

Question: A user is running a MySQL RDS instance. The user will not use the DB for the next 3 months. How can the user save costs?

- A. Pause the RDS activities from CLI until it is required in the future
- B. Stop the RDS instance
- C. Create a snapshot of RDS to launch in the future and terminate the instance now
- D. Change the instance size to micro

Answer: C

Explanation: The RDS instances unlike the AWS EBS backed instances cannot be stopped or paused. The user needs to take the final snapshot, terminate the instance and launch a new instance in the future from that snapshot.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.BackingUpAndRestoringAmazonRDSInstances.html>

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Question: In DynamoDB, if you create a table and request 10 units of write capacity and 200 units of read capacity of provisioned throughput, how much would you be charged in US East (Northern Virginia) Region?

- A. \$0.05 per hour
- B. \$0.10 per hour
- C. \$0.03 per hour
- D. \$0.15 per hour

Answer: A

Explanation: To understand pricing in DynamoDB, consider the following example. If you create a table and request 10 units of write capacity and 200 units of read capacity of provisioned throughput, you would be charged:

$$\$0.01 + (4 \times \$0.01) = \$0.05 \text{ per hour}$$

Reference: <http://aws.amazon.com/dynamodb/pricing/>

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Question: You have been doing a lot of testing of your VPC Network by deliberately failing EC2 instances to test whether instances are failing over properly. Your customer who will be paying the AWS bill for all this asks you if he is being charged for all these instances. You try to explain to him how the billing works on EC2 instances to the best of your knowledge. What would be an appropriate response to give to the customer in regards to this?

- A. Billing commences when Amazon EC2 AMI instance is completely up and billing ends as soon as the instance starts to shutdown.
- B. Billing commences when Amazon EC2 initiates the boot sequence of an AMI instance and billing ends when the instance shuts down.
- C. Billing only commences only after 1 hour of uptime and billing ends when the instance terminates.

D. Billing commences when Amazon EC2 initiates the boot sequence of an AMI instance and billing ends as soon as the instance starts to shutdown.

Answer: B

Explanation: Billing commences when Amazon EC2 initiates the boot sequence of an AMI instance. Billing ends when the instance shuts down, which could occur through a web services command, by running “shutdown -h”, or through instance failure.

Reference: <http://aws.amazon.com/ec2/faqs/#Billing>

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Question: AWS Elastic Load Balancer supports SSL termination.

- A. True. For specific availability zones only.
- B. False
- C. True. For specific regions only
- D. True. For all regions

Answer: D

Explanation: You can configure your load balancer in ELB (Elastic Load Balancing) to use a SSL certificate in order to improve your system security. The load balancer uses the certificate to terminate and then decrypt requests before sending them to the back-end instances. Elastic Load Balancing uses AWS Identity and Access Management (IAM) to upload your certificate to your load balancer.

Reference:

[http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/US\\_SettingUpLoadBalancerHTTSPS.html](http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/US_SettingUpLoadBalancerHTTSPS.html)

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Question: A user has launched five instances with ELB. How can the user add the sixth EC2 instance to ELB?

- A. The user can add the sixth instance on the fly.
- B. The user must stop the ELB and add the sixth instance.
- C. The user can add the instance and change the ELB config file.
- D. The ELB can only have a maximum of five instances.

Answer: A

Explanation: Elastic Load Balancing automatically distributes incoming traffic across multiple EC2 instances. You create a load balancer and register instances with the load balancer in one or more Availability Zones. The load balancer serves as a single point of contact for clients. This enables you to increase the availability of your application. You can add and remove EC2 instances from your load balancer as your needs change, without disrupting the overall flow of information.

Reference: <http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/SvcIntro.html>

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Question: An organization has 500 employees. The organization wants to set up AWS access for each department. Which of the below mentioned options is a possible solution?

- A. Create IAM roles based on the permission and assign users to each role
- B. Create IAM users and provide individual permission to each
- C. Create IAM groups based on the permission and assign IAM users to the groups
- D. It is not possible to manage more than 100 IAM users with AWS

Answer: C

Explanation: An IAM group is a collection of IAM users. Groups let the user specify permissions for a collection of users, which can make it easier to manage the permissions for those users.

Reference:

[http://docs.aws.amazon.com/IAM/latest/UserGuide/Using\\_WorkingWithGroupsAndUsers.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_WorkingWithGroupsAndUsers.html)

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Question: How long can you keep your Amazon SQS messages in Amazon SQS queues?

- A. From 120 secs up to 4 weeks
- B. From 10 secs up to 7 days
- C. From 60 secs up to 2 weeks
- D. From 30 secs up to 1 week

Answer: C

Explanation: The SQS message retention period is configurable and can be set anywhere from 1 minute to 2 weeks. The default is 4 days and once the message retention limit is reached your messages will be automatically deleted. The option for longer message retention provides greater flexibility to allow for longer intervals between message production and consumption.

Reference: <https://aws.amazon.com/sqs/faqs/>

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Question: In regard to DynamoDB, which of the following statements is correct?

- A. An Item should have at least two value sets, a primary key and another attribute.
- B. An Item can have more than one attributes.
- C. A primary key should be single-valued.
- D. An attribute can have one or several other attributes.

Answer: B

Explanation: In Amazon DynamoDB, a database is a collection of tables. A table is a collection of items and each item is a collection of attributes.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html>

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Question: Which one of the following statements is NOT an advantage of DynamoDB being built on Solid State Drives:

- A. serve high-scale request workloads
- B. low request pricing
- C. high I/O performance of WebApp on EC2 instance
- D. low-latency response times

Answer: C

Explanation: In DynamoDB, SSDs help achieve design goals of predictable low-latency response times for storing and accessing data at any scale. The high I/O performance of SSDs also enables to serve high-scale request workloads cost efficiently, and to pass this efficiency along in low request pricing.

Reference: <http://aws.amazon.com/dynamodb/faqs/>

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Question: An organization has hosted an application on the EC2 instances. There will be multiple users connecting to the instance for setup and configuration of application. The organization is planning to implement certain security best practices. Which of the below mentioned pointers will not help the organization achieve better security arrangement?

- A. Apply the latest patch of OS and always keep it updated.
- B. Allow only IAM users to connect with the EC2 instances with their own secret access key.
- C. Disable the password based login for all the users. All the users should use their own keys to connect with the instance securely.
- D. Create a procedure to revoke the access rights of the individual user when they are not required to connect to EC2 instance anymore for the purpose of application configuration.

Answer: B

Explanation: Since AWS is a public cloud any application hosted on EC2 is prone to hacker attacks. It becomes extremely important for a user to setup a proper security mechanism on the EC2 instances. A few of the security measures are listed below:

Always keep the OS updated with the latest patch

Always create separate users with in OS if they need to connect with the EC2 instances, create their keys and disable their password

Create a procedure using which the admin can revoke the access of the user when the business work on the EC2 instance is completed

Lock down unnecessary ports

Audit any proprietary applications that the user may be running on the EC2 instance

Provide temporary escalated privileges, such as sudo for users who need to perform occasional privileged tasks

The IAM is useful when users are required to work with AWS resources and actions, such as launching an instance. It is not useful to connect (RDP / SSH) with an instance.

Reference: <http://aws.amazon.com/articles/1233/>

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Question: A user is planning to make a mobile game which can be played online or offline and will be hosted on EC2. The user wants to ensure that if someone breaks the highest score or they achieve some milestone they can inform all their colleagues through email. Which of the below mentioned AWS services helps achieve this goal?

- A. AWS Simple Workflow Service.
- B. AWS Simple Queue Service.
- C. Amazon Cognito
- D. AWS Simple Email Service.

Answer: D

Explanation: Amazon Simple Email Service (Amazon SES) is a highly scalable and cost-effective email-sending service for businesses and developers. It integrates with other AWS services, making it easy to send emails from applications that are hosted on AWS.

Reference: <http://aws.amazon.com/ses/faqs/>

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Question: Which one of the following operations is NOT a DynamoDB operation?

- A. BatchWriteItem
- B. DescribeTable
- C. BatchGetItem
- D. BatchDeleteItem

Answer: D

Explanation: In DynamoDB, DeleteItem deletes a single item in a table by primary key, but BatchDeleteItem doesn't exist.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/operationlist.html>

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Question: True or False: In DynamoDB, Scan operations are always eventually consistent.

- A. No, scan is like Query operation
- B. Yes
- C. No, scan is strongly consistent by default
- D. No, you can optionally request strongly consistent scan.

Answer: B

Explanation: In DynamoDB, Scan operations are always eventually consistent.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/APISummary.html>

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Question: Regarding Amazon SNS, when you want to subscribe to a topic and receive notifications to your email, in the Protocol drop-down box, you should select \_\_\_\_\_.

- A. Email
- B. Message
- C. SMTP
- D. IMAP

Answer: A

Explanation: In Amazon SNS, when you want to subscribe to a topic and receive notifications to your email, select Email in the Protocol drop-down box. Enter an email address you can use to receive the notification in the Endpoint field.

Reference: <http://docs.aws.amazon.com/sns/latest/dg/SubscribeTopic.html>

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Question: In Amazon EC2, which of the following is the type of monitoring data for Amazon EBS volumes that is available automatically in 5-minute periods at no charge?

- A. Primary
- B. Basic
- C. Initial
- D. Detailed

Answer: B

Explanation: Basic is the type of monitoring data (for Amazon EBS volumes) which is available automatically in 5-minute periods at no charge called.

Reference:

<http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/monitoring-volume-status.html>

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Question: In DynamoDB, to get a detailed listing of secondary indexes on a table, you can use the \_\_\_\_\_ action.

- A. DescribeTable
- B. BatchGetItem
- C. GetItem
- D. TableName

Answer: A

Explanation: In DynamoDB, DescribeTable returns information about the table, including the current status of the table, when it was created, the primary key schema, and any indexes on the table.

Reference:

<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/SecondaryIndexes.html>

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Question: A user has launched an EC2 instance. However, due to some reason the instance was terminated. If the user wants to find out the reason for termination, where can he find the details?

- A. The user can get information from the AWS console, by checking the Instance description under the State transition reason label
- B. The user can get information from the AWS console, by checking the Instance description under the Instance Termination reason label
- C. The user can get information from the AWS console, by checking the Instance description under the Instance Status Change reason label
- D. It is not possible to find the details after the instance is terminated

Answer: A

Explanation: An EC2 instance, once terminated, may be available in the AWS console for a while after termination. The user can find the details about the termination from the description tab under the label State transition reason. If the instance is still running, there will be no reason listed. If the user has explicitly stopped or terminated the instance, the reason will be “User initiated shutdown”.

Reference:

[http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using\\_InstanceStraightToTerminated.html](http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_InstanceStraightToTerminated.html)

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Question: \_\_\_\_\_ is a task coordination and state management service for cloud applications.

- A. Amazon SES
- B. Amazon SWF
- C. Amazon FPS
- D. Amazon SNS

Answer: B

Explanation: Amazon Simple Workflow (Amazon SWF) is a task coordination and state management service for cloud applications. With Amazon SWF, you can stop writing complex glue-code and state machinery and invest more in the business logic that makes your applications unique.

Reference: <http://aws.amazon.com/swf/>

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Question: When you create a table with a hash-and-range key, you must define one or more secondary indexes on that table.

- A. False, hash-range key is another name for secondary index
- B. False, it is optional
- C. True
- D. False, when you have Hash-Range key you cannot define Secondary index

Answer: B

Explanation: When you create a table with a hash-and-range key in DynamoDB, you can also define one or more secondary indexes on that table.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/LSI.html>

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Question: A user is planning to create a structured database in the cloud. Which of the below mentioned AWS offerings help the user achieve the goal?

- A. AWS DynamoDB
- B. AWS RDS
- C. AWS SimpleDB
- D. AWS RSD

Answer: B

Explanation: AWS RDS is a managed database server offered by AWS, which makes it easy to set up, operate, and scale a relational database or structured data in cloud.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

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Question: A user has created a MySQL RDS instance with PIOPS. Which of the below mentioned statements will help user understand the advantage of PIOPS?

- A. The user can achieve additional dedicated capacity for the EBS I/O with an enhanced RDS option
- B. It uses optimized EBS volumes and optimized configuration stacks
- C. It provides a dedicated network bandwidth between EBS and RDS
- D. It uses a standard EBS volume with optimized configuration the stacks

Answer: B

Explanation: RDS DB instance storage comes in two types: standard and provisioned IOPS. Standard storage is allocated on the Amazon EBS volumes and connected to the user's DB instance. Provisioned IOPS uses optimized EBS volumes and an optimized configuration stack. It provides additional, dedicated capacity for the EBS I/O.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

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Question: A user is accessing an EC2 instance on the SSH port for IP 10.20.30.40. Which one is a secure way to configure that the instance can be accessed only from this IP?

- A. In the security group, open port 22 for IP 10.20.30.40/0
- B. In the security group, open port 22 for IP 10.20.30.40/32
- C. In the security group, open port 22 for IP 10.20.30.40/24

D. In the security group, open port 22 for IP 10.20.30.40

Answer: B

Explanation: In AWS EC2, while configuring a security group, the user needs to specify the IP address in CIDR notation. The CIDR IP range 10.20.30.40/32 says it is for a single IP 10.20.30.40. If the user specifies the IP as 10.20.30.40 only, the security group will not accept and ask it in a CIDR format.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html>

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Question: When a user is detaching an EBS volume from a running instance and attaching it to a new instance, which of the below mentioned options should be followed to avoid file system damage?

- A. Unmount the volume first
- B. Stop all the I/O of the volume before processing
- C. Take a snapshot of the volume before detaching
- D. Force Detach the volume to ensure that all the data stays intact

Answer: A

Explanation: When a user is trying to detach an EBS volume, the user can either terminate the instance or explicitly remove the volume. It is a recommended practice to unmount the volume first to avoid any file system damage.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

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Question: A user is planning to host a scalable dynamic web application on AWS. Which of the services may not be required by the user to achieve automated scalability?

- A. CloudWatch
- B. S3
- C. AutoScaling
- D. AWS EC2 instances

Answer: B

Explanation: The user can achieve automated scaling by launching different EC2 instances and making them a part of an ELB. Cloudwatch will be used to monitor the resources and based on the scaling need it will trigger policies. AutoScaling is then used to scale up or down the instances.

Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/WhatIsAutoScaling.html>

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Question: Which one of the following data types does Amazon DynamoDB not support?

- A. Arrays
- B. String
- C. Binary
- D. Number Set

Answer: A

Explanation: Amazon DynamoDB supports the following data types:  
Scalar data types (like Number, String, and Binary)  
Multi-valued types (like String Set, Number Set, and Binary Set).

Reference:

<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html#DataModel.DataTypes>

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Question: Regarding Amazon SNS, you can send notification messages to mobile devices through any of the following supported push notification services, EXCEPT:

- A. Google Cloud Messaging for Android (GCM)
- B. Apple Push Notification Service (APNS)
- C. Amazon Device Messaging (ADM)
- D. Microsoft Windows Mobile Messaging (MWMM)

Answer: D

Explanation: In Amazon SNS, you have the ability to send notification messages directly to apps on mobile devices. Notification messages sent to a mobile endpoint can appear in the mobile app as message alerts, badge updates, or even sound alerts. Microsoft Windows Mobile Messaging (MWMM) doesn't exist and is not supported by Amazon SNS.

Reference: <http://docs.aws.amazon.com/sns/latest/dg/SNSMobilePush.html>

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Question: A user plans to use RDS as a managed DB platform. Which of the below mentioned features is not supported by RDS?

- A. Automated backup
- B. Automated scaling to manage a higher load
- C. Automated failure detection and recovery
- D. Automated software patching

Answer: B

Explanation: AWS RDS provides a managed DB platform, which offers features, such as automated backup, patch management, automated failure detection and recovery. The scaling is not automated and the user needs to plan it with a few clicks.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

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Question: A user has not enabled versioning on an S3 bucket. What will be the version ID of the object inside that bucket?

- A. 0
- B. There will be no version attached
- C. Null
- D. Blank

Answer: C

Explanation: S3 objects stored in the bucket before the user has set the versioning state have a version ID of null. When the user enables versioning, the objects in the bucket do not change and their ID remains null.

Reference:

<http://docs.aws.amazon.com/AmazonS3/latest/dev/AddingObjectsToVersionedBuckets.html>

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Question: A user has created a queue named “myqueue” with SQS. There are four messages published to queue which are not received by the consumer yet. If the user tries to delete the queue, what will happen?

- A. A user can never delete a queue manually. AWS deletes it after 30 days of inactivity on queue
- B. It will initiate the delete but wait for four days before deleting until all messages are deleted automatically.
- C. It will ask user to delete the messages first
- D. It will delete the queue

Answer: D

Explanation:

SQS allows the user to move data between distributed components of applications so they can perform different tasks without losing messages or requiring each component to be always available. The user can delete a queue at any time, whether it is empty or not. It is important to note that queues retain messages for a set period of time. By default, a queue retains messages for four days.

Reference:

<http://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/SQSConcepts.html>

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Question: What happens if your application performs more reads or writes than your provisioned capacity?

- A. Nothing
- B. requests above your provisioned capacity will be performed but you will receive 400 error codes.
- C. requests above your provisioned capacity will be performed but you will receive 200 error codes.

D. requests above your provisioned capacity will be throttled and you will receive 400 error codes.

Answer: D

Explanation: Speaking about DynamoDB, if your application performs more reads/second or writes/second than your table's provisioned throughput capacity allows, requests above your provisioned capacity will be throttled and you will receive 400 error codes.

Reference:

<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProvisionedThroughputIntro.html>

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Question: In relation to Amazon SQS, how can you ensure that messages are delivered in order?

- A. Increase the size of your queue
- B. Send them with a timestamp
- C. Give each message a unique id.
- D. AWS cannot guarantee that you will receive messages in the exact order you sent them

Answer: D

Explanation: Amazon SQS makes a best effort to preserve order in messages, but due to the distributed nature of the queue, AWS cannot guarantee that you will receive messages in the exact order you sent them. You typically place sequencing information or timestamps in your messages so that you can reorder them upon receipt.

Reference: <https://aws.amazon.com/items/1343?externalID=1343>

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Question: An organization has launched two applications: one for blogging and one for ECM on the same AWS Linux EC2 instance running in the AWS VPC. The organization has attached two private IPs (primary and secondary) to the above mentioned instance. The organization wants the instance OS to recognize the secondary IP address. How can the organization configure this?

- A. Use the ec2-net-utility package which updates routing tables, uses DHCP to refresh the secondary IP and adds the network interface.
- B. Use the ec2-net-utils package which will configure an additional network interface and update the routing table
- C. Use the ec2-ip-update package which can configure the network interface as well as update the secondary IP with DHCP.
- D. Use the ec2-ip-utility package which can update the routing tables as well as refresh the secondary IP using DHCP.

Answer: B

Explanation: A Virtual Private Cloud (VPC) is a virtual network dedicated to the user's AWS account. It enables the user to launch AWS resources into a virtual network that the user has defined. With VPC the user can specify multiple private IP addresses for his instances. The number of network interfaces and private IP addresses that a user can specify for an instance depends on the instance type. This scenario helps when the user wants to host

multiple websites on a single EC2 instance. After the user has assigned a secondary private IP address to his instance, he needs to configure the operating system on that instance to recognize the secondary private IP address. For AWS Linux, the ec2-net-utils package can take care of this step. It configures additional network interfaces that the user can attach while the instance is running, refreshes secondary IP addresses during DHCP lease renewal, and updates the related routing rules.

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

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Question: What kind of service is provided by AWS DynamoDB?

- A. Relational Database
- B. NoSQL Database
- C. Dynamic Database
- D. Document Database

Answer: B

Explanation: DynamoDB is a fast, fully managed NoSQL database service.

Reference: <http://aws.amazon.com/dynamodb/>

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Question: In relation to Amazon SQS, how many queues and messages can you have per queue for each user?

- A. Unlimited
- B. 10
- C. 256
- D. 500

Answer: A

Explanation: Amazon SQS supports an unlimited number of queues and unlimited number of messages per queue for each user. Please be aware that Amazon SQS automatically deletes messages that have been in the queue for more than 4 days.

Reference: <https://aws.amazon.com/items/1343?externalID=1343>

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Question: Doug has created a VPC with CIDR 10.201.0.0/16 in his AWS account. In this VPC he has created a public subnet with CIDR block 10.201.31.0/24. While launching a new EC2 from the console, he is not able to assign the private IP address 10.201.31.6 to this instance. Which is the most likely reason for this issue?

- A. Private IP address 10.201.31.6 is not part of the associated subnet's IP address range.
- B. Private IP address 10.201.31.6 is blocked via ACLs in Amazon infrastructure as a part of platform security.
- C. Private address IP 10.201.31.6 is currently assigned to another interface.

D. Private IP address 10.201.31.6 is reserved by Amazon for IP networking purposes.

Answer: C

Explanation: In Amazon VPC, you can assign any Private IP address to your instance as long as it is:

- Part of the associated subnet's IP address range

Not reserved by Amazon for IP networking purposes

Not currently assigned to another interface

Reference: <http://aws.amazon.com/vpc/faqs/>

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Question: Regarding Amazon SQS, are there restrictions on the names of Amazon SQS queues?

A. No

B. Yes. Queue names must be unique within an AWS account and you cannot use hyphens (-) and underscores (\_)

C. Yes. Queue names are limited to 80 characters and queue names must be unique within an AWS account

D. Yes. Queue names are limited to 80 characters but queue names do not need to be unique within an AWS account

Answer: C

Explanation: Queue names are limited to 80 characters. Alphanumeric characters plus hyphens (-) and underscores (\_) are allowed. Queue names must be unique within an AWS account. After you delete a queue, you can reuse the queue name.

Reference: <https://aws.amazon.com/sqs/faqs/>

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Question: In Amazon SNS, to send push notifications to mobile devices using Amazon SNS and ADM, you need to obtain the following, except:

A. Client secret

B. Client ID

C. Device token

D. Registration ID

Answer: C

Explanation: To send push notifications to mobile devices using Amazon SNS and ADM, you need to obtain the following: Registration ID and Client secret.

Reference: <http://docs.aws.amazon.com/sns/latest/dg/SNSMobilePushPrereq.html>

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Question: Regarding Amazon SNS, to begin using Amazon SNS mobile push notifications, you first need \_\_\_\_\_that uses one of the supported push notification services: APNS, GCM, or ADM.

- A. an access policy for the mobile endpoints
- B. to activate push notification service of Amazon SNS
- C. to know the type of mobile device operating system
- D. an app for the mobile endpoints

Answer: D

Explanation: In Amazon SNS, to begin using Amazon SNS mobile push notifications, you first need an app for the mobile endpoints that uses one of the supported push notification services: APNS, GCM, or ADM. After you've registered and configured the app to use one of these services, you configure Amazon SNS to send push notifications to the mobile endpoints.

Reference: <http://docs.aws.amazon.com/sns/latest/dg/SNSMobilePush.html>

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Question: How many types of block devices does Amazon EC2 support?

- A. 5
- B. 1
- C. 2
- D. 4

Answer: C

Explanation: Amazon EC2 supports 2 types of block devices.

Reference:

<http://docs.amazonaws.com/AWSEC2/latest/UserGuide/block-device-mapping-concepts.html>

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Question: ExamKiller (with AWS account ID 111122223333) has created 50 IAM users for its organization's employees. ExamKiller wants to make the AWS console login URL for all IAM users as: <https://examkiller.signin.aws.amazon.com/console/>. How can this be configured?

- A. Create a bucket with the name ExamKiller and map it with the IAM alias
- B. It is not possible to have capital letters as a part of the alias name
- C. The user needs to use Route 53 to map the ExamKiller domain and IAM URL
- D. For the AWS account, create an alias ExamKiller for the IAM login

Answer: B

Explanation: If a user wants the URL of the AWS IAM sign-in page to have the company name instead of the AWS account ID, he can create an alias for his AWS account ID. The alias must be unique across all Amazon Webservices products and contain only digits, lowercase letters, and hyphens.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/AccountAlias.html>

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Question: Can a user get a notification of each instance start / terminate configured with Auto Scaling?

- A. Yes, always
- B. No
- C. Yes, if configured with the Auto Scaling group
- D. Yes, if configured with the Launch Config

Answer: C

Explanation: The user can get notifications using SNS if he has configured the notifications while creating the Auto Scaling group.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/GettingStartedTutorial.html>

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Question: AutoScaling is configured with 3 AZs. Each zone has 5 instances running. If AutoScaling wants to terminate an instance based on the policy action, which instance will it terminate first?

- A. Terminate the first launched instance
- B. Randomly select the instance for termination
- C. Terminate the instance from the AZ which does not have a high AWS load
- D. Terminate the instance from the AZ which has instances running near to the billing hour

Answer: B

Explanation: Before Auto Scaling selects an instance to terminate, it first identifies the Availability Zone that has more instances than the other Availability Zones used by the group. If all the Availability Zones have the same number of instances, it identifies a random Availability Zone.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/us-termination-policy.html>

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Question: In regard to DynamoDB, can I delete local secondary indexes?

- A. Yes, if it is a primary hash key index
- B. No
- C. Yes, if it is a local secondary indexes
- D. Yes, if it is a Global secondary indexes

Answer: B

Explanation: In DynamoDB, an index cannot be modified once it is created.

Reference: [http://aws.amazon.com/dynamodb/faqs/#security\\_anchor](http://aws.amazon.com/dynamodb/faqs/#security_anchor)

---

Question: You need to develop and run some new applications on AWS and you know that Elastic Beanstalk and CloudFormation can both help as a deployment mechanism for a broad range of AWS resources. Which of the following statements best describes the differences between Elastic Beanstalk and CloudFormation?

- A. Elastic Beanstalk uses Elastic load balancing and CloudFormation doesn't.
- B. CloudFormation is faster in deploying applications than Elastic Beanstalk.
- C. CloudFormation is much more powerful than Elastic Beanstalk, because you can actually design and script custom resources
- D. Elastic Beanstalk is faster in deploying applications than CloudFormation.

Answer: C

Explanation: These services are designed to complement each other. AWS Elastic Beanstalk provides an environment to easily develop and run applications in the cloud. It is integrated with developer tools and provides a one-stop experience for you to manage the lifecycle of your applications. AWS CloudFormation is a convenient deployment mechanism for a broad range of AWS resources. It supports the infrastructure needs of many different types of applications such as existing enterprise applications, legacy applications, applications built using a variety of AWS resources and container-based solutions (including those built using AWS Elastic Beanstalk).

AWS CloudFormation introduces two new concepts: The template, a JSON-format, text-based file that describes all the AWS resources you need to deploy to run your application and the stack, the set of AWS resources that are created and managed as a single unit when AWS CloudFormation instantiates a template.

Reference: <http://aws.amazon.com/cloudformation/faqs/>

---

Question: Can you SSH to your private machines that reside in a VPC from outside without elastic IP?

- A. Yes, but only if you have direct connect or vpn
- B. Only if you are using a non-US region
- C. Only if you are using a US region
- D. No

Answer: A

Explanation: The instances that reside in the private subnets of your VPC are not reachable from the Internet, meaning that is not possible to ssh into them. To interact with them you can use a bastion server, located in a public subnet, that will act as a proxy for them. You can also connect if you have direct connect or vpn.

Reference: [http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC\\_Scenario2.html](http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario2.html)

---

Question: Does AWS CloudFormation support Amazon EC2 tagging?

- A. It depends if the Amazon EC2 tagging has been defined in the template.

- B. No, it doesn't support Amazon EC2 tagging.
- C. No, CloudFormation doesn't support any tagging
- D. Yes, AWS CloudFormation supports Amazon EC2 tagging

Answer: D

Explanation: In AWS CloudFormation, Amazon EC2 resources that support the tagging feature can also be tagged in an AWS template. The tag values can refer to template parameters, other resource names, resource attribute values (e.g. addresses), or values computed by simple functions (e.g., a concatenated list of strings).

Reference: <http://aws.amazon.com/cloudformation/faqs/>

---

Question: A user has created a MySQL RDS instance. Which of the below mentioned options is mandatory to configure while creating an instance?

- A. Multi AZ deployment setup
- B. Automated backup window
- C. Availability Zone
- D. Maintenance window

Answer: A

Explanation: When creating an RDS instance, the user needs to specify whether it is Multi AZ or not. If the user does not provide the value for the zone, the maintenance window or automated backup window, RDS will automatically select the value.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html>

---

Question: A user has enabled the automated backup, but not specified the backup window. What will RDS do in this case?

- A. Will throw an error on instance launch
- B. RDS will take 3 AM – 3:30 AM as the default window
- C. RDS assigns a random time period based on the region
- D. Will not allow to launch a DB instance

Answer: C

Explanation: If the user does not specify a preferred backup window while enabling an automated backup, Amazon RDS assigns a default 30-minute backup window which is selected at random from an 8-hour block of time per region.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.BackingUpAndRestoringAmazonRDSInstances.html>

---

Question: A user is planning to host a web server as well as an app server on a single EC2 instance which is a part of the public subnet of a VPC. How can the user setup to have two separate public IPs and separate security groups for both the application as well as the web server?

- A. Launch a VPC instance with two network interfaces. Assign a separate security group to each and AWS will assign a separate public IP to them.
- B. Launch VPC with two separate subnets and make the instance a part of both the subnets.
- C. Launch a VPC instance with two network interfaces. Assign a separate security group and elastic IP to them.
- D. Launch a VPC with ELB such that it redirects requests to separate VPC instances of the public subnet.

Answer: C

Explanation: If you need to host multiple websites(with different IPs) on a single EC2 instance, the following is the suggested method from AWS.

Launch a VPC instance with two network interfaces

Assign elastic IPs from VPC EIP pool to those interfaces (Because, when the user has attached more than one network interface with an instance, AWS cannot assign public IPs to them.)

Assign separate Security Groups if separate Security Groups are needed

This scenario also helps for operating network appliances, such as firewalls or load balancers that have multiple private IP addresses for each network interface.

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

---

Question: An online gaming site asked you if you can deploy a database that is a fast, highly scalable NoSQL database service in AWS for a new site that he wants to build. Which database should you recommend?

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

Answer: C

Explanation: Amazon DynamoDB is ideal for database applications that require very low latency and predictable performance at any scale but don't need complex querying capabilities like joins or transactions. Amazon DynamoDB is a fully-managed NoSQL database service that offers high performance, predictable throughput and low cost. It is easy to set up, operate, and scale.

With Amazon DynamoDB, you can start small, specify the throughput and storage you need, and easily scale your capacity requirements on the fly. Amazon DynamoDB automatically partitions data over a number of servers to meet your request capacity. In addition, DynamoDB automatically replicates your data synchronously across multiple Availability Zones within an AWS Region to ensure high-availability and data durability.

Reference: [https://aws.amazon.com/running\\_databases/#dynamodb\\_anchor](https://aws.amazon.com/running_databases/#dynamodb_anchor)

---

Question: How long are the messages kept on an SQS queue by default?

- A. If a message is not read, it is never deleted
- B. 2 weeks
- C. 1 day
- D. 4 days

Answer: D

Explanation: The SQS message retention period is configurable and can be set anywhere from 1 minute to 2 weeks. The default is 4 days and once the message retention limit is reached your messages will be automatically deleted. The option for longer message retention provides greater flexibility to allow for longer intervals between message production and consumption.

Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: Regarding Amazon SWF, the coordination logic in a workflow is contained in a software program called a \_\_\_\_\_.

- A. Handler
- B. Decider
- C. Coordinator
- D. Worker

Answer: B

Explanation: In Amazon SWF, the coordination logic in a workflow is contained in a software program called a decider. The decider schedules activity tasks, provides input data to the activity workers, processes events that arrive while the workflow is in progress, and ultimately ends (or closes) the workflow when the objective has been completed.

Reference: <http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-intro-to-swf.html>

---

Question: A user has attached one RDS security group with 5 RDS instances. The user has changed the ingress rule for the security group. What will be the initial status of the ingress rule?

- A. Approving
- B. Implementing
- C. Authorizing
- D. It is not possible to assign a single group to multiple DB instances

Answer: C

Explanation: When the user makes any changes to the RDS security group the rule status will be authorizing for some time until the changes are applied to all instances that the group is connected with. Once the changes are propagated the rule status will change to authorized.

Reference:

Question: A user has attached an EBS volume to a running Linux instance as a “/dev/sdf” device. The user is unable to see the attached device when he runs the command “df -h”. What is the possible reason for this?

- A. The volume is not in the same AZ of the instance
- B. The volume is not formatted
- C. The volume is not attached as a root device
- D. The volume is not mounted

Answer: D

Explanation: When a user creates an EBS volume and attaches it as a device, it is required to mount the device. If the device/volume is not mounted it will not be available in the listing.

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

---

Question: A user has setup an application on EC2 which uses the IAM user access key and secret access key to make secure calls to S3. The user wants to temporarily stop the access to S3 for that IAM user. What should the root owner do?

- A. Delete the IAM user
- B. Change the access key and secret access key for the users
- C. Disable the access keys for the IAM user
- D. Stop the instance

Answer: C

Explanation: If the user wants to temporarily stop the access to S3 the best solution is to disable the keys. Deleting the user will result in a loss of all the credentials and the app will not be useful in the future. If the user stops the instance IAM users can still access S3. The change of the key does not help either as they are still active. The best possible solution is to disable the keys.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/ManagingCredentials.html>

---

Question: When should a user try to Force Detach an EBS volume?

- A. If the volume is stuck in a detaching state
- B. If the volume is not accessible from the instance
- C. If the volume is not unmounted and the user still wants to detach
- D. If the volume is a root volume

Answer: A

Explanation: If an EBS volume stays in the detaching state, the user can force the detachment

by clicking Force Detach. Forcing the detachment can lead to either data loss or a corrupted file system. The user should use this option only as a last resort to detach a volume from a failed instance or if he is detaching a volume with the intention of deleting it.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

---

Question: How can a user configure three termination policies for the AutoScaling group?

- A. Define multiple policies in random order
- B. Define multiple policies in the ordered list
- C. Keep updating the AutoScaling group with each policy
- D. The user cannot specify more than two policies for AutoScaling

Answer: B

Explanation: To configure the Auto Scaling termination policy, the user can either specify any one of the policies as a standalone policy or list multiple policies in an ordered list. The policies are executed in the order that they are listed.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/us-termination-policy.html>

---

Question: A user wants to configure AutoScaling which scales up when the CPU utilization is above 70% and scales down when the CPU utilization is below 30%. How can the user configure AutoScaling for the above mentioned condition?

- A. Use AutoScaling with a schedule
- B. Configure ELB to notify AutoScaling on load increase or decrease
- C. Use dynamic AutoScaling with a policy
- D. Use AutoScaling by manually modifying the desired capacity during a condition

Answer: C

Explanation: The user can configure the AutoScaling group to automatically scale up and then scale down based on the specified conditions. To configure this, the user must setup policies which will get triggered by the CloudWatch alarms.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/as-scale-based-on-demand.html>

---

Question: A user has created an application which sends data to a log file. The server hosting the log files can be unavailable due to any reason. The user wants to make it so that whenever the log server is up it should be receiving the messages. Which of the below mentioned AWS services helps achieve this functionality?

- A. AWS Simple Workflow
- B. AWS Simple Task Service

- C. AWS Simple Notification Service
- D. AWS Simple Queue Service

Answer: D

Explanation: Amazon Simple Queue Service (SQS) is a fast, reliable, scalable, and fully managed message queuing service. SQS provides a simple and cost-effective way to decouple the components of an application. The user can use SQS to transmit any volume of data without losing messages or requiring other services to always be available. Using SQS, the application has to just send the data to SQS and SQS transmits it to the log file whenever it is available.

Reference: <http://aws.amazon.com/sqs/>

---

Question: Is there a limit to how much throughput you can get out of a single table in DynamoDB?

- A. Yes, not more than 1,000 writes/second or 1,000 reads/second
- B. No
- C. Yes, not more than 10,000 writes/second or 10,000 reads/second
- D. No, but If you wish to exceed throughput rates of 10,000 writes/second or 10,000 reads/second, you must first contact AWS.

Answer: D

Explanation: In DynamoDB, you can increase the throughput you have provisioned for your table using UpdateTable API or in the AWS Management Console. If you wish to exceed throughput rates of 10,000 writes/second or 10,000 reads/second, you must first contact AWS.

Reference: <http://aws.amazon.com/dynamodb/>

---

Question: In AWS Elastic Beanstalk, you can update your deployed application even while it is part of a running environment. For a Java application, you can also use \_\_\_\_\_ to update your deployed application.

- A. the AWS Toolkit for Eclipse
- B. the AWS Toolkit for Visual Studio
- C. the AWS Toolkit for JVM
- D. the AWS Toolkit for Netbeans

Answer: A

Explanation: In AWS Elastic Beanstalk, you can update your deployed application, even while it is part of a running environment. For a Java application, you can also use the AWS Toolkit for Eclipse to update your deployed application.

Reference:

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/GettingStarted.Walkthrough.html>

---

Question: You have a number of image files to encode. In an Amazon SQS worker queue, you create an Amazon SQS message for each file specifying the command (jpeg-encode) and the location of the file in Amazon S3. Which of the following statements best describes the functionality of Amazon SQS?

- A. Amazon SQS is for single-threaded sending or receiving speeds.
- B. Amazon SQS is a non-distributed queuing system.
- C. Amazon SQS is a distributed queuing system that is optimized for horizontal scalability, not for single-threaded sending or receiving speeds.
- D. Amazon SQS is a distributed queuing system that is optimized for vertical scalability and for single-threaded sending or receiving speeds.

Answer: C

Explanation: Amazon SQS is a distributed queuing system that is optimized for horizontal scalability, not for single-threaded sending or receiving speeds. A single client can send or receive Amazon SQS messages at a rate of about 5 to 50 messages per second. Higher receive performance can be achieved by requesting multiple messages (up to 10) in a single call. It may take several seconds before a message that has been to a queue is available to be received.

Reference: [http://media.amazonwebservices.com/AWS\\_Storage\\_Options.pdf](http://media.amazonwebservices.com/AWS_Storage_Options.pdf)

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Question: Can you configure an RDS Read Replica using CloudFormation templates?

- A. Yes, provided that you have root access
- B. Yes, when you create a new CloudFormation template
- C. Yes, but not for all Regions.
- D. No, you can add the ReadReplica only when the resource is made available by CloudFormation

Answer: B

Explanation: AWS CloudFormation gives developers and systems administrators an easy way to create and manage collections of AWS resources. You can now set Read Replicas for your databases with RDS when you create a new CloudFormation template. You can start using it with the sample template of CloudFormation.

Reference:

[https://s3.amazonaws.com/cloudformation-templates-us-east-1/RDS\\_MySQL\\_With\\_Read\\_Replica.template](https://s3.amazonaws.com/cloudformation-templates-us-east-1/RDS_MySQL_With_Read_Replica.template)

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Question: A user is creating an ELB with VPC. Which of the following options is available as a part of the “Add EC2 instances” page?

- A. Select Subnet
- B. Select IAM
- C. Select ENI
- D. Select VPC

Answer: A

Explanation: When a user is launching an ELB with VPC, he/she has to select the options, such as subnet and security group before selecting the instances part of that subnet.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/elb-getting-started.html>

---

Question: An account owner has created an IAM user with the name examkiller. The account owner wants to give EC2 access of only the US West region to that IAM user. How can the owner configure this?

- A. While creating a policy provide the region as a part of the resources
- B. Create an IAM user in the US West region and give access to EC2
- C. Create an IAM policy and define the region in the condition
- D. It is not possible to provide access based on the region

Answer: C

Explanation: The IAM policy is never region specific. If the user wants to configure the region specific setting, he needs to provide conditions as part of the policy.

Reference: <http://awspolicygen.s3.amazonaws.com/policygen.html>

---

Question: What is the maximum time messages can be stored in SQS?

- A. 14 days
- B. one month
- C. 4 days
- D. 7 days

Answer: A

Explanation: A message can be stored in the Simple Queue Service (SQS) from 1 minute up to a maximum of 14 days.

Reference: [http://aws.amazon.com/sqs/faqs/#How\\_long\\_can\\_I\\_keep\\_my\\_messages\\_in\\_Amazon\\_SQS\\_queues](http://aws.amazon.com/sqs/faqs/#How_long_can_I_keep_my_messages_in_Amazon_SQS_queues)

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Question: In DynamoDB, the default table size is:

- A. 5 GB
- B. 1 GB
- C. 10 GB
- D. There is no table size

Answer: D

Explanation: DynamoDB has seamless scalability with no table size limits and unlimited storage, so you shouldn't be worried about managing storage on the host or to provisioning more drive, as your data requirement changes.

Reference: <http://aws.amazon.com/dynamodb/>

---

Question: A user is launching an AWS RDS instance with MySQL. The user wants to enable the Multi AZ feature. Which of the below mentioned parameters will not be allowed to configure by RDS?

- A. Availability Zone
- B. Region
- C. DB subnet group
- D. Database port

Answer: A

Explanation: If the user is launching RDS with Multi AZ the user cannot provision the Availability Zone. RDS is launched automatically instead

Reference: <https://console.aws.amazon.com/rds/>

Question: You want to have multiple versions of your application running at the same time, with all versions launched via AWS Elastic Beanstalk. Is this possible?

- A. No. However if you have 2 AWS accounts this can be done
- B. No. AWS Elastic Beanstalk is not designed to support multiple running environments
- C. Yes. AWS Elastic Beanstalk is designed to support a number of multiple running environments
- D. Yes. However AWS Elastic Beanstalk is designed to support only 2 multiple running environments

Answer: C

Explanation: AWS Elastic Beanstalk is designed to support multiple running environments. As an example you could have one for integration testing, one for pre-production, and one for production, with each environment independently configured and running on its own separate AWS resources.

Reference: <https://aws.amazon.com/elasticbeanstalk/faqs/>

---

Question: A user has launched an EBS backed Linux instance. How can a user detach the root device and attach it to another instance as a secondary volume?

- A. Unmount the root volume first and then detach it
- B. It is not possible to mount the root volume to some other instance
- C. Stop the first instance and then attach instance's root volume as a new volume to the other instance

D. It is not possible to mount the root device as a secondary volume on the other instance

Answer: C

Explanation: If an Amazon EBS volume is the root device of an instance, it cannot be detached unless the instance is in the stopped state.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

---

Question: When using Amazon SQS how much data can you store in a message?

- A. 8 KB
- B. 2 KB
- C. 16 KB
- D. 4 KB

Answer: A

Explanation: With Amazon SQS version 2008-01-01, the maximum message size for both SOAP and Query requests is 8KB.

If you need to send messages to the queue that are larger than 8 KB, AWS recommends that you split the information into separate messages. Alternatively, you could use Amazon S3 or Amazon SimpleDB to hold the information and include the pointer to that information in the Amazon SQS message.

If you send a message that is larger than 8KB to the queue, you will receive a MessageTooLong error with HTTP code 400.

Reference: <https://aws.amazon.com/items/1343?externalID=1343>

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Question: A user has launched one EC2 instance in the US West region. The user wants to access the RDS instance launched in the US East region from that EC2 instance. How can the user configure the access for that EC2 instance?

- A. It is not possible to access RDS of the US East region from the US West region
- B. Open the security group of the US West region in the RDS security group's ingress rule
- C. Configure the IP range of the US West region instance as the ingress security rule of RDS
- D. Create an IAM role which has access to RDS and launch an instance in the US West region with it

Answer: C

Explanation: The user cannot authorize an Amazon EC2 security group if it is in a different AWS Region than the RDS DB instance. The user can authorize an IP range or specify an Amazon EC2 security group in the same region that refers to an IP address in another region.

Reference:

[http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_WorkingWithSecurityGroups.html](http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithSecurityGroups.html)

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Question: In regard to AWS CloudFormation, what is a stack?

- A. The set of AWS templates that are created and managed as a template
- B. The set of AWS resources that are created and managed as a template
- C. The set of AWS resources that are created and managed as a single unit
- D. The set of AWS templates that are created and managed as a single unit

Answer: C

Explanation: A stack is the set of AWS resources that are created and managed as a single unit when AWS CloudFormation initiates a template.

Reference: <http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/concept-stack.html>

---

Question: In regard to DynamoDB, what is the Global secondary index?

- A. An index with a hash and range key that can be different from those on the table.
- B. An index that has the same range key as the table, but a different hash key
- C. An index that has the same hash key and range key as the table
- D. An index that has the same hash key as the table, but a different range key

Answer: A

Explanation: Global secondary index – an index with a hash and range key that can be different from those on the table.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html>

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Question: Which of the below mentioned options is not a best practice to securely manage the AWS access credentials?

- A. Enable MFA for privileged users
- B. Create individual IAM users
- C. Keep rotating your secure access credentials at regular intervals
- D. Create strong access key and secret access key and attach to the root account

Answer: D

Explanation: It is a recommended approach to avoid using the access and secret access keys of the root account.

Thus, do not download or delete it. Instead make the IAM user as powerful as the root account and use its credentials. The user cannot generate their own access and secret access keys as they are always generated by AWS.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/IAMBestPractices.html>

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Question: You have been given a scope to deploy some AWS infrastructure for a large organisation. The requirements are that you will have a lot of EC2 instances but may need to add more when the average utilization of your Amazon EC2 fleet is high and conversely remove them when CPU utilization is low. Which AWS services would be best to use to accomplish this?

- A. Amazon CloudFront, Amazon CloudWatch and Elastic Load Balancing.
- B. Auto Scaling, Amazon CloudWatch and AWS CloudTrail.
- C. Auto Scaling, Amazon CloudWatch and Elastic Load Balancing.
- D. Auto Scaling, Amazon CloudWatch and AWS Elastic Beanstalk

Answer: C

Explanation: Auto Scaling enables you to follow the demand curve for your applications closely, reducing the need to manually provision Amazon EC2 capacity in advance. For example, you can set a condition to add new Amazon EC2 instances in increments to the Auto Scaling group when the average utilization of your Amazon EC2 fleet is high; and similarly, you can set a condition to remove instances in the same increments when CPU utilization is low. If you have predictable load changes, you can set a schedule through Auto Scaling to plan your scaling activities. You can use Amazon CloudWatch to send alarms to trigger scaling activities and Elastic Load Balancing to help distribute traffic to your instances within Auto Scaling groups. Auto Scaling enables you to run your Amazon EC2 fleet at optimal utilization.

Reference: <http://aws.amazon.com/autoscaling/>

---

Question: You are building an online store on AWS that uses SQS to process your customer orders. Your backend system needs those messages in the same sequence the customer orders have been put in. How can you achieve that?

- A. You can do this with SQS but you also need to use SWF
- B. Messages will arrive in the same order by default.
- C. You can use sequencing information on each message
- D. It is not possible to do this with SQS

Answer: C

Explanation: Amazon SQS is engineered to always be available and deliver messages. One of the resulting tradeoffs is that SQS does not guarantee first in, first out delivery of messages. For many distributed applications, each message can stand on its own, and as long as all messages are delivered, the order is not important. If your system requires that order be preserved, you can place sequencing information in each message, so that you can reorder the messages when the queue returns them.

Reference:

<http://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/Welcome.html>

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Question: A user has launched an EC2 instance and installed a website with the Apache webserver. The webserver is running but the user is not able to access the website from the internet. What can be the possible reason for this failure?

- A. The security group of the instance is not configured properly.
- B. The instance is not configured with the proper key-pairs.
- C. The Apache website cannot be accessed from the internet.
- D. Instance is not configured with an elastic IP.

Answer: A

Explanation: In Amazon Web Services, when a user has configured an instance with Apache, the user needs to ensure that the ports in the security group are opened as configured in Apache config. E.g. If Apache is running on port 80, the user should open port 80 in the security group.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html>

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Question: When you use the AWS Elastic Beanstalk console to deploy a new application you'll need to upload a source bundle and it should \_\_\_\_\_.

- A. Consist of a single .zip file
- B. Consist of a single .war file
- C. Consist of a single .zip file or .war file
- D. Consist of a folder with all files

Answer: C

Explanation: When you use the AWS Elastic Beanstalk console to deploy a new application or an application version, you'll need to upload a source bundle. Your source bundle must meet the following requirements:

Consist of a single .zip file or .war file

Not exceed 512 MB

Not include a parent folder or top-level directory (subdirectories are fine)

Reference:

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.deployment.source.html>

---

Question: A user had defined an IAM policy similar to the one given below on a bucket:

```
{  
  "Version": "2012-10-17", "Statement": [  
    {"Effect": "Allow", "Principal": {  
      "AWS": "arn:aws:iam::12112112:user/test" },  
      "Action": [ "s3:GetBucketLocation", "s3>ListBucket", "s3:GetObject" ],  
      "Resource": [ "arn:aws:s3:::examkiller" ]}  
  ]}
```

What will this do?

- A. It will result in an error saying invalid policy statement
- B. It will create an IAM policy for the user test
- C. Allows the user test of the AWS account ID 12112112 to perform GetBucketLocation,

ListBucket and GetObject on the bucket examkiller

D. It will allow all the IAM users of the account ID 12112112 to perform GetBucketLocation, ListBucket and GetObject on bucket examkiller

Answer: C

Explanation: The IAM policy allows to test a user in the account 12112112 to perform:

s3:GetBucketLocation

s3>ListBucket

s3:GetObject

Amazon S3 permissions on the examkiller bucket.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/access-policy-language-overview.html>

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Question: A user has configured a bucket S3 to host a static website. What difference will there be when static website hosting is enabled?

- A. It will help the user identify this bucket as the website root to map with the domain
- B. It will create a new version of the bucket
- C. It will not make any difference, but will help the user to configure the error page
- D. It will provide the region specific website endpoint

Answer: D

Explanation: To host a static website, the user needs to configure an Amazon S3 bucket for website hosting and then upload the website contents to the bucket. The website is then available at the region-specific website endpoint of the bucket.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteHosting.html>

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Question: How does Amazon SQS allow multiple readers to access the same message queue without losing messages or processing them many times?

- A. By identifying a user by his unique id
- B. By using unique cryptography
- C. Amazon SQS queue has a configurable visibility timeout.
- D. Multiple readers can't access the same message queue

Answer: C

Explanation: Every Amazon SQS queue has a configurable visibility timeout. For the designated amount of time after a message is read from a queue, it will not be visible to any other reader. As long as the amount of time that it takes to process the message is less than the visibility timeout, every message will be processed and deleted. In the event that the component processing the message fails or becomes unavailable, the message will again become visible to any component reading the queue once the visibility timeout ends. This allows you to have many components all reading messages from the same queue, with each working to process different messages.

Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: In DynamoDB, a secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support \_\_\_\_\_ operations.

- A. None of the above
- B. Both
- C. Query
- D. Scan

Answer: C

Explanation: In DynamoDB, a secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support Query operations.

Reference:

<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/SecondaryIndexes.html>

---

Question: A user is trying to understand AWS SNS. To which of the below mentioned end points is SNS unable to send a notification?

- A. AWS SES
- B. Email JSON
- C. AWS SQS
- D. HTTP

Answer: A

Explanation: Amazon Simple Notification Service (Amazon SNS) is a fast, flexible, and fully managed push messaging service. Amazon SNS can deliver notifications by SMS text message or email to the Amazon Simple Queue Service (SQS) queues or to any HTTP endpoint. The user can select one of the following transports as part of the subscription requests: "HTTP", "HTTPS", "Email", "Email-JSON", "SQS", "and SMS".

Reference: <http://aws.amazon.com/sns/faqs/>

---

Question: Which of the following device names is recommended for an EBS volume that can be attached to an Amazon EC2 Instance running Windows?

- A. xvd[a-e]
- B. /mnt/sd[b-e]
- C. xvd[f-p]
- D. /dev/sda1

Answer: C

Explanation: The xvd[f-p] is the recommended device name for EBS volumes that can be attached

to the Amazon EC2 Instances running on Windows.

Reference: [http://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/device\\_naming.html](http://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/device_naming.html)

---

Question: Can one instance be registered with two ELBs in the same region?

- A. No
- B. Yes, provided both ELBs have the same health check configuration
- C. Yes, always
- D. Yes, provided both ELBs are in the same AZ

Answer: C

Explanation: Yes, it is possible to have one instance part of two separate ELBs, though both ELBs have different configurations. ELBs are never launched in specific zones.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/enable-disable-az.html>

---

Question: What does Amazon SQS provide?

- A. An asynchronous message queue service.
- B. A Simple Query Server, managed directly by Amazon Web Services.
- C. None of these.
- D. A synchronous message queue service.

Answer: A

Explanation: Amazon SQS stands for Simple Queue Services, and provides a cost-effective way to decouple the components of your application through an asynchronous message queue service

Reference: <http://aws.amazon.com/sqs/>

---

Question: A user is trying to create a list of IAM users with the AWS console. When the IAM users are created which of the below mentioned credentials will be enabled by default for the user?

- A. IAM access key and secret access key
- B. IAM X.509 certificates
- C. Nothing. Everything is disabled by default
- D. IAM passwords

Answer: C

Explanation: Newly created IAM users have no password and no access key (access key ID and secret access key). If the user needs to administer your AWS resources using the AWS Management Console, you can create a password for the user. If the user needs to interact

with AWS programmatically (using the command line interface (CLI), the AWS SDK, or service-specific APIs), you can create an access key for that user. The credentials you create for users are what they use to uniquely identify themselves to AWS.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/Using\\_WorkingWithGroupsAndUsers.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_WorkingWithGroupsAndUsers.html)

---

Question: Bob is an IAM user who has access to the EC2 services. Admin is an IAM user who has access to all the AWS services including IAM. Can Bob change his password?

- A. No, the IAM user can never change the password
- B. Yes, provided Admin has given Bob access to change his password
- C. Yes, only from AWS CLI
- D. Yes, only from the AWS console

Answer: B

Explanation: The IAM users by default cannot change their password. The root owner or IAM administrator needs to set the policy in the password policy page, which should allow the user to change their password. Once it is enabled, the IAM user can always change their passwords from the AWS console or CLI.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/Using\\_ManagingUserPwdSelf.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_ManagingUserPwdSelf.html)

---

Question: A user has created photo editing software and hosted it on EC2. The software accepts requests from the user about the photo format and resolution and sends a message to S3 to enhance the picture accordingly. Which of the below mentioned AWS services will help make a scalable software with the AWS infrastructure in this scenario?

- A. AWS Elastic Transcoder
- B. AWS Simple Notification Service
- C. AWS Simple Queue Service
- D. AWS Glacier

Answer: C

Explanation: Amazon Simple Queue Service (SQS) is a fast, reliable, scalable, and fully managed message queuing service. SQS provides a simple and cost-effective way to decouple the components of an application. The user can configure SQS, which will decouple the call between the EC2 application and S3. Thus, the application does not keep waiting for S3 to provide the data.

Reference: <http://aws.amazon.com/sqs/faqs/>

---

Question: A user has created a blank EBS volume in the US-East-1 region. The user is unable to attach the volume to a running instance in the same region. What could be the possible reason for this?

- A. The instance must be in a running state. It is required to stop the instance to attach volume
- B. The AZ for the instance and volume are different
- C. The instance is from an instance store backed AMI
- D. The instance has enabled the volume attach protection

Answer: B

Explanation: An EBS volume provides persistent data storage. The user can attach a volume to any instance provided they are both in the same AZ. Even if they are in the same region but in a different AZ, it will not be able to attach the volume to that instance.

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

---

Question: In DynamoDB, could you use IAM to grant access to Amazon DynamoDB resources and API actions?

- A. Yes
- B. Depended to the type of access
- C. In DynamoDB there is no need to grant access
- D. No

Answer: A

Explanation: Amazon DynamoDB integrates with AWS Identity and Access Management (IAM). You can use AWS IAM to grant access to Amazon DynamoDB resources and API actions. To do this, you first write an AWS IAM policy, which is a document that explicitly lists the permissions you want to grant. You then attach that policy to an AWS IAM user or role.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/UsingIAMwithDDB.html>

---

Question: A user is planning to host a mobile game on EC2 which sends notifications to active users on either high score or the addition of new features. The user should get this notification when he is online on his mobile device. Which of the below mentioned AWS services can help achieve this functionality?

- A. AWS Simple Notification Service.
- B. AWS Simple Queue Service.
- C. AWS Mobile Communication Service.
- D. AWS Simple Email Service.

Answer: A

Explanation: Amazon Simple Notification Service (Amazon SNS) is a fast, flexible, and fully managed push messaging service. Amazon SNS makes it simple and cost-effective to push to mobile devices, such as iPhone, iPad, Android, Kindle Fire, and internet connected smart devices, as well as pushing to other distributed services.

Reference: <http://aws.amazon.com/sns>

---

Question: An organization is setting up their website on AWS. The organization is working on various security measures to be performed on the AWS EC2 instances. Which of the below mentioned security mechanisms will not help the organization to avoid future data leaks and identify security weaknesses?

- A. Perform SQL injection for application testing.
- B. Run penetration testing on AWS with prior approval from Amazon.
- C. Perform a hardening test on the AWS instance.
- D. Perform a Code Check for any memory leaks.

Answer: D

Explanation: AWS security follows the shared security model where the user is as much responsible as Amazon. Since Amazon is a public cloud it is bound to be targeted by hackers. If an organization is planning to host their application on AWS EC2, they should perform the below mentioned security checks as a measure to find any security weakness/data leaks:  
Perform penetration testing as performed by attackers to find any vulnerability. The organization must take an approval from AWS before performing penetration testing  
Perform hardening testing to find if there are any unnecessary ports open  
Perform SQL injection to find any DB security issues  
The code memory checks are generally useful when the organization wants to improve the application performance.

Reference: <http://aws.amazon.com/security/penetration-testing/>

---

Question: A root account owner is trying to setup an additional level of security for all his IAM users. Which of the below mentioned options is a recommended solution for the account owner?

- A. Enable access key and secret access key for all the IAM users
- B. Enable MFA for all IAM users
- C. Enable the password for all the IAM users
- D. Enable MFA for the root account

Answer: B

Explanation: Multi-Factor Authentication adds an extra level of security for all the users. The user can enable MFA for all IAM users which ensures that each user has to provide an extra six digit code for authentication.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/Using\\_ManagingMFA.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_ManagingMFA.html)

---

Question: Regarding Amazon SQS, what happens if there is no activity against a queue for more than 30 consecutive days?

- A. Your account will be suspended

- B. The queue may be deleted
- C. Nothing
- D. The queue will be deleted

Answer: B

Explanation: AWS reserve the right to delete a queue if none of the following requests have been issued against the queue for more than 30 consecutive days:

SendMessage  
ReceiveMessage  
DeleteMessage  
GetQueueAttributes  
SetQueueAttributes

You should design your application with this in mind.

Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: Which of the below mentioned options is a must to have an element as a part of the IAM policy?

- A. Condition
- B. ID
- C. Statement
- D. Version

Answer: C

Explanation: The statement is the main element of the IAM policy and it is a must for a policy. Elements such as condition, version and ID are not required.

Reference:

[http://docs.aws.amazon.com/IAM/latest/UserGuide/AccessPolicyLanguage\\_ElementDescriptions.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/AccessPolicyLanguage_ElementDescriptions.html)

---

Question: Which of the below mentioned commands allows the user to share the AMI with his peers using the AWS EC2 CLI?

- A. ec2-share-image-public
- B. ec2-share-image-account
- C. ec2-share-image
- D. ec2-modify-image-attribute

Answer: D

Explanation: A user can share an AMI with another user / peer using the command:

ec2-modify-image-attribute <AMI-ID> -l -a <AWS Account ID>;

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/sharingamis-explicit.html>

---

Question: ExamKiller (with AWS account ID 111122223333) has created 50 IAM users for its organization's employees. ExamKiller wants to make the AWS console login URL for all IAM users like: <https://examkiller.signin.aws.amazon.com/console/>. How can this be configured?

- A. The user needs to use Route 53 to map the examkiller domain and IAM URL
- B. Create an IAM AWS account alias with the name examkiller
- C. It is not possible to have a personalized IAM login URL
- D. Create an IAM hosted zone Identity for the domain examkiller

Answer: B

Explanation: If a user wants the URL of the AWS IAM sign-in page to have a company name instead of the AWS account ID, he can create an alias for his AWS account ID.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/AccountAlias.html>

---

Question: A user has created a new EBS volume from an existing snapshot. The user mounts the volume on the instance to which it is attached. Which of the below mentioned options is a required step before the user can mount the volume?

- A. Run a cyclic check on the device for data consistency
- B. Create the file system of the volume
- C. Resize the volume as per the original snapshot size
- D. No step is required. The user can directly mount the device

Answer: D

Explanation: When a user is trying to mount a blank EBS volume, it is required that the user first creates a file system within the volume. If the volume is created from an existing snapshot then the user needs not to create a file system on the volume as it will wipe out the existing data.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-using-volumes.html>

---

Question: A user is creating multiple IAM users. What advice should be given to him to enhance the security?

- A. Grant least privileges to the individual user
- B. Grant all higher privileges to the group
- C. Grant less privileges for user, but higher privileges for the group
- D. Grant more privileges to the user, but least privileges to the group

Answer: A

Explanation: It is a recommended rule that the root user should grant the least privileges to the IAM user or the group. The higher the privileges, the more problems it can create.

Question: In regards to Amazon SQS how many times will you receive each message?

- A. At least twice
- B. Exactly once
- C. As many times as you want
- D. At least once

Answer: D

Explanation: Amazon SQS is engineered to provide “at least once” delivery of all messages in its queues. Although most of the time, each message will be delivered to your application exactly once, you should design your system so that processing a message more than once does not create any errors or inconsistencies. Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: A user has set an IAM policy where it allows all requests if a request from IP 10.10.10.1/32. Another policy allows all the requests between 5 PM to 7 PM. What will happen when a user is requesting access from IP 10.10.10.1/32 at 6 PM?

- A. IAM will throw an error for policy conflict
- B. It is not possible to set a policy based on the time or IP
- C. It will deny access
- D. It will allow access

Answer: D

Explanation: With regard to IAM, when a request is made, the AWS service decides whether a given request should be allowed or denied. The evaluation logic follows these rules:  
By default, all requests are denied. (In general, requests made using the account credentials for resources in the account are always allowed.)  
An explicit allow policy overrides this default.  
An explicit deny policy overrides any allows.

Reference:

[http://docs.aws.amazon.com/IAM/latest/UserGuide/AccessPolicyLanguage\\_EvaluationLogic.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/AccessPolicyLanguage_EvaluationLogic.html)

---

Question: A user is enabling logging on a particular bucket. Which of the below mentioned options may be best suitable to allow access to the log bucket?

- A. Create an IAM policy and allow log access
- B. It is not possible to enable logging on the S3 bucket
- C. Create an IAM Role which has access to the log bucket
- D. Provide ACL for the logging group

Answer: D

Explanation: The only recommended use case for the S3 bucket ACL is to grant the write permission to the Amazon S3 Log Delivery group to write access log objects to the user's bucket.

Reference:

<http://docs.aws.amazon.com/AmazonS3/latest/dev/access-policy-alternatives-guidelines.html>

---

Question: A user is running a webserver on EC2. The user wants to receive the SMS when the EC2 instance utilization is above the threshold limit. Which AWS services should the user configure in this case?

- A. AWS CloudWatch + AWS SES.
- B. AWS CloudWatch + AWS SNS.
- C. AWS CloudWatch + AWS SQS.
- D. AWS EC2 + AWS Cloudwatch.

Answer: B

Explanation: Amazon SNS makes it simple and cost-effective to push to mobile devices, such as iPhone, iPad, Android, Kindle Fire, and internet connected smart devices, as well as pushing to other distributed services. In this case, the user can configure that Cloudwatch sends an alarm on when the threshold is crossed to SNS which will trigger an SMS.

Reference: <http://aws.amazon.com/sns/>

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Question: A user has setup Multi AZ with the MS SQL RDS instance. Which of the below mentioned functionalities can be achieved by the user?

- A. High availability
- B. Scalability
- C. MS SQL does not support Multi AZ
- D. Disaster recovery

Answer: C

Explanation: The Multi AZ feature allows the user to achieve High Availability. MS SQL does not support Multi AZ.

Reference: <https://aws.amazon.com/rds/faqs/#36>

---

Question: An organization is having an application which can start and stop an EC2 instance as per schedule. The organization needs the MAC address of the instance to be registered with its software. The instance is launched in EC2-CLASSIC. How can the organization update the MAC registration every time an instance is booted?

- A. The instance MAC address never changes. Thus, it is not required to register the MAC address every time.

- B. The organization should write a boot strapping script which will get the MAC address from the instance metadata and use that script to register with the application.
- C. AWS never provides a MAC address to an instance; instead the instance ID is used for identifying the instance for any software registration.
- D. The organization should provide a MAC address as a part of the user data. Thus, whenever the instance is booted the script assigns the fixed MAC address to that instance.

Answer: B

Explanation: AWS provides an on demand, scalable infrastructure. AWS EC2 allows the user to launch On-Demand instances. AWS does not provide a fixed MAC address to the instances launched in EC2-CLASSIC. If the instance is launched as a part of EC2-VPC, it can have an ENI which can have a fixed MAC. However, with EC2-CLASSIC, every time the instance is started or stopped it will have a new MAC address.

To get this MAC, the organization can run a script on boot which can fetch the instance metadata and get the MAC address from that instance metadata. Once the MAC is received, the organization can register that MAC with the software.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AESDG-chapter-instancedata.html>

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Question: A user is trying to share a video file with all his friends. Which of the below mentioned AWS services will be cheapest and easy to use?

- A. AWS S3
- B. AWS EC2
- C. AWS RRS
- D. AWS Glacier

Answer: C

Explanation: AWS RRS provides the same functionality as AWS S3, but at a cheaper rate. It is ideally suited for non mission critical applications. It provides less durability than S3, but is a cheaper option.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingRRS.html>

---

Question: A user has configured ELB. Which of the below mentioned protocols the user can configure for ELB health checks while setting up ELB?

- A. All of the options
- B. TCP
- C. HTTPS
- D. SSL

Answer: A

Explanation: An ELB performs a health check on its instances to ensure that it diverts

traffic only to healthy instances. The ELB can perform a health check on HTTP, HTTPS, TCP and SSL protocols.

Reference: <http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide>Welcome.html>

---

Question: Is it possible to create an S3 bucket accessible only by a certain IAM user, using policies in a CloudFormation template?

- A. No, you can only create the S3 bucket but not the IAM user.
- B. S3 is not supported by CloudFormation.
- C. Yes, all these resources can be created using a CloudFormation template
- D. No, in the same template you can only create the S3 bucket and the relative policy.

Answer: C

Explanation: With AWS Identity and Access Management (IAM), you can create IAM users to control who has access to which resources in your AWS account. You can use IAM with AWS CloudFormation to control what AWS CloudFormation actions users can perform, such as view stack templates, create stacks, or delete stacks.

In addition to AWS CloudFormation actions, you can manage what AWS services and resources are available to each user.

---

Question: A user has created an EBS instance in the US-East-1a AZ. The user has a volume of 30 GB in the US-East-1b zone. How can the user attach the volume to an instance?

- A. Since both the volume and the instance are in the same region, the user can attach the volume
- B. Use the volume migrate function to move the volume from one AZ to another and attach to the instance
- C. Take a snapshot of the volume. Create a new volume in the USEast-1a and attach that to the instance
- D. Use the volume replicate function to create a new volume in the US-East-1a and attach that to the volume

Answer: C

Explanation: If an EBS volume is not in the same AZ of an EC2 instance, it cannot be attached to the instance. The only option is to take a snapshot of the volume and create a new volume in the instance's AZ.

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

---

Question: A user is part of a group which has a policy allowing him just read only access to EC2. The user is part of another group which has full access to EC2. What happens when the user tries to launch an instance?

- A. It will allow the user to launch the instance

- B. It will fail since the user has just read only access
- C. It will allow or deny based on the group under which the user has logged into EC2
- D. It will not allow the user to add to the conflicting groups

Answer: A

Explanation: The IAM group policy is always aggregated. In this case, if the user does not have permission for one group, but has permission for another group, he will have full access to EC2. Unless there is specific deny policy, the user will be able to access EC2.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/PoliciesOverview.html>

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Question: A user has launched an RDS instance. The user has created 3 databases on the same server. What can the maximum size be for each database?

- A. The size of each DB cannot be more than 3 TB
- B. It is not possible to have more than one DB on a single instance
- C. The total instance storage size cannot be more than 3 TB
- D. The size of each DB cannot be more than 1 TB

Answer: C

Explanation: The AWS RDS DB instance is an isolated DB environment provided by AWS in which the user can create more than 1 database. The maximum size of the instance should be between 5 GB and 3 TB. The size of each DB can be anything in this range.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

---

Question: A user has created an RDS instance with MySQL. The user is using the HeidiSQL client to connect with the RDS DB. The client is unable to connect to DB from his home machine. What is a possible reason for the failure?

- A. The user has to open port 80 in the RDS security group to connect with RDS DNS
- B. The security group is not configured to allow a request from the user's IP on port 3306
- C. You can never connect to RDS from your desktop
- D. The user has to open port 22 in the RDS security group to connect with RDS DNS

Answer: B

Explanation: If the user needs to connect to RDS then he has to open port 3306 in the RDS security group for his IP address.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

---

Question: A user is creating a new EBS volume from an existing snapshot. The snapshot size shows 10 GB. Can the user create a volume of 30 GB from that snapshot?

- A. Provided the original volume has set the change size attribute to true
- B. Yes
- C. Provided the snapshot has the modify size attribute set as true
- D. No

Answer: B

Explanation: A user can always create a new EBS volume of a higher size than the original snapshot size. The user cannot create a volume of a lower size. When the new volume is created the size in the instance will be shown as the original size. The user needs to change the size of the device with resize2fs or other OS specific commands.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-expand-volume.html>

---

Question: An organization has 10000 employees. The organization wants to give restricted AWS access to each employee. How can the organization achieve this?

- A. Create an IAM user for each employee and make them a part of the group
- B. It is not recommended to support 10000 users with IAM
- C. Use STS and create the users' run time
- D. Use Identity federation with SSO

Answer: D

Explanation: Identity federation enables users from an existing directory to access resources within your AWS account, making it easier to manage your users by maintaining their identities in a single place. In this case, the federated user is the only solution since AWS does not allow creating more than 5000 IAM users.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/LimitationsOnEntities.html>

---

Question: Can a user associate and use his own DNS with ELB instead of the DNS provided by AWS ELB?

- A. Yes, by creating a CNAME with the existing domain name provider
- B. Yes, by configuring DNS in the AWS Console
- C. No
- D. Yes, only through Route 53 by mapping ELB and DNS

Answer: A

Explanation: The AWS ELB allows mapping a custom domain name with ELB. The user can map ELB with DNS in two ways: 1) By creating CNAME with the existing domain name service provider or 2) By creating a record with Route 53.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/using-domain-names-with-elb.html>

Question:

\_\_\_\_\_ can be used to bootstrap both the Chef Server and Chef Client software on your EC2 instances.

- A. AWS CloudFormation
- B. AWS Elastic Beanstalk
- C. AWS OpsWorks
- D. Amazon Glacier

Answer: A

Explanation: AWS CloudFormation can be used to bootstrap both the Chef Server and Chef Client software on your EC2 instances.

Reference: <http://aws.amazon.com/cloudformation/faqs/>

---

Question: In relation to Amazon Simple Workflow Service (Amazon SWF), what is an “Activity Worker”?

- A. An individual task undertaken by a workflow
- B. The automation of a business process
- C. A piece of software that implements tasks
- D. All answers listed are correct

Answer: C

Explanation: In relation to Amazon Simple Workflow Service (Amazon SWF), an activity worker is a program that receives activity tasks, performs them, and provides results back. Which translates to a piece of software that implements tasks.

Reference:

<http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-develop-activity.html>

---

Question: A user has launched a MySQL RDS. The user wants to plan for the DR and automate the snapshot. Which of the below mentioned functionality offers this option with RDS?

- A. Copy snapshot
- B. Automated synchronization
- C. Snapshot
- D. Automated backup

Answer: D

Explanation: Amazon RDS provides two different methods for backing up and restoring the Amazon DB instances: automated backups and DB snapshots. Automated backups automatically back up the DB instance during a specific, user-definable backup window, and keep the backups for a limited, user-specified period of time.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.BackingUpAndRestoringAmazonRDSInstances.html>

---

Question: You cannot access your AWS console, so you revert to using the CLI that you are not familiar with. Which of the following commands is not a valid CLI command for EC2 instances?

- A. ec2-allocate-address
- B. ec2-attach-internet-gateway
- C. ec2-associate-route-table
- D. ec2-allocate-interface

Answer: D

Explanation: You can use the CLI tools to manage your Amazon EC2 resources (such as instances, security groups, and volumes) and your Amazon VPC resources (such as VPCs, subnets, route tables, and Internet gateways). Before you can start using the tools, you must download and configure them.

The following are valid CLI commands for EC2 instances:

```
ec2-accept-vpc-peering-connection  
ec2-allocate-address  
ec2-assign-private-ip-addresses  
ec2-associate-address  
ec2-associate-dhcp-options  
ec2-associate-route-table  
ec2-attach-internet-gateway  
ec2-attach-network-interface (not ec2-allocate-interface)
```

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/command-reference.html>

---

Question: An organization has 20 employees. The organization wants to give all the users access to the organization AWS account. Which of the below mentioned options is the right solution?

- A. Share the root credentials with all the users
- B. Create an IAM user for each employee and provide access to them
- C. It is not advisable to give AWS access to so many users
- D. Use the IAM role to allow access based on STS

Answer: B

Explanation: AWS Identity and Access Management is a web service that enables the AWS customers to manage users and user permissions in AWS. The IAM is targeted at organizations with multiple users or systems that use AWS products such as Amazon EC2, Amazon RDS, and the AWS Management Console. With IAM, the organization can centrally manage users, security credentials such as access keys, and permissions that control which AWS resources users can access.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM\\_Introduction.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM_Introduction.html)

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Question: When AutoScaling is launching a new instance based on condition, which of the below mentioned policies will it follow?

- A. Based on the criteria defined with cross zone Load balancing
- B. Launch an instance which has the highest load distribution
- C. Launch an instance in the AZ with the fewest instances
- D. Launch an instance in the AZ which has the highest instances

Answer: C

Explanation: AutoScaling attempts to distribute instances evenly between the Availability Zones that are enabled for the user's AutoScaling group. Auto Scaling does this by attempting to launch new instances in the Availability Zone with the fewest instances.

Reference: [http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/AS\\_Concepts.html](http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/AS_Concepts.html)

---

Question: In regards to Amazon SQS how can you secure the messages in your queues?

- A. You can't
- B. Amazon SQS uses either your Access Key ID or an X.509 certificate to authenticate your identity
- C. Through your IAM access keys
- D. Don't use root access

Answer: B

Explanation: Authentication mechanisms are provided to ensure that messages stored in Amazon SQS queues are secured against unauthorized access. Only the AWS account owners can access the queues they create. Amazon SQS uses proven cryptographic methods to authenticate your identity, either through the use of your Access Key ID and request signature, or through the use of an X.509 certificate.

Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: Which Amazon service is not used by Elastic Beanstalk?

- A. Amazon S3
- B. Amazon ELB
- C. Auto scaling
- D. Amazon EMR

Answer: D

Explanation: Elastic Beanstalk leverages AWS services such as Amazon Elastic Cloud Compute

(Amazon EC2), Amazon Simple Storage Service (Amazon S3), Amazon Simple Notification Service (Amazon SNS), Elastic Load Balancing and Auto Scaling to deliver the same highly reliable, scalable, and cost-effective infrastructure that hundreds of thousands of businesses depend on today.

Reference: <http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/Welcome.html>

---

Question: In AWS Elastic Beanstalk, if the application returns any response other than 200, OK or there is no response within the configured InactivityTimeout period, \_\_\_\_\_.

- A. SQS once again makes the message visible in the queue and available for another attempt at processing
- B. SQS waits for another timeout
- C. SQS run DeleteMessagecall and deletes the message from the queue
- D. SQS sends a message to the application with the MessageID and pending status

Answer: A

Explanation: In AWS Elastic Beanstalk, if the application returns any response other than 200, OK or there is no response within the configured InactivityTimeout period, SQS once again makes the message visible in the queue and available for another attempt at processing.

Reference:

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features-managing-env-tiers.html#worker-environ>

---

Question: Which of the below mentioned options can be a good use case for storing content in AWS RRS?

- A. Storing mission critical data Files
- B. Storing infrequently used log files
- C. Storing a video file which is not reproducible
- D. Storing image thumbnails

Answer: D

Explanation: AWS RRS provides the same functionality as AWS S3, but at a cheaper rate. It is ideally suited for non-mission, critical applications, such as files which can be reproduced.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingRRS.html>

---

Question: Which header received at the EC2 instance identifies the port used by the client while requesting ELB?

- A. X-Forwarded-Proto
- B. X-Requested-Proto
- C. X-Forwarded-Port

#### D. X-Requested-Port

Answer: C

Explanation: The X-Forwarded-Port request header helps the user identify the port used by the client while sending a request to ELB.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/TerminologyandKeyConcepts.html>

---

Question: When you register an activity in Amazon SWF, you provide the following information, except:

- A. a name
- B. timeout values
- C. a domain
- D. version

Answer: C

Explanation: When designing an Amazon SWF workflow, you precisely define each of the required activities. You then register each activity with Amazon SWF as an activity type. When you register the activity, you provide information such as a name and version, and some timeout values based on how long you expect the activity to take.

Reference: <http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-intro-to-swf.html>

---

Question: A user is using an EBS backed instance. Which of the below mentioned statements is true?

- A. The user will be charged for volume and instance only when the instance is running
- B. The user will be charged for the volume even if the instance is stopped
- C. The user will be charged only for the instance running cost
- D. The user will not be charged for the volume if the instance is stopped

Answer: B

Explanation: If a user has launched an EBS backed instance, the user will be charged for the EBS volume even though the instance is in a stopped state. The instance will be charged for the EC2 hourly cost only when it is running.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

---

Question: A user is trying to create a policy for an IAM user from the AWS console. Which of the below mentioned options is not available to the user while configuring policy?

- A. Use policy generator to create policy
- B. Use custom policy to create policy
- C. Use policy simulator to create policy
- D. Assign No permission

Answer: C

Explanation: When a user is trying to create a policy from the AWS console, it will have options such as create policy from templates or use a policy generator. The user can also define a custom policy or chose the option to have no permission. The policy simulator is not available in the console.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/IAMBestPractices.html>

---

Question: A user has an S3 object in the US Standard region with the content “color=red”. The user updates the object with the content as “color=white”. If the user tries to read the value 1 minute after it was uploaded, what will S3 return?

- A. It will return “color=white”
- B. It will return “color=red”
- C. It will return an error saying that the object was not found
- D. It may return either “color=red” or “color=white” i.e. any of the value

Answer: D

Explanation: AWS S3 follows the eventual consistent model in the US Standard Region. Once the object is updated it may return the new value or the old value based on whether all the content is replicated across multiple servers until it becomes consistent (eventual).

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

---

Question: AWS Elastic Beanstalk will change the health status of a web server environment tier to gray color when:

- A. AWS Elastic Beanstalk detects other problems with the environment that are known to make the application unavailable
- B. Your application hasn't responded to the application health check URL within the last one hour.
- C. Your application hasn't responded to the application health check URL within the last five minutes.
- D. Your application's health status is unknown because status is reported when the application is not in the ready state.

Answer: D

Explanation: AWS Elastic Beanstalk will change the health status of a web server environment tier to gray color when your application's health status is unknown (because status is reported when the application is not in the ready state).

Reference:

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.healthstatus.html>

---

Question: A user wants to access RDS from an EC2 instance using IP addresses. Both RDS and EC2 are in the same region, but different AZs. Which of the below mentioned options help configure that the instance is accessed faster?

- A. Configure the Private IP of the Instance in RDS security group
- B. Security group of EC2 allowed in the RDS security group
- C. Configuring the elastic IP of the instance in RDS security group
- D. Configure the Public IP of the instance in RDS security group

Answer: A

Explanation: If the user is going to specify an IP range in RDS security group, AWS recommends using the private IP address of the Amazon EC2 instance. This provides a more direct network route from the Amazon EC2 instance to the Amazon RDS DB instance, and does not incur network charges for the data sent outside of the Amazon network.

Reference:

[http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_WorkingWithSecurityGroups.html](http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithSecurityGroups.html)

---

Question: A user is creating a snapshot of an EBS volume. Which of the below statements is incorrect in relation to the creation of an EBS snapshot?

- A. Its incremental
- B. It can be used to launch a new instance
- C. It is stored in the same AZ as the volume
- D. It is a point in time backup of the EBS volume

Answer: C

Explanation: The EBS snapshots are a point in time backup of the EBS volume. It is an incremental snapshot, but is always specific to the region and never specific to a single AZ. Hence the statement “It is stored in the same AZ as the volume” is incorrect.

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

---

Question: A user is planning to use EBS for his DB requirement. The user already has an EC2 instance running in the VPC private subnet. How can the user attach the EBS volume to a running instance?

- A. The user must create EBS within the same VPC and then attach it to a running instance.
- B. The user can create EBS in the same zone as the subnet of instance and attach that EBS to instance.
- C. It is not possible to attach an EBS to an instance running in VPC until the instance is stopped.

D. The user can specify the same subnet while creating EBS and then attach it to a running instance.

Answer: B

Explanation: A Virtual Private Cloud (VPC) is a virtual network dedicated to the user's AWS account. The user can create subnets as per the requirement within a VPC. The VPC is always specific to a region. The user can create a VPC which can span multiple Availability Zones by adding one or more subnets in each Availability Zone.

The instance launched will always be in the same availability zone of the respective subnet. When creating an EBS the user cannot specify the subnet or VPC. However, the user must create the EBS in the same zone as the instance so that it can attach the EBS volume to the running instance.

Reference: [http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC\\_Subnets.html#VPCSubnet](http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Subnets.html#VPCSubnet)

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Question: Which of the following groups is AWS Elastic Beanstalk best suited for?

- A. Those who want to deploy and manage their applications within minutes in the AWS cloud
- B. Those who want to privately store and manage Git repositories in the AWS cloud.
- C. Those who want to automate the deployment of applications to instances and to update the applications as required
- D. Those who want to model, visualize, and automate the steps required to release software

Answer: A

Explanation: AWS Elastic Beanstalk is best suited for those groups who want to deploy and manage their applications within minutes in the AWS cloud. As a bonus, you don't even need experience with cloud computing to get started.

Reference: <https://aws.amazon.com/elasticbeanstalk/faqs/>

---

Question: You are using Amazon SQS and are getting a "Queue Deleted Recently" error. What is wrong?

- A. The message is too big
- B. You have incorrect permissions
- C. Another user has deleted the queue
- D. If you delete a queue, you need to wait for at least 60 seconds before creating a queue with the same name

Answer: D

Explanation: If you delete a queue, you need to wait for at least 60 seconds before creating a queue with the same name. Please note that when you delete a queue, the deletion process takes up to 60 seconds. Requests you send to a recently deleted queue might succeed during the 60-second period. For example, a SendMessage request might succeed, but after 60 seconds the queue and that message you sent no longer exists.

Question: Your manager has requested you to tag EC2 instances to organize and manage a load balancer. Which of the following statements about tag restrictions is incorrect?

- A. The maximum key length is 127 Unicode characters.
- B. The maximum value length is 255 Unicode characters.
- C. Tag keys and values are case sensitive.
- D. The maximum number of tags per load balancer is 20.

Answer: D

---

Question: A user is trying to find the state of an S3 bucket with respect to versioning. Which of the below mentioned states AWS will not return when queried?

- A. versioning-enabled
- B. versioning-suspended
- C. unversioned
- D. versioned

Answer: D

Explanation: S3 buckets can be in one of the three states: unversioned (the default), versioning-enabled or versioning-suspended. The bucket owner can configure the versioning state of a bucket. The versioning state applies to all (never some) of the objects in that bucket. The first time owner enables a bucket for versioning, objects in it are thereafter always versioned and given a unique version ID.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Versioning.html>

---

Question: What is the maximum number of tags that a user can assign to an EC2 instance?

- A. 50
- B. 10
- C. 5
- D. 25

Answer: B

Explanation: To help manage EC2 instances as well as their usage in a better way, the user can tag the instances. The tags are metadata assigned by the user which consists of a key and a value. One resource can have a maximum of 10 tags.

Reference: [http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using\\_Tags.html](http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_Tags.html)

---

Question: How do you configure SQS to support longer message retention?

- A. Set the MessageRetentionPeriod attribute using the SetQueueAttributes method
- B. Using a Lambda function
- C. You can't. It is set to 14 days and cannot be changed
- D. You need to request it from AWS

Answer: A

Explanation: To configure the message retention period, set the MessageRetentionPeriod attribute using the SetQueueAttributes method. This attribute is used to specify the number of seconds a message will be retained by SQS. Currently the default value for the message retention period is 4 days. Using the MessageRetentionPeriod attribute, the message retention period can be set anywhere from 60 seconds (1 minute), up to 1209600 seconds (14 days).

Reference: <https://aws.amazon.com/sqs/faqs/>

---

Question: The user has created multiple AutoScaling groups. The user is trying to create a new AS group but it fails. How can the user know that he has reached the AS group limit specified by AutoScaling in that region?

- A. Run the command: `as-describe-account-limits`
- B. Run the command: `as-describe-group-limits`
- C. Run the command: `as-max-account-limits`
- D. Run the command: `as-list-account-limits`

Answer: A

Explanation: A user can see the number of AutoScaling resources currently allowed for the AWS account either by using the `as-describe-account-limits` command or by calling the `DescribeAccountLimits` action.

Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/ts-as-capacity.html>

---

Question: An organization is hosting an application as part of the free usage tier. The organization wants to create IAM users for each of its 150 employees and they may access AWS as part of free usage tier. What will you advise the organization?

- A. The IAM is not available as a part of the free usage tier
- B. Create IAM roles and give access based on role since it will not cost the user
- C. Do not create more than 100 users as it will cost the organization.
- D. Create IAM users for each employee as it does not cost

Answer: D

Explanation: IAM is a free service. You can create as many IAM users or groups as desired free of cost.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM\\_Introduction.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM_Introduction.html)

---

Question: A user has enabled serverside encryption with S3. The user downloads the encrypted object from S3. How can the user decrypt it?

- A. S3 does not support server side encryption
- B. S3 provides a server side key to decrypt the object
- C. The user needs to decrypt the object using their own private key
- D. S3 manages encryption and decryption automatically

Answer: D

Explanation: If the user is using the server-side encryption feature, Amazon S3 encrypts the object data before saving it on disks in its data centres and decrypts it when the user downloads the objects. Thus, the user is free from the tasks of managing encryption, encryption keys, and related tools.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingEncryption.html>

---

Question: A user has configured ELB with two instances running in separate AZs of the same region? Which of the below mentioned statements is true?

- A. Multi AZ instances will provide HA with ELB
- B. Multi AZ instances are not possible with a single ELB
- C. Multi AZ instances will provide scalability with ELB
- D. The user can achieve both HA and scalability with ELB

Answer: A

Explanation: If a user is running two instances in separate AZs, it will provide HA with ELB since ELB will automatically stop routing the traffic to unhealthy instances and send it to healthy instances only.

---

Question: Does Amazon DynamoDB support both increment and decrement atomic operations?

- A. No, neither increment nor decrement operations.
- B. Only increment, since decrement are inherently impossible with DynamoDB's data model.
- C. Only decrement, since increment are inherently impossible with DynamoDB's data model.
- D. Yes, both increment and decrement operations.

Answer: D

Explanation: Amazon DynamoDB supports increment and decrement atomic operations.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/APISummary.html>

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Question: What is the data model of DynamoDB?

- A. "Items", with Keys and one or more Attribute; and "Attribute", with Name and Value.
- B. "Database", which is a set of "Tables", which is a set of "Items", which is a set of "Attributes".
- C. "Table", a collection of Items; "Items", with Keys and one or more Attribute; and "Attribute", with Name and Value.
- D. "Database", a collection of Tables; "Tables", with Keys and one or more Attribute; and "Attribute", with Name and Value.

Answer: C

Explanation: The data model of DynamoDB is:

"Table", a collection of Items;  
"Items", with Keys and one or more Attribute;  
"Attribute", with Name and Value.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html>

---

Question: A user is trying to configure access with S3. Which of the following options is not possible to provide access to the S3 bucket / object?

- B. Define the policy for the IAM user B. Define the ACL for the object
- C. Define the policy for the object
- D. Define the policy for the bucket

Answer: C

Explanation: Amazon S3 offers access policy options broadly categorized as resource-based policies and user policies. Access policies, such as ACL and resource policy can be attached to the bucket. With the object the user can only have ACL and not an object policy. The user can also attach access policies to the IAM users in the account. These are called user policies.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/s3-access-control.html>

---

Question: An organization has enabled a strict password policy for its IAM users. The organization is taking help from the IAM console to set the password policy. Which of the below mentioned rules cannot be specified by the user as a part of the policy?

- A. Allow at least one lower case letter
- B. Allow at least one number
- C. Allow at least one non-alphanumeric character
- D. Do not allow the user to use the password from the last three passwords

Answer: D

Explanation: AWS IAM allows an organization to create multiple users and provide them access to various AWS services. By default when the user is created, he does not have password enabled and can not login to AWS console. If the organization wants to allow the users to

login to AWS console, they can enable password for each user. It is required that IAM users follow certain guidelines to set their IAM login password. For this IAM provides root account owner to setup password policy. The password policy also lets the specify whether all IAM users can change their own passwords. As part of policy, organization can specify that passwords for IAM users must be of a certain minimum length, must include certain characters, and a few more criteria such as below.

One upper / lower or both letters

One alpha numeric

One number

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/Using\\_ManagingPasswordPolicies.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_ManagingPasswordPolicies.html)

---

Question: A user has developed an application which is required to send the data to a NoSQL database. The user wants to decouple the data sending such that the application keeps processing and sending data but does not wait for an acknowledgement of DB. Which of the below mentioned applications helps in this scenario?

- A. AWS Simple Notification Service
- B. AWS Simple Workflow
- C. AWS Simple Query Service
- D. AWS Simple Queue Service

Answer: D

Explanation: Amazon Simple Queue Service (SQS) is a fast, reliable, scalable, and fully managed message queuing service. SQS provides a simple and cost-effective way to decouple the components of an application. In this case, the user can use AWS SQS to send messages which are received from an application and sent to DB. The application can continue processing data without waiting for any acknowledgement from DB. The user can use SQS to transmit any volume of data without losing messages or requiring other services to always be available.

Reference: <http://aws.amazon.com/sqs/>

---

Question: In regard to DynamoDB, can I modify the index once it is created?

- A. Yes, if it is a primary hash key index
- B. Yes, if it is a Global secondary index
- C. No
- D. Yes, if it is a local secondary index

Answer: C

Explanation: Currently, in DynamoDB, an index cannot be modified once it is created.

Reference: [http://aws.amazon.com/dynamodb/faqs/#security\\_anchor](http://aws.amazon.com/dynamodb/faqs/#security_anchor)

---

Question: A user has created a new raw EBS volume. The user mounts the volume on the instance

to which it is attached. Which of the below mentioned options is a required step before the user can mount the volume?

- A. Run a cyclic check on the device for data consistency
- B. Create a file system of the volume
- C. No step is required. The user can directly mount the device
- D. Resize the volume as per the original snapshot size

Answer: B

Explanation: When a user is trying to mount a blank EBS volume, it is required that the user first creates a file system within the volume.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-using-volumes.html>

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Question: A user is launching an AWS RDS with MySQL. Which of the below mentioned options allows the user to configure the INNODB engine parameters?

- A. Options group
- B. Engine parameters
- C. Parameter groups
- D. DB parameters

Answer: C

Explanation: With regard to RDS, the user can manage the configuration of a DB engine by using a DB parameter group. A DB parameter group contains engine configuration values that can be applied to one or more DB instances of the same instance type.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

---

Question: A user is configuring the HTTPS protocol on a front end ELB and the SSL protocol for the back-end listener in ELB. What will ELB do?

- A. It will allow you to create the configuration, but the instance will not pass the health check
- B. Receives requests on HTTPS and sends it to the back end instance on SSL
- C. It will not allow you to create this configuration
- D. It will allow you to create the configuration, but ELB will not work as expected

Answer: C

Explanation: If a user is configuring HTTPS on the front end and TCP on the back end, ELB will not allow saving these listeners and will respond with the message.

“Load Balancer protocol is an application layer protocol, but instance protocol is not. Both the Load Balancer protocol and the instance protocol should be at the same layer. Please fix.”

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/elb-troubleshooting.html>

---

Question: ExamKiller (with AWS account ID 111122223333) has created 50 IAM users for its organization's employees. What will be the AWS console URL for these associates?

- A. <https://111122223333.signin.aws.amazon.com/console/>
- B. <https://signin.aws.amazon.com/console/>
- C. <https://signin.aws.amazon.com/111122223333/console/>
- D. <https://signin.aws.amazon.com/console/111122223333/>

Answer: A

Explanation: When an organization is using AWS IAM for creating various users and manage their access rights, the IAM user cannot use the login URL <http://aws.amazon.com/console> to access AWS management console. The console login URL for the IAM user will have AWS account ID of that organization to identify the IAM user belongs to particular account. The AWS console login URL for the IAM user will be [https://<AWS\\_Account\\_ID>.signin.aws.amazon.com/console/](https://<AWS_Account_ID>.signin.aws.amazon.com/console/). In this case it will be <https://111122223333.signin.aws.amazon.com/console/>

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/AccountAlias.html>

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Question: A user is planning to host MS SQL on an EBS volume. It was recommended to use the AWS RDS. What advantages will the user have if he uses RDS in comparison to an EBS based DB?

- A. Better throughput with PIOPS
- B. Automated backup
- C. MS SQL is not supported with RDS
- D. High availability with multi AZs

Answer: B

Explanation: Comparing with on-premises or EC2 based MS SQL, RDS provides an automated backup feature. PIOPS is available with both RDS and EBS. However, HA is not available with MS SQL.

Reference: <https://aws.amazon.com/rds/faqs/>

---

Question: A user is setting up an Elastic Load Balancer(ELB). Which of the below parameters should the user consider so as the instance gets registered with the ELB?

- A. ELB DNS
- B. IP address
- C. Security group
- D. ELB IP

Answer: B

Explanation: The EC2 instances are registered with the load balancer using the IP addresses

associated with the instances. When an instance is stopped and then started, the IP address associated with the instance changes. This prevents the load balancer from routing traffic to the restarted instance. When the user stops and then starts registered EC2 instances, it is recommended that to de-register the stopped instance from load balancer, and then register the restarted instance. Failure to do so may prevent the load balancer from performing health checks and routing the traffic to the restarted instance.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/TerminologyandKeyConcepts.html>

---

Question: The user has configured AutoScaling based on the dynamic policy. Which of the following is not the right command to specify a change in capacity as a part of the policy?

- A. "adjustment=-50"
- B. "adjustment=3"
- C. "adjustment=-1"
- D. "adjustment=-8"

Answer: D

Explanation: The user can configure the AutoScaling group to automatically scale up and then scale down based on the various specified CloudWatch monitoring conditions. The user needs to provide the adjustment value and the adjustment type. A positive adjustment value increases the current capacity and a negative adjustment value decreases the current capacity. The user can express the change to the current size as an absolute number, an increment or as a percentage of the current group size.

In this option specifying the exact capacity with the adjustment value = -8 will not work as when type is exact capacity the adjustment value cannot be negative.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/as-scale-based-on-demand.html>

---

Question: When you use the AWS Elastic Beanstalk console to deploy a new application

.

- A. you'll need to upload each file separately
- B. you'll need to create each file and path
- C. you'll need to upload a source bundle
- D. you'll need to create each file

Answer: C

Explanation: When you use the AWS Elastic Beanstalk console to deploy a new application or an application version, you'll need to upload a source bundle.

Reference:

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.deployment.source.html>

---

Question: A user is planning to use the AWS RDS with MySQL. Which of the below mentioned services the user is not going to pay?

- A. Data transfer
- B. RDS Cloudwatch metrics
- C. Data storage
- D. I/O requests per month

Answer: B

Explanation: RDS charges the user on a pay as you go basis. It charges the user based on the instance type, number of hours that the instance is running, data transfer, storage cost as well for the I/O requests. The monitoring is free of cost.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

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Question: A user has created a snapshot of an EBS volume. Which of the below mentioned usage cases is not possible with respect to a snapshot?

- A. Mirroring the volume from one AZ to another AZ
- B. Launch an instance
- C. Decrease the volume size
- D. Increase the size of the volume

Answer: C

Explanation: The EBS snapshots are a point in time backup of the volume. It is helpful to move the volume from one AZ to another or launch a new instance. The user can increase the size of the volume but cannot decrease it less than the original snapshot size.

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

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Question: True or False: AWS CloudFormation allows you to create Microsoft Windows stacks.

- A. False, AWS CloudFormation does not support Microsoft Windows.
- B. False, Amazon doesn't support Microsoft Windows.
- C. False, you cannot create Windows stacks.
- D. True

Answer: D

Explanation: AWS CloudFormation allows you to create Microsoft Windows stacks based on Amazon EC2 Windows Amazon Machine Images (AMIs) and provides you with the ability to install software, to use remote desktop to access your stack, and to update and configure your stack.

Reference:

<http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/cfn-windows-stacks.html>

---

Question: Which of the following solutions is not supported by DynamoDB:

- A. Hash secondary index
- B. Local secondary index
- C. Hash Primary Key
- D. Global secondary index

Answer: A

Explanation: In DynamoDB, a secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support Query operations. DynamoDB supports the following two types of secondary indexes:

Local secondary index is an index that has the same hash key as the table, but a different range key. A local secondary index is “local” in the sense that every partition of a local secondary index is scoped to a table partition that has the same hash key.

Global secondary index is an index with a hash and range key that can be different from those on the table. A global secondary index is considered “global” because queries on the index can span all of the data in a table, across all partitions.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html>

---

Question: An ELB is diverting traffic across 5 instances. One of the instances was unhealthy only for 20 minutes. What will happen after 20 minutes when the instance becomes healthy?

- A. ELB will never divert traffic back to the same instance
- B. ELB will not automatically send traffic to the same instance. However, the user can configure to start sending traffic to the same instance
- C. ELB starts sending traffic to the instance once it is healthy
- D. ELB terminates the instance once it is unhealthy. Thus, the instance cannot be healthy after 10 minutes

Answer: C

Explanation: AWS Elastic Load Balancing continuously checks the health of an instance. If one of the instances is unhealthy it stops sending traffic to it and automatically reroutes the traffic to the remaining running EC2 instances. If the failed EC2 instance is restored, Elastic Load Balancing will again start sending traffic to that instance.

Reference: <http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/SvcIntro.html>

---

Question: An organization has created an application which is hosted on the AWS EC2 instance. The application stores images to S3 when the end user uploads to it. The organization does not want to store the AWS secure credentials required to access the S3 inside the instance. Which of the below mentioned options is a possible solution to avoid any security threat?

- A. Use the IAM role and assign it to the instance.

- B. Since the application is hosted on EC2, it does not need credentials to access S3.
- C. Use the X.509 certificates instead of the access and the secret access keys.
- D. Use the IAM based single sign between the AWS resources and the organization application.

Answer: A

Explanation: The AWS IAM role uses temporary security credentials to access AWS services. Once the role is assigned to an instance, it will not need any security credentials to be stored on the instance.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-for-amazon-ec2.html>

---

Question: When a user is launching an instance with EC2, which of the below mentioned options is not available during the instance launch console for a key pair?

- A. Proceed without the key pair
- B. Upload a new key pair
- C. Select an existing key pair
- D. Create a new key pair

Answer: B

Explanation: While launching an EC2 instance, the user can create a new key pair, select an existing key pair or proceed without a key pair. The user cannot upload a new key pair in the EC2 instance launch console.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html>

---

Question: Which OS does the current version of AWS Elastic Beanstalk use?

- A. Amazon Linux AMI, Windows Server 2003 R2 AMI or the Windows Server 2008 R2 AMI
- B. Amazon Linux AMI only
- C. Amazon Linux AMI or the Windows Server 2008 R2 AMI
- D. Windows Server 2008 R2 AMI only

Answer: C

Explanation: The current version of AWS Elastic Beanstalk uses the Amazon Linux AMI or the Windows Server 2008 R2 AMI.

Reference: <https://aws.amazon.com/elasticbeanstalk/faqs/>

---

Question: A user is creating an EBS volume. He asks for your advice. Which advice mentioned below should you not give to the user for creating an EBS volume?

- A. Take the snapshot of the volume when the instance is stopped
- B. Stripe multiple volumes attached to the same instance

- C. Create an AMI from the attached volume
- D. Attach multiple volumes to the same instance

Answer: C

Explanation: When a user creates an EBS volume, the user can attach it to a running instance. The user can attach multiple volumes to the same instance and stripe them together to increase the I/O. The user can take a snapshot from the existing volume but cannot create an AMI from the volume. However, the user can create an AMI from a snapshot.

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

---

Question: AWS Elastic Beanstalk stores your application files and optionally server log files in\_\_\_\_\_.

- A. Amazon Storage Gateway
- B. Amazon Glacier
- C. Amazon EC2
- D. Amazon S3

Answer: D

Explanation: AWS Elastic Beanstalk stores your application files and optionally server log files in Amazon S3. If you are using the AWS Management Console, Git, the AWS Toolkit for Visual Studio, or AWS Toolkit for Eclipse, an Amazon S3 bucket will be created in your account for you and the files you upload will be automatically copied from your local client to Amazon S3. Optionally, you may configure Elastic Beanstalk to copy your server log files every hour to Amazon S3. You do this by editing the environment configuration settings.

Reference: <http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/AWSHowTo.html>

---

Question: The AWS console for DynamoDB enables you to do all the following operations, except:

- A. Set up alarms to monitor your table's capacity usage.
- B. Create, update, and delete tables.
- C. Import Data from other databases or from files.
- D. View your table's top monitoring metrics on real-time graphs from CloudWatch.

Answer: C

Explanation: The AWS console for DynamoDB enables you to do all the above operation but not Importing Data from other databases or from files and it is not possible to do it.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ConsoleDynamoDB.html>

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Question: An organization has created multiple components of a single application for compartmentalization. Currently all the components are hosted on a single EC2 instance. Due

to security reasons the organization wants to implement two separate SSLs for the separate modules although it is already using VPC. How can the organization achieve this with a single instance?

- A. Create a VPC instance which will have both the ACL and the security group attached to it and have separate rules for each IP address.
- B. Create a VPC instance which will have multiple network interfaces with multiple elastic IP addresses.
- C. You have to launch two instances each in a separate subnet and allow VPC peering for a single IP.
- D. Create a VPC instance which will have multiple subnets attached to it and each will have a separate IP address.

Answer: B

Explanation: A Virtual Private Cloud (VPC) is a virtual network dedicated to the user's AWS account. It enables the user to launch AWS resources into a virtual network that the user has defined. With VPC the user can specify multiple private IP addresses for his instances. The number of network interfaces and private IP addresses that a user can specify for an instance

depends on the instance type. With each network interface the organization can assign an EIP. This scenario helps when the user wants to host multiple websites on a single EC2 instance by using multiple SSL certificates on a single server and associating each certificate with a specific EIP address. It also helps in scenarios for operating network appliances, such as firewalls or load balancers that have multiple private IP addresses for each network interface.

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

---

Question: In regards to VPC, select the correct statement:

- A. You can associate multiple subnets with the same Route Table.
- B. You can associate multiple subnets with the same Route Table, but you can't associate a subnet with only one Route Table.
- C. You can't associate multiple subnets with the same Route Table.
- D. None of these.

Answer: A

Explanation: Every subnet in your VPC must be associated with exactly one Route Table. However, multiple subnets can be associated with the same Route Table.

Reference: [http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC\\_Route\\_Tables.html](http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Route_Tables.html)

---

Question: Which of the following device names is reserved for the root device for Linux instances of Amazon EC2?

- A. /dev/sda1
- B. /dev/sd[b-e]

- C. xvd[a-e]
- D. /dev/sd[f-p][1-6]

Answer: A

Explanation: /dev/sda1 is the name of the device reserved for the root device for Linux instances.

Reference: [http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/device\\_naming.html](http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/device_naming.html)

---

Question:

A user has hosted a website on AWS and uses ELB to load balance the multiple instances. The user application does not have any cookie management. How can the user bind the session of the requestor with a particular instance?

- A. Bind the IP address with a sticky cookie
- B. Create a cookie at the application level to set at ELB
- C. Use session synchronization with ELB
- D. Let ELB generate a cookie for a specified duration

Answer: D

Explanation:

The key to manage the sticky session is determining how long the load balancer should route the user's request to the same application instance. If the application has its own session cookie, then the user can set the Elastic Load Balancing to create the session cookie to follow the duration specified by the application's session cookie. If the user's application does not have its own session cookie, then he can set the Elastic Load Balancing to create a session cookie by specifying his own stickiness duration. Reference:

[http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/US\\_StickySessions.html](http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/US_StickySessions.html)

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Question: Your supervisor has asked you to build a simple file synchronization service for your department. He doesn't want to spend too much money and he wants to be notified of any changes to files by email. What do you think would be the best Amazon service to use for the email solution?

- A. Amazon CloudSearch
- B. Amazon Elastic Transcoder
- C. Amazon SES
- D. Amazon AppStream

Answer: C

Explanation: File change notifications can be sent via email to users following the resource with Amazon Simple Email Service (Amazon SES), an easy-to-use, cost-effective email solution.

Reference: [http://media.amazonaws.com/architecturecenter/AWS\\_ac\\_ra\\_filesync\\_08.pdf](http://media.amazonaws.com/architecturecenter/AWS_ac_ra_filesync_08.pdf)

---

Question: ExamKiller has three AWS accounts. They have created separate IAM users within each account. ExamKiller wants a single IAM console URL such as <https://examkiller.signin.aws.amazon.com/console/> for all account users. How can this be achieved?

- A. Merge all the accounts with consolidated billing
- B. Create the same account alias with each account ID
- C. It is not possible to have the same IAM account login URL for separate AWS accounts
- D. Create the S3 bucket with an alias name and use the redirect rule to forward requests to various accounts

Answer: C

Explanation: If a user wants the URL of the AWS IAM sign-in page to have a company name instead of the AWS account ID, he can create an alias for his AWS account ID. The alias should be unique.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/AccountAlias.html>

---

Question: A user has enabled automated backup for an RDS instance. What is the longest duration for which the user can retain the automated backup?

- A. 25 days
- B. 15 days
- C. 45 days
- D. 35 days

Answer: D

Explanation: Amazon RDS provides two different methods for backing up and restoring the Amazon DB instances: automated backups and DB snapshots. Automated backups automatically back up the DB instance during a specific, user-definable backup window, and keep the backups for a limited, user-specified period of time. The maximum period can be 35 days.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.BackingUpAndRestoringAmazonRDSInstances.html>

---

Question: A user is enabling a static website hosting on an S3 bucket. Which of the below mentioned parameters cannot be configured by the user?

- A. Error document
- B. Conditional error on object name
- C. Index document
- D. Conditional redirection on object name

Answer: B

Explanation: To host a static website, the user needs to configure an Amazon S3 bucket for website hosting and then upload the website contents to the bucket. The user can configure the index, error document as well as configure the conditional routing of on object name.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/HowDoIWebsiteConfiguration.html>

---

Question: A user is uploading archives to Glacier. The user is trying to understand key Glacier resources. Which of the below mentioned options is not a Glacier resource?

- A. Notification configuration
- B. Archive ID
- C. Job
- D. Archive

Answer: B

Explanation: AWS Glacier has four resources. Vault and Archives are core data model concepts. Job is required to initiate download of archive. The notification configuration is required to send user notification when archive is available for download.

Reference: <http://docs.aws.amazon.com/amazonglacier/latest/dev/amazon-glacier-data-model.html>

---

Question: An organization has 10 departments. The organization wants to track the AWS usage of each department. Which of the below mentioned options meets the requirement?

- A. Setup IAM groups for each department and track their usage
- B. Create separate accounts for each department, but use consolidated billing for payment and tracking
- C. Create separate accounts for each department and track them separately
- D. Setup IAM users for each department and track their usage

Answer: B

Explanation: The cost of an IAM user or groups can never be tracked separately for the purpose of billing. The best solution in this case is to create a separate account for each department and use consolidated billing.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM\\_Introduction.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM_Introduction.html)

---

Question: Regarding Amazon SWF, at times you might want to record information in the workflow history of a workflow execution that is specific to your use case. \_\_\_\_\_ enable you to record information in the workflow execution history that you can use for any custom or scenario-specific purpose.

- A. Markers
- B. Tags
- C. Hash keys

## D. Events

Answer: A

Explanation: In Amazon SWF, at times you might want to record information in the workflow history of a workflow execution that is specific to your use case. Markers enable you to record information in the workflow execution history that you can use for any custom or scenario-specific purpose.

Reference: <http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-adv.html>

---

Question: How can you peek at a message in Amazon SQS?

- A. Log the message ID and the receipt handle for your messages and correlate them to confirm when a message has been received and deleted
- B. Send the message to Amazon S3
- C. You can't
- D. Set up a CloudWatch alarm to auto send you the message

Answer: A

Explanation: With version 2008-01-01, the PeekMessage action has been removed from Amazon SQS. This functionality was used mainly to debug small systems – specifically to confirm a message was successfully sent to the queue or deleted from the queue.

To do this with version 2008-01-01, you can log the message ID and the receipt handle for your messages and correlate them to confirm when a message has been received and deleted.

Reference: <https://aws.amazon.com/items/1343?externalID=1343>

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Question: In regard to DynamoDB, for which one of the following parameters does Amazon not charge you?

- A. Cost per provisioned write units
- B. Cost per provisioned read units
- C. Storage cost
- D. I/O usage within the same Region

Answer: D

Explanation: In DynamoDB, you will be charged for the storage and the throughput you use rather than for the I/O which has been used.

Reference: <http://aws.amazon.com/dynamodb/pricing/>

---

Question: An organization has created 10 IAM users. The organization wants those users to work independently and access AWS. Which of the below mentioned options is not a possible solution?

- A. Create the access key and secret access key for each user and provide access to AWS using the console
- B. Create the X.509 certificate for each user and provide them access to AWS CLI
- C. Enable MFA for each IAM user and assign them the virtual MFA device to access the console
- D. Provide each user with the IAM login and password for the AWS console

Answer: A

Explanation: If an organization has created the IAM users, the users can access AWS services either with an IAM specific login/password or console. The organization can generate the IAM X.509 certificates to access AWS with CLI. The organization can also enable MFA for each IAM user, which allows an added security for each IAM user. If the organization has created the access key and secret key than the user cannot access the console using those keys. Access key and secret access key are useful for CLI or Webservices.

Reference: [http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM\\_Introduction.html](http://docs.aws.amazon.com/IAM/latest/UserGuide/IAM_Introduction.html)

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Question: What is the maximum size for messages stored in SQS?

- A. 256KB
- B. 128KB
- C. 1024KB
- D. 64KB

Answer: A

Explanation: By default, SQS queues allow you to send the largest supported payload size, currently 256KB. You can choose to specify a limit on how many bytes can be sent per payload, using the MaximumMessageSize attribute of the SetQueueAttributes method.

Reference: <http://aws.amazon.com/sqs/faqs/>

---

Question: A user is planning to host data with RDS. Which of the below mentioned databases is not supported by RDS?

- A. PostgreSQL
- B. SQLDB
- C. Oracle
- D. MS SQL

Answer: B

Explanation: Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the cloud. AWS RDS supports popular DBs, such as MySQL, PostgreSQL, MS SQL and Oracle. This means that the code, applications, and tools user is already using with existing databases can be used with Amazon RDS too. In short, it is a managed Relation Database offering from AWS which manages backups, software patching, automatic failure detection, and recovery of Database.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide>Welcome.html>

---

Question: An EC2 instance has one additional EBS volume attached to it. How can a user attach the same volume to another running instance in the same AZ?

- A. Terminate the first instance and only then attach to the new instance
- B. Attach the volume as read only to the second instance
- C. Detach the volume first and attach to new instance
- D. No need to detach. Just select the volume and attach it to the new instance, it will take care of mapping internally

Answer: C

Explanation: If an EBS volume is attached to a running EC2 instance, the user needs to detach the volume from the original instance and then attach it to a new running instance. The user doesn't need to stop / terminate the original instance.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

---

Question: A user has configured an automated backup between 5 AM – 5:30 AM for the MySQL RDS DB. Will the performance of RDS get frozen momentarily during a backup?

- A. No
- B. Yes, only if the instance size is smaller than large size
- C. Yes, provided it is a single zone implementation
- D. Yes, always

Answer: C

Explanation: Amazon RDS provides two different methods for backing up and restoring the Amazon DB instances. A brief I/O freeze, typically lasting a few seconds, occurs during both automated backups and DB snapshot operations on Single-AZ DB instances.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.BackingUpAndRestoringAmazonRDSInstances.html>

---

Question: A root AWS account owner has created three IAM users: Bob, John and Michael. Michael is the IAM administrator. Bob and John are not the superpower users, but users with some pre-defined policies. John does not have access to modify his password. Thus, he asks Bob to change his password. How can Bob change John's password?

- A. This statement is false. It should be Michael who changes the password for John
- B. It is not possible that John cannot modify his password
- C. Provided Bob is the manager of John
- D. Provided Michael has added Bob to a group, which has permissions to modify the IAM

passwords

Answer: D

Explanation: Generally with IAM users, the password can be modified in two ways. The first option is to define the IAM level policy which allows each user to modify their own passwords. The other option is to create a group and create a policy for the group which can change the passwords of various IAM users.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/HowToPwdIAMUser.html>

---

Question: Regarding Amazon SNS, to send messages to a queue through a topic, you must subscribe the queue to the Amazon SNS topic. You specify the queue by its \_\_\_\_\_.

- A. ARN
- B. Token
- C. Registration ID
- D. URL

Answer: A

Explanation: In Amazon SNS, to send messages to a queue through a topic, you must subscribe the queue to the Amazon SNS topic. You specify the queue by its ARN.

Reference: <http://docs.aws.amazon.com/sns/latest/dg/SendMessageToSQS.html>

---

Question: To scale up the AWS resources using manual AutoScaling, which of the below mentioned parameters should the user change?

- A. Maximum capacity
- B. Desired capacity
- C. Preferred capacity
- D. Current capacity

Answer: B

Explanation: The Manual Scaling as part of Auto Scaling allows the user to change the capacity of Auto Scaling group. The user can add / remove EC2 instances on the fly. To execute manual scaling, the user should modify the desired capacity. AutoScaling will adjust instances as per the requirements. If the user is trying to CLI, he can use command `as-set-desired-capacity <Auto Scaling Group Name> -desired-capacity <New Capacity>`;

Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/as-manual-scaling.html>

---

Question: A user has configured a website and launched it using the Apache web server on port 80. The user is using ELB with the EC2 instances for Load Balancing. What should the user do to ensure that the EC2 instances accept requests only from ELB?

- A. Open the port for an ELB static IP in the EC2 security group
- B. Configure the security group of EC2, which allows access to the ELB source security group
- C. Configure the EC2 instance so that it only listens on the ELB port
- D. Configure the security group of EC2, which allows access only to the ELB listener

Answer: B

Explanation: When a user is configuring ELB and registering the EC2 instances with it, ELB will create a source security group. If the user wants to allow traffic only from ELB, he should remove all the rules set for the other requests and open the port only for the ELB source security group.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/using-elb-security-groups.html>

---

Question: When working with AWS CloudFormation Templates what is the maximum number of stacks that you can create?

- A. 500
- B. 50
- C. 20
- D. 10

Answer: C

Explanation: CloudFormation Limits Maximum number of AWS CloudFormation stacks that you can create is 20 stacks.

Reference:

<http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/cloudformation-limits.html>

---

Question: Does DynamoDB support in-place atomic updates?

- A. It is not defined
- B. Yes
- C. It does support in-place non-atomic updates
- D. No

Answer: B

Explanation: DynamoDB supports in-place atomic updates.

Reference:

<http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/WorkingWithItems.html#WorkingWithItems.AtomicCounters>

---

Question: A user is having access to objects of an S3 bucket which is not owned by him. If he is trying to set the objects of that bucket public, which of the below mentioned options may be a right fit for this action?

- A. Make the bucket public with full access
- B. Define the policy for the bucket
- C. Provide ACL on the object
- D. Create an IAM user with permission

Answer: C

Explanation: An S3 object ACL is the only way to manage access to objects which are not owned by the bucket owner. An AWS account that owns the bucket can grant another AWS account permission to upload objects. The bucket owner does not own these objects. The AWS account that created the object must grant permissions using object ACLs.

Reference:

<http://docs.aws.amazon.com/AmazonS3/latest/dev/access-policy-alternatives-guidelines.html>

---

Question: A bucket owner has allowed another account's IAM users to upload or access objects in his bucket. The IAM user of Account A is trying to access an object created by the IAM user of account B. What will happen in this scenario?

- A. The bucket policy may not be created as S3 will give error due to conflict of Access Rights
- B. It is not possible to give permission to multiple IAM users
- C. AWS S3 will verify proper rights given by the owner of Account A, the bucket owner as well as by the IAM user B to the object
- D. It is not possible that the IAM user of one account accesses objects of the other IAM user

Answer: C

Explanation: If a IAM user is trying to perform some action on an object belonging to another AWS user's bucket, S3 will verify whether the owner of the IAM user has given sufficient permission to him. It also verifies the policy for the bucket as well as the policy defined by the object owner.

Reference:

<http://docs.aws.amazon.com/AmazonS3/latest/dev/access-control-auth-workflow-object-operation.html>

---

Question: A user wants to achieve High Availability with PostgreSQL DB. Which of the below mentioned functionalities helps achieve HA?

- A. Read Replica
- B. Multi AZ
- C. Multi region
- D. PostgreSQL does not support HA

Answer: B

Explanation: The Multi AZ feature allows the user to achieve High Availability. For Multi AZ, Amazon RDS automatically provisions and maintains a synchronous “standby” replica in a different Availability Zone.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

---

Question: A user is launching an instance with EC2. Which of the below mentioned options does the user need to consider before launching an instance?

- A. Select the region where the instance is being launched.
- B. Select the instance type.
- C. All the options listed should be considered..
- D. Select the OS of the AMI.

Answer: C

Explanation: Regarding Amazon EC2, when launching an instance, the user needs to select the region the instance would be launched from. While launching, the user needs to plan for the instance type and the OS of the instance.

Reference: [http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-launch-instance\\_linux.html](http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-launch-instance_linux.html)

---

Question: A user has created an EBS volume with 1000 IOPS. What is the average IOPS that the user will get for most of the year as per EC2 SLA if the instance is attached to the EBS optimized instance?

- A. 900
- B. 990
- C. 950
- D. 1000

Answer: A

Explanation: As per AWS SLA if the instance is attached to an EBS-Optimized instance, then the Provisioned IOPS volumes are designed to deliver within 10% of the provisioned IOPS performance 99.9% of the time in a given year. Thus, if the user has created a volume of 1000 IOPS, the user will get a minimum 900 IOPS 99.9% time of the year.

Reference: <http://aws.amazon.com/ec2/faqs/>

---

Question: Which of the following programming languages have an officially supported AWS SDK? Choose 2 answers

- A. Perl
- B. PHP

- C. Pascal
- D. Java
- E. SQL

Answer: B,D

---

Question: Which statements about DynamoDB are true? Choose 2 answers

- A. DynamoDB uses a pessimistic locking model
- B. DynamoDB uses optimistic concurrency control
- C. DynamoDB uses conditional writes for consistency
- D. DynamoDB restricts item access during reads
- E. DynamoDB restricts item access during writes

Answer: B,C

---

Question: You have an environment that consists of a public subnet using Amazon VPC and 3 instances that are running in this subnet. These three instances can successfully communicate with other hosts on the Internet. You launch a fourth instance in the same subnet, using the same AMI and security group configuration you used for the others, but find that this instance cannot be accessed from the Internet. What should you do to enable internet access?

- A. Deploy a NAT instance into the public subnet.
- B. Modify the routing table for the public subnet
- C. Configure a publically routable IP Address In the host OS of the fourth instance.
- D. Assign an Elastic IP address to the fourth instance.

Answer: D

---

Question: How can you secure data at rest on an EBS volume?

- A. Attach the volume to an instance using EC2's SSL interface.
- B. Write the data randomly instead of sequentially.
- C. Use an encrypted file system on top of the BBS volume.
- D. Encrypt the volume using the S3 server-side encryption service.
- E. Create an IAM policy that restricts read and write access to the volume.

Answer: C

---

Question: Which of the following is an example of a good DynamoDB hash key schema for provisioned throughput efficiency?

- A. User ID, where the application has many different users.
- B. Status Code where most status codes are the same
- C. Device ID, where one is by far more popular than all the others.

D. Game Type, where there are three possible game types

Answer: A

---

Question: Which of the following statements about SWF are true? Choose 3 answers

- A. SWF tasks are assigned once and never duplicated
- B. SWF requires an S3 bucket for workflow storage
- C. SWF workflow executions can last up to a year
- D. SWF triggers SNS notifications on task assignment
- E. SWF uses deciders and workers to complete tasks
- F. SWF requires at least 1 EC2 instance per domain

Answer: A,C,E

---

Question: Which of the following are correct statements with policy evaluation logic in AWS Identity and Access Management? Choose 2 answers

- A. By default, all requests are denied
- B. An explicit allow overrides an explicit deny
- C. An explicit allow overrides default deny.
- D. An explicit deny does not override an explicit allow
- E. By default, all requests are allowed

Answer: A,C

---

Question: Company C has recently launched an online commerce site for bicycles on AWS. They have a “Product” DynamoDB table that stores details for each bicycle, such as, manufacturer, color, price, quantity and size to display in the online store. Due to customer demand, they want to include an image for each bicycle along with the existing details. Which approach below provides the least impact to provisioned throughput on the “Product” table?

- A. Serialize the image and store it in multiple DynamoDB tables
- B. Create an “Images” DynamoDB table to store the Image with a foreign key constraint to the “Product” table
- C. Add an image data type to the “Product” table to store the images in binary format
- D. Store the images in Amazon S3 and add an S3 URL pointer to the “Product” table item for each image

Answer: D

---

Question: Company D is running their corporate website on Amazon S3 accessed from <http://www.companyd.com>. Their marketing team has published new web fonts to a separate S3 bucket accessed by the S3 endpoint <https://s3-us-west1.amazonaws.com/cdfonts>. While testing the new web fonts, Company D recognized the web fonts are being blocked by the browser. What should Company D do to prevent the web fonts from being blocked by the browser?

- A. Enable versioning on the cdfonts bucket for each web font
- B. Create a policy on the cdfonts bucket to enable access to everyone
- C. Add the Content-MD5 header to the request for webfonts in the cdfonts bucket from the website
- D. Configure the cdfonts bucket to allow cross-origin requests by creating a CORS configuration

Answer: D

---

Question: What is one key difference between an Amazon EBS-backed and an instance-store backed instance?

- A. Virtual Private Cloud requires EBS backed instances
- B. Amazon EBS-backed instances can be stopped and restarted
- C. Auto scaling requires using Amazon EBS-backed instances.
- D. Instance-store backed instances can be stopped and restarted.

Answer: B

---

Question: A meteorological system monitors 600 temperature gauges, obtaining temperature samples every minute and saving each sample to a DynamoDB table. Each sample involves writing 1K of data and the writes are evenly distributed over time.

How much write throughput is required for the target table?

- A. 1 write capacity unit
- B. 10 write capacity units
- C. 60 write capacity units
- D. 600 write capacity units
- E. 3600 write capacity units

Answer: B

---

Question: A startup's photo-sharing site is deployed in a VPC. An ELB distributes web traffic across two subnets. ELB session stickiness is configured to use the AWS-generated session cookie, with a session TTL of 5 minutes. The webserver Auto Scaling Group is configured as: min-size=4, max-size=4.

The startup's preparing for a public launch, by running load-testing software installed on a single EC2 instance running in us-west-2a. After 60 minutes of load-testing, the webserver logs show:

Which recommendations can help ensure load-testing HTTP requests are evenly distributed across the four web servers? Choose 2 answers

- A. Launch and run the load-tester EC2 instance from us-east-1 instead.
- B. Re-configure the load-testing software to re-resolve DNS for each web request.
- C. Use a 3rd-party load-testing service which offers globally-distributed test clients.
- D. Configure ELB and Auto Scaling to distribute across us-west-2a and us-west-2c.
- E. Configure ELB session stickiness to use the app-specific session cookie.

Answer: B,E

---

Question: You have written an application that uses the Elastic Load Balancing service to spread traffic to several web servers. Your users complain that they are sometimes forced to login again in the middle of using your application, after they have already logged in. This is not behavior you have designed. What is a possible solution to prevent this happening?

- A. Use instance memory to save session state.
- B. Use instance storage to save session state.
- C. Use EBS to save session state
- D. Use ElastiCache to save session state.
- E. Use Glacier to save session slate.

Answer: D

---

Question: If a message is retrieved from a queue in Amazon SQS, how long is the message inaccessible to other users by default?

- A. 0 seconds
- B. 1 hour
- C. 1 day
- D. forever
- E. 30 seconds

Answer: E

---

Question: Which of the following are valid SNS delivery transports? Choose 2 answers

- A. HTTP
- B. UDP
- C. SMS
- D. DynamoDB
- E. Named Pipes

Answer: A,C

---

Question: When uploading an object, what request header can be explicitly specified in a request to Amazon S3 to encrypt object data when saved on the server side?

- A. x-amz-storage-class
- B. Content-MD5
- C. x-amz-security-token
- D. x-amz-server-side-encryption

Answer: D

---

Question: Which DynamoDB limits can be raised by contacting AWS support? Choose 2 answers

- A. The number of hash keys per account
- B. The maximum storage used per account
- C. The number of tables per account
- D. The number of local secondary indexes per account
- E. The number of provisioned throughput units per account

Answer: C,E

---

Question: In AWS, which security aspects are the customer's responsibility? Choose 4 answers

- A. Life-cycle management of IAM credentials
- B. Decommissioning storage devices
- C. Security Group and ACL (Access Control List) settings
- D. Encryption of EBS (Elastic Block Storage) volumes
- E. Controlling physical access to compute resources
- F. Patch management on the EC2 instance's operating system

Answer: A,B,C,F

---

Question: You are providing AWS consulting services for a company developing a new mobile application that will be leveraging Amazon SNS Mobile Push for push notifications. In order to send direct notification messages to individual devices each device registration identifier or token needs to be registered with SNS; however the developers are not sure of the best way to do this.

You advise them to:

- A. Bulk upload the device tokens contained in a CSV file via the AWS Management Console.
- B. Let the push notification service (e.g. Amazon Device Messaging) handle the registration.
- C. Implement a token vending service to handle the registration.
- D. Call the CreatePlatformEndPoint API function to register multiple device tokens.

Answer: B

---

Question: In DynamoDB, what type of HTTP response codes indicate that a problem was found with the client request sent to the service?

- A. 5xx HTTP response code
- B. 200 HTTP response code
- C. 306 HTTP response code
- D. 4xx HTTP response code

Answer: D

---

Question: Company C is currently hosting their corporate site in an Amazon S3 bucket with Static Website Hosting enabled. Currently, when visitors go to <http://www.companyc.com> the index.html page is returned. Company C now would like a new page welcome.html to be returned when a visitor enters <http://www.companyc.com> in the browser.

Which of the following steps will allow Company C to meet this requirement? Choose 2 answers

- A. Upload an html page named welcome.html to their S3 bucket
- B. Create a welcome subfolder in their S3 bucket
- C. Set the Index Document property to welcome.html
- D. Move the index.html page to a welcome subfolder
- E. Set the Error Document property to welcome.html

Answer: A,C

---

Question: What item operation allows the retrieval of multiple items from a DynamoDB table in a single API call?

- A. GetItem
- B. BatchGetItem
- C. GetMultipleItems
- D. GetItemRange

Answer: B

---

Question: Which of the following are valid arguments for an SNS Publish request? Choose 3 answers

- A. TopicArn
- B. Subject
- C. Destination
- D. Format
- E. Message
- F. Language

Answer: A,B,E

---

Question: An application stores payroll information nightly in DynamoDB for a large number of employees across hundreds of offices. Item attributes consist of individual name, office identifier, and cumulative daily hours. Managers run reports for ranges of names working in their office. One query is. “Return all Items in this office for names starting with A through E”. Which table configuration will result in the lowest impact on provisioned throughput for this query?

- A. Configure the table to have a hash index on the name attribute, and a range index on the office identifier
- B. Configure the table to have a range index on the name attribute, and a hash index on the office identifier
- C. Configure a hash index on the name attribute and no range index
- D. Configure a hash index on the office Identifier attribute and no range index

Answer: B

---

Question: EC2 instances are launched from Amazon Machine images (AMIS). A given public AMI can:

- A. be used to launch EC2 Instances in any AWS region.
- B. only be used to launch EC2 instances in the same country as the AMI is stored.
- C. only be used to launch EC2 instances in the same AWS region as the AMI is stored.
- D. only be used to launch EC2 instances in the same AWS availability zone as the AMI is stored

Answer: C

---

Question: Which of the following platforms are supported by Elastic Beanstalk? Choose 2 answers

- A. Apache Tomcat
- B. .NET
- C. IBM Websphere
- D. Oracle JBoss
- E. Jetty

Answer: A,B

---

Question: Which EC2 API call would you use to retrieve a list of Amazon Machine Images (AMIs)?

- A. DescnbeInstances
- B. DescribeAMIs
- C. DescribeImages
- D. GetAMIs
- E. You cannot retrieve a list of AMIs as there are over 10,000 AMIs

Answer: E

---

Question: When a Simple Queue Service message triggers a task that takes 5 minutes to complete, which process below will result in successful processing of the message and remove it from the queue while minimizing the chances of duplicate processing?

- A. Retrieve the message with an increased visibility timeout, process the message, delete the message from the queue

- B. Retrieve the message with an increased visibility timeout, delete the message from the queue, process the message
- C. Retrieve the message with increased DelaySeconds, process the message, delete the message from the queue
- D. Retrieve the message with increased DelaySeconds, delete the message from the queue, process the message

Answer: A

---

Question: You are inserting 1000 new items every second in a DynamoDB table. Once an hour these items are analyzed and then are no longer needed. You need to minimize provisioned throughput, storage, and API calls.

Given these requirements, what is the most efficient way to manage these Items after the analysis?

- A. Retain the items in a single table
- B. Delete items individually over a 24 hour period
- C. Delete the table and create a new table per hour
- D. Create a new table per hour

Answer: C

---

Question: Which features can be used to restrict access to data in S3? Choose 2 answers

- A. Use S3 Virtual Hosting
- B. Set an S3 Bucket policy.
- C. Enable IAM Identity Federation.
- D. Set an S3 ACL on the bucket or the object.
- E. Create a CloudFront distribution for the bucket

Answer: C,D

---

Question: Company B provides an online image recognition service and utilizes SOS to decouple system components for scalability. The SQS consumers poll the imaging queue as often as possible to keep end-to-end throughput as high as possible. However, Company B is realizing that polling in tight loops is burning CPU cycles and increasing costs with empty responses. How can Company B reduce the number of empty responses?

- A. Set the imaging queue visibility Timeout attribute to 20 seconds
- B. Set the Imaging queue ReceiveMessageWaitTimeSeconds attribute to 20 seconds
- C. Set the imaging queue MessageRetentionPeriod attribute to 20 seconds
- D. Set the DelaySeconds parameter of a message to 20 seconds

Answer: B

---

Question: What AWS products and features can be deployed by Elastic Beanstalk? Choose 3 answers

- A. Auto scaling groups
- B. Route 53 hosted zones
- C. Elastic Load Balancers
- D. RDS Instances
- E. Elastic IP addresses
- F. SQS Queues

Answer: A,C,D

---

Question: What is the maximum number of S3 Buckets available per AWS account?

- A. 100 per region
- B. there is no limit
- C. 100 per account
- D. 500 per account
- E. 100 per IAM user

Answer: C

---

Question: What is the format of structured notification messages sent by Amazon SNS?

- A. An XML object containing MessageId, UnsubscribeURL, Subject, Message and other values
- B. An JSON object containing MessageId, DuplicateFlag, Message and other values
- C. An XML object containing MessageId, DuplicateFlag, Message and other values
- D. An JSON object containing MessageId, unsubscribeURL, Subject, Message and other values

Answer: D

---

Question: When using a large Scan operation in DynamoDB, what technique can be used to minimize the impact of a scan on a table's provisioned throughput?

- A. Set a smaller page size for the scan
- B. Use parallel scans
- C. Define a range index on the table
- D. Prewarm the table by updating all items

Answer: C

---

Question: Which code snippet below returns the URL of a load balanced web site created in CloudFormation with an AWS::ElasticLoadBalancing::LoadBalancer resource name "ElasticLoadBalancer"?

- A. "Fn::Join" : [ "", [ "http://", {"Fn::GetAttr" : [ "ElasticLoadBalancer", "DNSName" ] } ] ]

- B. "Fn::Join" : [".", [ "http://", {"Fn::GetAttr" : [ "ElasticLoadBalancer", "Url"]}]]
- C. "Fn::Join" : [".", [ "http://", {"Ref" : "ElasticLoadBalancerUrl"}]]
- D. "Fn::Join" : [".", [ "http://", {"Ref" : "ElasticLoadBalancerDNSName"}]]

Answer: B

---

Question: How can software determine the public and private IP addresses of the Amazon EC2 instance that it is running on?

- A. Query the appropriate Amazon CloudWatch metric.
- B. Use ipconfig or ifconfig command.
- C. Query the local instance userdata.
- D. Query the local instance metadata.

Answer: D

---

Question: An Amazon S3 bucket, "myawsbucket" is configured with website hosting in Tokyo region, what is the region-specific website endpoint?

- A. www.myawsbucket.ap-northeast-1.amazonaws.com
- B. myawsbucket.s3-website-ap-northeast-1.amazonaws.com
- C. myawsbucket.amazonaws.com
- D. myawsbucket.tokyo.amazonaws.com

Answer: B

---

Question: Which of the following items are required to allow an application deployed on an EC2 instance to write data to a DynamoDB table?

Assume that no security Keys are allowed to be stored on the EC2 instance. Choose 2 answers

- A. Create an IAM User that allows write access to the DynamoDB table.
- B. Add an IAM Role to a running EC2 instance.
- C. Add an IAM User to a running EC2 Instance.
- D. Launch an EC2 Instance with the IAM Role included in the launch configuration.
- E. Create an IAM Role that allows write access to the DynamoDB table.
- F. Launch an EC2 Instance with the IAM User included in the launch configuration.

Answer: D,E

---

Question: Which of the following services are key/value stores? Choose 3 answers

- A. Amazon ElastiCache
- B. Simple Notification Service
- C. DynamoDB
- D. Simple Workflow Service
- E. Simple Storage Service

Answer: A,B,C

---

Question: How is provisioned throughput affected by the chosen consistency model when reading data from a DynamoDB table?

- A. Strongly consistent reads use the same amount of throughput as eventually consistent reads.
- B. Strongly consistent reads use more throughput than eventually consistent reads.
- C. Strongly consistent reads use less throughput than eventually consistent reads.
- D. Strongly consistent reads use variable throughput depending on read activity

Answer: B

---

Question: Your application is trying to upload a 6 GB file to Simple Storage Service and receive a “Your proposed upload exceeds the maximum allowed object size.” error message. What is a possible solution for this?

- A. None, Simple Storage Service objects are limited to 5 GB
- B. Use the multi-part upload API for this object
- C. Use the large object upload API for this object
- D. Contact support to increase your object size limit
- E. Upload to a different region

Answer: B

---

Question:

Which of the following services are included at no additional cost with the use of the AWS platform? Choose 2 answers

- A. Simple Storage Service
- B. Elastic Compute Cloud
- C. Auto Scaling
- D. Elastic Load Balancing
- E. CloudFormation
- F. Simple Workflow Service

Answer: C,E

---

Question: What type of block cipher does Amazon S3 offer for server side encryption?

- A. Triple DES
- B. Advanced Encryption Standard
- C. Blowfish
- D. RC5

Answer: B

---

Question: A corporate web application is deployed within an Amazon VPC, and is connected to the corporate data center via IPSec VPN. The application must authenticate against the on-premise LDAP server. Once authenticated, logged-in users can only access an S3 keyspace specific to the user.

Which two approaches can satisfy the objectives? Choose 2 answers

- A. The application authenticates against LDAP. The application then calls the IAM Security Service to login to IAM using the LDAP credentials. The application can use the IAM temporary credentials to access the appropriate S3 bucket.
- B. The application authenticates against LDAP, and retrieves the name of an IAM role associated with the user. The application then calls the IAM Security Token Service to assume that IAM Role. The application can use the temporary credentials to access the appropriate S3 bucket.
- C. The application authenticates against IAM Security Token Service using the LDAP credentials. The application uses those temporary AWS security credentials to access the appropriate S3 bucket.
- D. Develop an identity broker which authenticates against LDAP, and then calls IAM Security Token Service to get IAM federated user credentials. The application calls the identity broker to get IAM federated user credentials with access to the appropriate S3 bucket.
- E. Develop an identity broker which authenticates against IAM Security Token Service to assume an IAM Role to get temporary AWS security credentials. The application calls the identity broker to get AWS temporary security credentials with access to the appropriate S3 bucket.

Answer: B,D

---

Question: You attempt to store an object in the US-STANDARD region in Amazon S3, and receive a confirmation that it has been successfully stored. You then immediately make another API call and attempt to read this object. S3 tells you that the object does not exist. What could explain this behavior?

- A. US-STANDARD uses eventual consistency and it can take time for an object to be readable in a bucket
- B. Objects in Amazon S3 do not become visible until they are replicated to a second region.
- C. US-STANDARD imposes a 1 second delay before new objects are readable.
- D. You exceeded the bucket object limit, and once this limit is raised the object will be visible.

Answer: A

---

Question: You are writing to a DynamoDB table and receive the following exception: "ProvisionedThroughputExceededException". though according to your Cloudwatch metrics for the table, you are not exceeding your provisioned throughput. What could be an explanation for this?

- A. You haven't provisioned enough DynamoDB storage instances
- B. You're exceeding your capacity on a particular Range Key
- C. You're exceeding your capacity on a particular Hash Key
- D. You're exceeding your capacity on a particular Sort Key
- E. You haven't configured DynamoDB Auto Scaling triggers

Answer: C

---

Question: If an application is storing hourly log files from thousands of instances from a high traffic web site, which naming scheme would give optimal performance on S3?

- A. Sequential
- B. instanceID\_log-HH-DD-MM-YYYY
- C. instanceID\_log-YYYY-MM-DD-HH
- D. HH-DD-MM-YYYY-log\_instanceID
- E. YYYY-MM-DD-HH-log\_instanceID

Answer: E

---

Question: 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?

- A. Store photos on an EBS volume of the web server
- B. Remove public read access and use signed URLs with expiry dates.
- C. Use CloudFront distributions for static content.
- D. Block the IPs of the offending websites in Security Groups.

Answer: B

---

Question: Company A has an S3 bucket containing premier content that they intend to make available to only paid subscribers of their website. The S3 bucket currently has default permissions of all objects being private to prevent inadvertent exposure of the premier content to non-paying website visitors. How can Company A provide only paid subscribers the ability to download a premier content file in the S3 bucket?

- A. Apply a bucket policy that grants anonymous users to download the content from the S3 bucket
- B. Generate a pre-signed object URL for the premier content file when a paid subscriber requests a download
- C. Add a bucket policy that requires Multi-Factor Authentication for requests to access the S3 bucket objects
- D. Enable server side encryption on the S3 bucket for data protection against the non-paying website visitors

Answer: B

---

Question: Which of the following is chosen as the default region when making an API call with an AWS SDK?

- A. ap-northeast-1
- B. us-west-2
- C. us-east-1
- D. eu-west-1
- E. us-central-1

Answer: C

---

Question: Games-R-Us is launching a new game app for mobile devices. Users will log into the game using their existing Facebook account and the game will record player data and scoring information directly to a DynamoDB table.

What is the most secure approach for signing requests to the DynamoDB API?

- A. Create an IAM user with access credentials that are distributed with the mobile app to sign the requests
- B. Distribute the AWS root account access credentials with the mobile app to sign the requests
- C. Request temporary security credentials using web identity federation to sign the requests
- D. Establish cross account access between the mobile app and the DynamoDB table to sign the requests

Answer: C

---

Question: After launching an instance that you intend to serve as a NAT (Network Address Translation) device in a public subnet you modify your route tables to have the NAT device be the target of internet bound traffic of your private subnet. When you try and make an outbound connection to the Internet from an instance in the private subnet, you are not successful.

Which of the following steps could resolve the issue?

- A. Attaching a second Elastic Network interface (ENI) to the NAT instance, and placing it in the private subnet
- B. Attaching a second Elastic Network Interface (ENI) to the instance in the private subnet, and placing it in the public subnet
- C. Disabling the Source/Destination Check attribute on the NAT instance
- D. Attaching an Elastic IP address to the instance in the private subnet

Answer: C

---

Question: What happens, by default, when one of the resources in a CloudFormation stack cannot be created?

- A. Previously-created resources are kept but the stack creation terminates.

- B. Previously-created resources are deleted and the stack creation terminates.
- C. The stack creation continues, and the final results indicate which steps failed.
- D. CloudFormation templates are parsed in advance so stack creation is guaranteed to succeed.

Answer: B

---

Question: Which of the following statements about SQS is true?

- A. Messages will be delivered exactly once and messages will be delivered in First in, First out order
- B. Messages will be delivered exactly once and message delivery order is indeterminate
- C. Messages will be delivered one or more times and messages will be delivered in First in, First out order
- D. Messages will be delivered one or more times and message delivery order is indeterminate

Answer: D