanation:-Every user you create in IAM starts with 'No permission'. One or more IAM users can be created in AWS account. IAM user can be created for someone who needs access to the AWS console, or when a new application is needed to make API calls to AWS.

- ☐ Full permissions
- ☐ Partial permissions

Q50) A company needs to deploy virtual desktops to its customers in a virtual private cloud, leveraging existing security controls. Which set of AWS services and features will meet the company's requirements?

- ☒ AWS Directory Service, Amazon Workspaces, and AWS Identity and Access Management

Explanation:-Refer: <https://aws.amazon.com/iam/>

- ☐ Virtual Private Network connection, AWS Directory Services, and Amazon Workspaces

- Virtual Private connection, AWS Directory Services, and ClassicLink
- Amazon Elastic Compute Cloud, and AWS Identity and Access Management

Q51) Amazon EC2 provides a repository of public data sets that can be seamlessly integrated into AWS cloud-based applications. What is the monthly charge for using the public data sets?

- 10\$ per month for all the datasets
- 1\$ per dataset per month
- A 1 time charge of 10\$ for all the datasets.
- ✔ There is no charge for using the public data sets

Q52) A group can contain many users. Can a user belong to multiple groups?

- Yes but only in VPC
- Yes but only if they are using two factor authentication
- No
- ✔ Yes always

Q53) Which procedure for backing up a relational database on EC2 that is using a set of RAIDed EBS volumes for storage minimizes the time during which the database cannot be written to and results in a consistent backup?

- 1. Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Wait for snapshots to complete, 4. Resume disk I/O
- 1. Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Resume disk I/O
- 1. Suspend disk I/O, 2. Create an image of the EC2 Instance, 3. Resume disk I/O
- 1. Stop the EC2 Instance. 2. Snapshot the EBS volumes
- ✔ 1. Detach EBS volumes, 2. Start EBS snapshot of volumes, 3. Re-attach EBS volumes

Q54) Can we attach an EBS volume to more than one EC2 instance at the same time?

- Only EC2-optimized EBS volumes.
- ✔ No
- Yes.
- Only in read mode.

Q55)

You currently operate a web application in the AWS US-East region. The application runs on an auto-scaled layer of EC2 instances and an RDS Multi-AZ database. Your IT security compliance officer has tasked you to develop a reliable and durable logging solution to track changes made to your EC2, IAM, and RDS resources. The solution must ensure the integrity and confidentiality of your log data.

Which of these solutions would you recommend?

- Create three new CloudTrail trails with three new S3 buckets to store the logs: one for the AWS Management console, one for AWS SDKs, and one for command line tools. Use IAM roles and S3 bucket policies on the S3 buckets that store your logs.
- Create a new CloudTrail trail with an existing S3 bucket to store the logs and with the global services option selected. Use S3 ACLs and Multi Factor Authentication (MFA). Delete on the S3 bucket that stores your logs.
- Create a new CloudTrail with one new S3 bucket to store the logs. Configure SNS to send log file delivery notifications to your management system. Use IAM roles and S3 bucket policies on the S3 bucket that stores your logs.
- ✔ Create a new CloudTrail trail with one new S3 bucket to store the logs and with the global services option selected. Use IAM roles, S3 bucket policies, and Multi Factor Authentication (MFA). Delete on the S3 bucket that stores your logs.

Q56)

Your department creates regular analytics reports from your company's log files. All log data is collected in Amazon S3 and processed by daily Amazon Elastic MapReduce (EMR) jobs that generate daily PDF reports and aggregated tables in CSV format for an Amazon Redshift data warehouse. Your CFO requests that you optimize the cost structure for this system.

Which of the following alternatives will lower costs without compromising average performance of the system or data integrity for the raw data?

- Use reduced redundancy storage (RRS) for PDF and csv data in S3. Add Spot Instances to EMR jobs. Use Spot Instances for Amazon Redshift.
- Use reduced redundancy storage (RRS) for all data in Amazon S3. Add Spot Instances to Amazon EMR jobs. Use Reserved Instances for Amazon Redshift.
- ✔ Use reduced redundancy storage (RRS) for all data in S3. Use a combination of Spot instances and Reserved Instances for Amazon EMR jobs. Use Reserved instances for Amazon Redshift.
- Use reduced redundancy storage (RRS) for PDF and csv data in Amazon S3. Add Spot instances to Amazon EMR jobs. Use Reserved Instances for Amazon Redshift.

Q57) A large real-estate brokerage is exploring the option of adding a cost-effective location-based alert to their existing mobile application. The application's backend infrastructure currently runs on AWS. Users who opt in to this service will receive alerts on their mobile device regarding real-estate offers in proximity to their location. For the alerts to be relevant, delivery time needs to be in the low minute count. The existing mobile app has 5 million users across the US. Which one of the following architectural suggestions would you make to the customer?

- The mobile application will send device location using AWS Mobile Push. EC2 instances will retrieve the relevant offers from DynamoDB. EC2 instances will communicate with mobile carriers/device providers to push alerts back to the mobile application.
- The mobile application will send device location using SQS. EC2 instances will retrieve the relevant offers from DynamoDB. AWS Mobile Push will be used to send offers to the mobile application.
- Use AWS DirectConnect or VPN to establish connectivity with mobile carriers. EC2 instances will receive the mobile applications' location through carrier connection. ROS will be used to store and relevant offers. EC2 instances will communicate with mobile carriers to push alerts back to the mobile application.
- ✔ The mobile application will submit its location to a web service endpoint utilizing Elastic Load Balancing and EC2 instances. DynamoDB will be used to store and retrieve relevant offers. EC2 instances will communicate with mobile carriers/device providers to push alerts back to mobile application.

Q58) What statement correctly describes CloudWatch operation within AWS cloud?

- Alarm history is never deleted
- Log data is stored for 15 days
- ✔ Log data is stored indefinitely

Explanation:-Amazon CloudWatch is a monitoring and management service that provides data and actionable insights for AWS, hybrid, and on-premises applications and infrastructure resources. With CloudWatch, you can collect and access all your performance and operational data in form of logs and metrics from a single platform. Refer:

<https://aws.amazon.com/cloudwatch/features/#~:text=Amazon%20CloudWatch%20is%20a%20monitoring,metrics%20from%20a%20single%20platform.>

- ELB is not supported