



AWS Solutions Architecture

Professional Certification - Copy Quiz

What action is required to establish an Amazon Virtual Private Cloud (VPC) VPN connection between an on-premises data center and an Amazon VPC virtual private gateway?


- ✓ ☒ Assign a static Internet-routable IP address to an Amazon VPC customer gateway.
- ☐ Modify the main route table to allow traffic to a network address translation instance.
- ☐ Use a dedicated network address translation instance in the public subnet.
- ☐ Establish a dedicated networking connection using AWS Direct Connect.

The correct answer is Assign a static Internet-routable IP address to an Amazon VPC customer gateway..

Connection can be established on an Amazon VPC and VPC gateway through assigning a static internet-routable IP address..

In reviewing the Auto Scaling events for your application you notice that your application is scaling up and down multiple times in the same hour. What design choice could you make to optimize for cost while preserving elasticity?

- ☐ Modify the Auto Scaling group termination policy to terminate the oldest instance first.

-  ☐ Modify the Auto Scaling group termination policy to terminate the newest instance first.
- ☐ Modify the Auto Scaling policy to use scheduled scaling actions.
- ✓ ☐ Modify the Amazon Cloud Watch alarm period that triggers your Auto Scaling scale down policy.
- ✓ ☒ Modify the Auto Scaling group cool-down timers.

The correct answer is Modify the Amazon Cloud Watch alarm period that triggers your Auto Scaling scale down policy., Modify the Auto Scaling group cool-down timers..

Reducing Amazon Cloud Watch Alarm period can help in cost optimization. Modify Auto Scaling group cool - down timers is another way to do it..

What combination of the following options will protect Amazon Simple Storage Service (S3) objects from both accidental deletion and accidental overwriting? Choose 2 answers

- ✓ ☒ Enable S3 versioning on the bucket.
- ☐ Access S3 data using only signed URLs.
- ☐ Disable S3 delete using an IAM bucket policy.
- ☐ Enable S3 Reduced Redundancy Storage.
- ✓ ☒ Enable multi-factor



The correct answer is Enable S3 versioning on the bucket., Enable multi-factor.

Versioning helps to create multiple copies, if you delete a file from bucket, it creates a delete marker which can be restored. MFA is another way to provide accidental deleting and overwriting..

A startup company hired you to help them build a mobile application, that will ultimately store billions of images and videos in Amazon Simple Storage Service (S3). The company is lean on funding, and wants to minimize operational costs, however, they have an aggressive Marketing plan, and expect to double their current installation base every six months. Due to the nature of their business, they are expecting sudden and large increases in traffic to and from S3, and need to ensure that it can handle the performance needs of their application. What other information must you gather from this customer in order to determine whether S3 is the right option?

- ☐ You must know how many customers the company has today, because this is critical in understanding what their customer base will be in two years.
- ☒ You must find out the total number of requests per second at peak usage.
- ☐ You must know the size of the individual objects being written to S3, in order to properly design the key namespace.
- ☐ In order to build the key namespace correctly, you must understand the total amount of storage needs for each S3 bucket.

The correct answer is You must find out the total number of requests per second at peak usage..

S3 has infinite storage, so C and D is wrong, option A is not helpful in cost minimization.

You are designing a personal document-archiving solution for your global enterprise with thousands of employee. Each employee has potentially gigabytes of data to be backed up in this archiving solution. The solution will be exposed to he employees as an

application, where they can just drag and drop their files to the archiving system. Employees can retrieve their archives through a web interface. The corporate network has high bandwidth AWS DirectConnect connectivity to AWS. You have regulatory requirements that all data needs to be encrypted before being uploaded to the cloud. How do you implement this in a highly available and cost efficient way?

- ☐ Manage encryption keys on-premise in an encrypted relational database. Set up an on-premises server with sufficient storage to temporarily store files and then upload them to Amazon S3, providing a client-side master key.
- ☐ Manage encryption keys in a Hardware Security Module (HSM) appliance on-premise server with sufficient storage to temporarily store, encrypt, and upload files directly into amazon Glacier.
- ☒ Manage encryption keys in amazon Key Management Service (KMS), upload to amazon simple storage service (s3) with client-side encryption using a KMS customer master key ID and configure Amazon S3 lifecycle policies to store each object using the amazon glacier storage tier.
- ☐ Manage encryption keys in an AWS CloudHSM appliance. Encrypt files prior to uploading on the employee desktop and then upload directly into amazon glacier

The correct answer is Manage encryption keys in amazon Key Management Service (KMS), upload to amazon simple storage service (s3) with client-side encryption using a KMS customer master key ID and configure Amazon S3 lifecycle policies to store each object using the amazon glacier storage tier..

Manage encryption keys on-premise in an encrypted relational database. Set up an on-premises server with sufficient storage to temporarily store files and then upload them to Amazon S3, providing a client-side master key. (Storing temporary increases cost and not a high availability option) Manage encryption keys in a Hardware Security Module (HSM) appliance on-premise server with sufficient storage to temporarily store, encrypt, and upload files directly into amazon Glacier. (Not cost effective) Manage encryption keys in amazon Key Management Service (KMS), upload to amazon simple storage service (s3)



with client-side encryption using a KMS customer master key ID and configure Amazon S3 lifecycle policies to store each object using the amazon glacier storage tier. (With CSE-KMS the encryption happens at client side before the object is upload to S3 and KMS is cost effective as well) Manage encryption keys in an AWS CloudHSM appliance. Encrypt files prior to uploading on the employee desktop and then upload directly into amazon glacier (Not cost effective).


Amazon Glacier is designed for: (Choose 2 answers)

- ☐ active database storage.
- ✓ ☒ infrequently accessed data.
- ✓ ☒ data archives.
- ☐ frequently accessed data.
- ☐ cached session data.

The correct answer is infrequently accessed data., data archives..

You are building a system to distribute confidential training videos to employees. Using CloudFront, what method could be used to serve content that is stored in S3, but not publically accessible from S3 directly?

- ✓ ☒ Create an Origin Access Identity (OAI) for CloudFront and grant access to the objects in your S3 bucket to that OAI.
- ☐ Add the CloudFront account security group "amazon-cf/amazon-cf-sg" to the appropriate S3 bucket policy.
- ☐ Create an Identity and Access Management (IAM) User for CloudFront and grant access to the objects in your S3 bucket to that IAM User.

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

The correct answer is Create an Origin Access Identity (OAI) for CloudFront and grant access to the objects in your S3 bucket to that OAI..

<http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html>.

Which of the following will occur when an EC2 instance in a VPC (Virtual Private Cloud) with an associated Elastic IP is stopped and started? (Choose 2 answers)

- ☐ The Elastic IP will be dissociated from the instance
- ✓ ☒ All data on instance-store devices will be lost
- ☐ All data on EBS (Elastic Block Store) devices will be lost
- ☐ The ENI (Elastic Network Interface) is detached
- ✓ ☒ The underlying host for the instance is changed

The correct answer is All data on instance-store devices will be lost, The underlying host for the instance is changed.

To protect S3 data from both accidental deletion and accidental overwriting, you should:



- ☒ enable S3 versioning on the bucket
- ☐ access S3 data using only signed URLs
- ☐ disable S3 delete using an IAM bucket policy
- ☐ enable S3 Reduced Redundancy Storage
- ☐ enable Multi-Factor Authentication (MFA) protected access

The correct answer is enable S3 versioning on the bucket.


Versioning Helps in Accidental Deletion, since it creates delete markers.

Which is an operational process performed by AWS for data security?

- ☐ AES-256 encryption of data stored on any shared storage device
- ☒ Decommissioning of storage devices using industry-standard practices
- ☐ Background virus scans of EBS volumes and EBS snapshots
- ☐ Replication of data across multiple AWS Regions
- ☐ Secure wiping of EBS data when an EBS volume is unmounted

The correct answer is Decommissioning of storage devices using industry-standard practices.

AWS Responsibilities.

 In the basic monitoring package for EC2, Amazon CloudWatch provides the following metrics:

- ☐ web server visible metrics such as number failed transaction requests
- ☐ operating system visible metrics such as memory utilization
- ☐ database visible metrics such as number of connections
- ✓ ☒ hypervisor visible metrics such as CPU utilization

The correct answer is hypervisor visible metrics such as CPU utilization.

Default Cloud Watch Metrics is CPU Utilization.

Does S3 provide read-after-write consistency?

- ☐ No, not for any region
- ☐ Yes, but only for certain regions
- ✓ ☒ Yes, but only for certain regions and for new objects
- ☐ Yes, for all regions

The correct answer is Yes, but only for certain regions and for new objects.

S3's consistency model is that of eventual consistency. This means that when an object is stored in S3, it is replicated in different datacenters (availability zones) in the same region. And it can take a short amount of time before all the data centers have a uniform



view of the object (This time is usually less than a second, but if system is in distress it could take much longer). Thus in essence, S3 does not provide read-after-write consistency. But the S3 team has modified the algorithm so as to provide read-after-write consistency for new objects. Which means that if I upload "object-n" for the first time (lets call it version-1), I get the opportunity to immediately read it without any consistency issues. This is though not supported for US-East region. Thus S3 support read-after-write consistency for new objects but for all regions except US-East..

Is data stored in S3 is always encrypted?

- ☐ Yes, S3 always encrypts data for security
- ☐ No, there is no such feature
- ✓ ☒ Yes, but only when right APIs are called
- ☐ Yes, but only in Gov Cloud datacenters

The correct answer is Yes, but only when right APIs are called.

S3 by default do not encrypt the data stored into its service. But using Server Side Encryption feature, if proper headers are passes (in REST), S3 will first encrypt the data and then store that encrypted data..

EBS can always tolerate an Availability Zone failure?

- ✓ ☒ No, all EBS volume is stored in a single Availability Zone
- ☐ Yes, EBS volume has multiple copies so it should be fine
- ☐ Depends on how it is setup
- ☐ Depends on the Region where EBS volume is initiated



The correct answer is No, all EBS volume is stored in a single Availability Zone.

Which of the following Auto scaling CANNOT do (select multiple if more than one is true)?

- ☐ Start up EC2 instances when CPU utilization is above threshold
- ☐ Release EC2 instances when CPU utilization is below threshold
- ✓ ☒ Increase the instance size when utilization is above threshold
- ✓ ☒ Add more Relational Database Service (RDS) read replicas when utilization is above threshold

The correct answer is Increase the instance size when utilization is above threshold, Add more Relational Database Service (RDS) read replicas when utilization is above threshold.

Auto scaling cannot increase instance size of an EC2 instance. The idea is to be able to scale horizontally, and not vertically. Also D is correct as Auto scaling currently cannot automate RDS instance to do anything..

What happens to data when an EC2 instance terminates (select multiple if more than one is true)?

- ☐ For EBS backed AMI, the EBS volume with operation system on it is preserved
- ✓ ☒ For EBS backed AMI, any volume attached other than the OS volume is preserved
- ✓ ☒ All the snapshots of the EBS volume with operating system is preserved
- ✓ ☒ For S3 backed AMI, all the data in the local (ephemeral) hard drive is deleted



The correct answer is For EBS backed AMI, any volume attached other than the OS volume is preserved, All the snapshots of the EBS volume with operating system is preserved, For S3 backed AMI, all the data in the local (ephemeral) hard drive is deleted.

For an EC2 instance launched in a private subnet in VPC, which of the following are the options for it to be able to connect to the internet (assume security groups have proper ports open).

- ☐ Simply attach an elastic IP
- ☐ If there is also a public subnet in the same VPC, an ENI can be attached to the instance with the ip address range of the public subnet
- ☒ If there is a public subnet in the same VPC with a NAT instance attached to internet gateway, then a route can be configured from the instance to the NAT
- ☐ There is no way for an instance in private subnet to talk to the internet

The correct answer is If there is a public subnet in the same VPC with a NAT instance attached to internet gateway, then a route can be configured from the instance to the NAT.

You want to use Route53 to direct your www sub-domain to an elastic load balancer fronting your web servers. What kind of record set should you create?



- ☐ A
- ☐ AAAA
- ☐ NS
- ☒ CNAME


The correct answer is CNAME.

You have created 4 weighted resource record sets with weights 1, 2, 3 and 4. the 3rd record set is selected by Route53:

- ☐ 1/7th of the time
- ☒ 3/10th of the time
- ☐ 3/7th of the time
- ☐ 1/4th of the time

The correct answer is 3/10th of the time.

weight 1 = 10% weight 2 = 20% weight 3 = 30% weight 4 = 40%.

 You have created a Route 53 latency record set from your domain to a machine in Singapore and a similar record to a machine in Oregon. When a user located in India visits your domain he will be routed to:

- ✓ ☒ Singapore
- ☐ Oregon
- ☐ Depends on the load on each machine
- ☐ Both, because 2 requests are made, 1 to each machine

The correct answer is Singapore.


Latency Record.

Which of the following can be used as an origin server in CloudFront?(Choose 3)

- ✓ ☒ A webserver running on EC2
- ✓ ☒ A webserver running in your own datacenter
- ☐ A RDS instance
- ✓ ☒ An Amazon S3 bucket

The correct answer is A webserver running on EC2, A webserver running in your own datacenter, An Amazon S3 bucket.

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 In CloudFront, what happens when content is NOT present at an Edge location and a request is made to it?

- ☐ An Error 404 not found is returned
- ✓ ☒ CloudFront delivers the content directly from the origin server and stores it in the cache of the edge location
- ☐ The request is kept on hold till content is delivered to the edge location
- ☐ The request is routed to the next closest edge location

The correct answer is CloudFront delivers the content directly from the origin server and stores it in the cache of the edge location.

Which of the following is true with respect to serving private content through CloudFront?

- ✓ ☒ Signed URLs can be created to access objects from CloudFront edge locations
- ✓ ☒ Direct access to S3 URLs can be removed therefore allowing access only through CloudFront URLs
- ☐ Mark the S3 bucket private and allow access to CloudFront by means of Roles
- ✓ ☒ Mark the S3 bucket private and and create an Origin Access Identity to access the objects



The correct answer is Signed URLs can be created to access objects from CloudFront edge locations, Direct access to S3 URLs can be removed therefore allowing access only through CloudFront URLs, Mark the S3 bucket private and create an Origin Access Identity to access the objects.

You have written a CloudFormation template that creates 1 elastic load balancer fronting 2 EC2 instances. Which section of the template should you edit so that the DNS of the load balancer is returned upon creation of the stack.

- ☐ Resources
- ☐ Parameters
- ☒ Outputs
- ☐ Mappings

The correct answer is Outputs.

KMS Keys are only stored and used in the region in which they are created. They cannot be transferred to another region

- ☒ TRUE
- ☐ FALSE



The correct answer is TRUE.

KMS can be integrated to

- ☐ CloudWatch
- ☐ CloudFront
- ✓ ☒ CloudTrail
- ☐ Opswork

The correct answer is CloudTrail.

KMS allows rotation of the keys (Choose Correct Answers)

- ✓ ☒ if keys generated by KMS rotated automatically by KMS, data does not need to be re-encrypted. KMS keeps previous versions of keys to use for decryption of data encrypted under an old version of a key. All new encryption requests against a key in AWS KMS are encrypted under the newest version of the key.
- ✓ ☐ if manually rotated, data has to be re-encrypted depending on the application's configuration
- ✓ ☒ Automatic key rotation is not supported for imported keys
 - ☐ Usage policies on KMS keys cannot determine which users can use them to encrypt and decrypt data.



The correct answer is if keys generated by KMS rotated automatically by KMS, data does not need to be re-encrypted. KMS keeps previous versions of keys to use for decryption of data encrypted under an old version of a key. All new encryption requests against a key in AWS KMS are encrypted under the newest version of the key., if manually rotated, data has to be re-encrypted depending on the application's configuration, Automatic key rotation is not supported for imported keys.

The Amazon Simple Storage Service (S3) data model enables you to organize data as folders in highly durable Amazon Elastic Block Store (EBS) volumes.

- ☐ TRUE
- ✓ ☒ FALSE

The correct answer is FALSE.

Which of these are not a type of Amazon EBS volume?

- ☐ Magnetic
- ☐ General Purpose SSD
- ✓ ☒ High Capacity SSD
- ☐ Provisioned IOPS SSD



The correct answer is High Capacity SSD.

Amazon RDS instances require security groups to be accessible, even though they are a managed service.


- ✓ ☒ TRUE
- ☐ FALSE


The correct answer is TRUE.

When an EC2 EBS-backed (EBS root) instance is stopped, what happens to the data On any ephemeral store volumes?

- ☐ Data is automatically saved in an EBS volume.
- ☐ Data is unavailable until the instance is restarted.
- ✓ ☒ Data will be deleted and will no longer be accessible.
- ☐ Data is automatically saved as an EBS snapshot.

The correct answer is Data will be deleted and will no longer be accessible..

 An AWS customer is deploying an application that is composed of an Auto Scaling group of EC2 Instances. The customer's security policy requires that every outbound connection from these instances to any other service within the customer's Virtual Private Cloud must be authenticated using a unique x 509 certificate that contains the specific instance-id. In addition, x 509 certificates must be designed by the customer's Key management service in order to be trusted for authentication. Which of the following configurations will support these requirements?

- ☐ Configure an IAM Role that grants access to an Amazon S3 object containing a signed certificate and configure the Auto Scaling group to launch instances with this role. Have the instances bootstrap get the certificate from Amazon S3 upon first boot.
- ☐ Embed a certificate into the Amazon Machine Image that is used by the Auto Scaling group. Have the launched instances generate a certificate signature request with the instance's assigned instance-id to the Key management service for signature.
- ☒  Configure the Auto Scaling group to send an SNS notification of the launch of a new instance to the trusted key management service. Have the Key management service generate a signed certificate and send it directly to the newly launched instance.
- ☐ Configure the launched instances to generate a new certificate upon first boot. Have the Key management service poll the AutoScaling group for associated instances and send new instances a certificate signature that contains the specific instance-id.

The correct answer is Configure the Auto Scaling group to send an SNS notification of the launch of a new instance to the trusted key management service. Have the Key management service generate a signed certificate and send it directly to the newly launched instance..

For IAM Role – Identity Providers and Federation (Choose Correct Answers)

- ✓ ☒ Identify Provider can be used to grant external user identities permissions to AWS resources without having to be created within your AWS account.
- ✓ ☒ IAM supports IdPs that are compatible with OpenID Connect (OIDC) or SAML 2.0 (Security Assertion Markup Language 2.0)
 - ☐ To use an IdP, you create an IAM Role to establish a trust relationship between your AWS account and the IdP.
- ✓ ☒ Identity providers help keep the AWS account secure without having the need to distribute or embed long term in the application

The correct answer is Identify Provider can be used to grant external user identities permissions to AWS resources without having to be created within your AWS account., IAM supports IdPs that are compatible with OpenID Connect (OIDC) or SAML 2.0 (Security Assertion Markup Language 2.0), Identity providers help keep the AWS account secure without having the need to distribute or embed long term in the application.

To use an IdP, you create an IAM identity provider entity to establish a trust relationship between your AWS account and the IdP.

Mobile or Web Application needs to be configured with the IdP which gives each application a unique ID or client ID , also called?

- ✓ ☒ Audience
- ☐ Permission
- ☐ Federation
- ☐ Identity

 The correct answer is Audience.

Which of the following instance type has lowest cost per GB RAM?

- ☐ Compute optimized
- ☐ General Purpose
- ☒ Memory Optimized
- ☐ Storage Optimized

The correct answer is Memory Optimized.

Application then makes an unsigned call to the STS service with

- ☐ AssumePermissionWithWebIdentity
- ☒ AssumeRoleWithWebIdentity
- ☐ AssumeRoleWithWebFederation
- ☐ AssumePermissionWithWebFederation

The correct answer is AssumeRoleWithWebIdentity.



Application then makes an unsigned call to the STS service with the AssumeRoleWithWebIdentity action to request temporary security credentials..

AWS verifies that the token is trusted and valid and if so, returns temporary security credentials

- ✓ ☒ access key
- ✓ ☒ secret access key
- ✓ ☒ session token
- ✓ ☒ expiry time
- ☐ Key pair

The correct answer is access key, secret access key, session token, expiry time.

AWS verifies that the token is trusted and valid and if so, returns temporary security credentials (access key, secret access key, session token, expiry time) to the application that have the permissions for the role that you name in the request..

A photo-sharing service stores pictures in Amazon Simple Storage Service (S3) and allows application sign-in using an OpenID Connect-compatible identity provider. Which AWS Security Token Service approach to temporary access should you use for the Amazon S3 operations?


- ☐ SAML-based Identity Federation
- ☐ Cross-Account Access
- ☐ AWS IAM users
- ✓ ☒ Web Identity Federation



The correct answer is Web Identity Federation.

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Which technique can be used to integrate AWS IAM (Identity and Access Management) with an on-premise LDAP (Lightweight Directory Access Protocol) directory service?


- ☐ Use an IAM policy that references the LDAP account identifiers and the AWS credentials.
- ☐ Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP
- ☒  Use AWS Security Token Service from an identity broker to issue short-lived AWS credentials.
- ☐ Use IAM roles to automatically rotate the IAM credentials when LDAP credentials are updated.
- ☐ Use the LDAP credentials to restrict a group of users from launching specific EC2 instance types.

The correct answer is Use AWS Security Token Service from an identity broker to issue short-lived AWS credentials..


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You are designing a photo sharing mobile app the application will store all pictures in a single Amazon S3 bucket. Users will upload pictures from their mobile device directly to Amazon S3 and will be able to view and download their own pictures directly from Amazon S3. You want to configure security to handle potentially millions of users in the

 most secure manner possible. What should your server-side application do when a new user registers on the photo-sharing mobile application?

- ☐ Create a set of long-term credentials using AWS Security Token Service with appropriate permissions Store these credentials in the mobile app and use them to access Amazon S3.
- ☒  Record the user's Information in Amazon RDS and create a role in IAM with appropriate permissions. When the user uses their mobile app create temporary credentials using the AWS Security Token Service 'AssumeRole' function. Store these credentials in the mobile app's memory and use them to access Amazon S3. Generate new credentials the next time the user runs the mobile app.
- ☐ Record the user's Information in Amazon DynamoDB. When the user uses their mobile app create temporary credentials using AWS Security Token Service with appropriate permissions. Store these credentials in the mobile app's memory and use them to access Amazon S3 Generate new credentials the next time the user runs the mobile app.
- ☐ Create IAM user. Assign appropriate permissions to the IAM user Generate an access key and secret key for the IAM user, store them in the mobile app and use these credentials to access Amazon S3.
- ☐ Create an IAM user. Update the bucket policy with appropriate permissions for the IAM user Generate an access Key and secret Key for the IAM user, store them In the mobile app and use these credentials to access Amazon S3.

The correct answer is Record the user's Information in Amazon RDS and create a role in IAM with appropriate permissions. When the user uses their mobile app create temporary credentials using the AWS Security Token Service 'AssumeRole' function. Store these credentials in the mobile app's memory and use them to access Amazon S3. Generate new credentials the next time the user runs the mobile app..

 Your company has recently extended its datacenter into a VPC on AWS to add burst computing capacity as needed. Members of your Network Operations Center need to be able to go to the AWS Management Console and administer Amazon EC2 instances as necessary. You don't want to create new IAM users for each NOC member and make those users sign in again to the AWS Management Console. Which option below will meet the needs for your NOC members?

- ☐ Use OAuth 2.0 to retrieve temporary AWS security credentials to enable your NOC members to sign in to the AWS Management Console.
- ☐ Use Web Identity Federation to retrieve AWS temporary security credentials to enable your NOC members to sign in to the AWS Management Console.
- ☒  Use your on-premises SAML 2.0-compliant identity provider (IDP) to grant the NOC members federated access to the AWS Management Console via the AWS single sign-on (SSO) endpoint.
- ☐ Use your on-premises SAML 2.0-compliant identity provider (IDP) to retrieve temporary security credentials to enable NOC members to sign in to the AWS Management Console

The correct answer is Use your on-premises SAML 2.0-compliant identity provider (IDP) to grant the NOC members federated access to the AWS Management Console via the AWS single sign-on (SSO) endpoint..

A corporate web application is deployed within an Amazon Virtual Private Cloud (VPC) and is connected to the corporate data center via an IPsec VPN. The application must authenticate against the on-premises LDAP server. After authentication, each logged-in user can only access an Amazon Simple Storage Space (S3) keyspace specific to that user. Which two approaches can satisfy these objectives? (Choose 2 answers)

- ☐ Develop an identity broker that authenticates against IAM security Token service to assume a IAM role in order 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.

- ✓ ☒ 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.
- ✓ ☒ Develop an identity broker that 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.
 - ☐ The application authenticates against LDAP the application then calls the AWS identity and Access Management (IAM) Security Token service to log in to IAM using the LDAP credentials the application can use the IAM temporary credentials to access the appropriate S3 bucket.
 - ☐ 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.

The correct answer is 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. , Develop an identity broker that 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..



A - Needs to authenticate against LDAP and not IAM B - Authenticates with LDAP and calls the AssumeRole C - Custom Identity broker implementation, with authentication with LDAP and using federated token D - Can't login to IAM using LDAP credentials E - Need to authenticate with LDAP.

Company B is launching a new game app for mobile devices. Users will log into the game using their existing social media account to streamline data capture. Company B would like to directly save player data and scoring information from the mobile app to a DynamoDB table named Score Data. When a user saves their game, the progress data will be stored to the Game state S3 bucket. What is the best approach for storing data to DynamoDB and S3?

- ☐ Use an EC2 Instance that is launched with an EC2 role providing access to the Score Data DynamoDB table and the Game State S3 bucket that communicates with the mobile app via web services.
- ✓ ☒ Use temporary security credentials that assume a role providing access to the Score Data DynamoDB table and the Game State S3 bucket using web identity federation.
- ☐ Use Login with Amazon allowing users to sign in with an Amazon account providing the mobile app with access to the Score Data DynamoDB table and the Game State S3 bucket.
- ☐ Use an IAM user with access credentials assigned a role providing access to the Score Data DynamoDB table and the Game State S3 bucket for distribution with the mobile app.


The correct answer is Use temporary security credentials that assume a role providing access to the Score Data DynamoDB table and the Game State S3 bucket using web identity federation.

A user has created a mobile application which makes calls to DynamoDB to fetch certain data. The application is using the DynamoDB SDK and root account access/secret access key to connect to DynamoDB from mobile. Which of the below mentioned statements is true with respect to the best practice for security in this scenario?

-  ☐ User should create a separate IAM user for each mobile application and provide DynamoDB access with it
- ☐ User should create an IAM role with DynamoDB and EC2 access. Attach the role with EC2 and route all calls from the mobile through EC2
-  ☒ The application should use an IAM role with web identity federation which validates calls to DynamoDB with identity providers, such as Google, Amazon, and Facebook
- ☐ Create an IAM Role with DynamoDB access and attach it with the mobile application

The correct answer is The application should use an IAM role with web identity federation which validates calls to DynamoDB with identity providers, such as Google, Amazon, and Facebook.

You are managing the AWS account of a big organization. The organization has more than 1000+ employees and they want to provide access to the various services to most of the employees. Which of the below mentioned options is the best possible solution in this case?

- ☐ The user should create a separate IAM user for each employee and provide access to them as per the policy
- ☐ The user should create an IAM role and attach STS with the role. The user should attach that role to the EC2 instance and setup AWS authentication on that server
- ☐ The user should create IAM groups as per the organization's departments and add each user to the group for better access control
-  ☒ Attach an IAM role with the organization's authentication service to authorize each user for various AWS services





The correct answer is Attach an IAM role with the organization's authentication service to authorize each user for various AWS services.

Your fortune 500 company has under taken a TCO analysis evaluating the use of Amazon S3 versus acquiring more hardware The outcome was that all employees would be granted access to use Amazon S3 for storage of their personal documents. Which of the following will you need to consider so you can set up a solution that incorporates single sign-on from your corporate AD or LDAP directory and restricts access for each user to a designated user folder in a bucket? (Choose 3 Answers)

- ✓ ☒ Setting up a federation proxy or identity provider
- ✓ ☒ Using AWS Security Token Service to generate temporary tokens
- ☐ Tagging each folder in the bucket
- ✓ ☒ Configuring IAM role
- ☐ Setting up a matching IAM user for every user in your corporate directory that needs access to a folder in the bucket

The correct answer is Setting up a federation proxy or identity provider, Using AWS Security Token Service to generate temporary tokens, Configuring IAM role.

 An AWS customer is deploying a web application that is composed of a front-end running on Amazon EC2 and of confidential data that is stored on Amazon S3. The customer security policy that all access operations to this sensitive data must be authenticated and authorized by a centralized access management system that is operated by a separate security team. In addition, the web application team that owns and administers the EC2 web front-end instances is prohibited from having any ability to access the data that circumvents this centralized access management system. Which of the following configurations will support these requirements:

- ☐ Encrypt the data on Amazon S3 using a CloudHSM that is operated by the separate security team. Configure the web application to integrate with the CloudHSM for decrypting approved data access operations for trusted end-users.
- ☒  Configure the web application to authenticate end-users against the centralized access management system. Have the web application provision trusted users STS tokens entitling the download of approved data directly from Amazon S3
- ☐ Have the separate security team create and IAM role that is entitled to access the data on Amazon S3. Have the web application team provision their instances with this role while denying their IAM users access to the data on Amazon S3
- ☐ Configure the web application to authenticate end-users against the centralized access management system using SAML. Have the end-users authenticate to IAM using their SAML token and download the approved data directly from S3.

The correct answer is Configure the web application to authenticate end-users against the centralized access management system. Have the web application provision trusted users STS tokens entitling the download of approved data directly from Amazon S3.

A - S3 doesn't integrate directly with CloudHSM, also there is no centralized access management system control B - Controlled access and admins cannot access the data as it needs authentication C - Web team would have access to the data D - not the way



SAML works and not sure if the centralized access management system is SAML complaint.

Which of the below is true for IAM ?

- ✓ ☒ Centralized control of your AWS account
- ✓ ☒ Shared Access of your AWS account
- ☐ Provide permanent Access for users/devices and services where necessary
- ✓ ☒ Identity Federation
- ✓ ☒ Multifactor Authentication

The correct answer is Centralized control of your AWS account, Shared Access of your AWS account, Identity Federation, Multifactor Authentication.

Provide temporary Access for users/devices and services where necessary .

Policy Document can be associated to Users and Groups but it cannot be associated to the Roles?

- ☐ TRUE
- ✓ ☒ FALSE
- ☐ There are few roles for which policy document cannot be attached.
- ☐ Policy Document is not nothing, rather it is called Policy Rule.



The correct answer is FALSE.

Policy Document can be associated to Users, Groups and Roles.

Virtual MFA devices are supported for? (Choose 4 Answers)

- ✓ ☒ Andriod
- ☐ Google
- ✓ ☒ Iphone
- ☐ Facebook
- ✓ ☒ Windows phone
- ✓ ☒ Blackberry

The correct answer is Andriod, Iphone, Windows phone, Blackberry.

AWS user id and password can be used programatically to access AWS resources?

- ☐ TRUE
- ✓ ☒ FALSE
- ☐ Only when you are using Linux systems, wget or curl
- ☐ you can use it when you have edge locations URL



The correct answer is FALSE.

Only Access Key and Secret Access Key can be used to programtically access aws resources .

Apart from downloading the csv to save Access Key and Secret Access Key, when user account is created an email instruction can also be sent to save them, but this can be done only once.

☐ TRUE

✓ ☒ FALSE

The correct answer is FALSE.

You can send email instruction, but it just contains aws account URL and AWS user id which was created. Access key and Secret Access key can be downloaded using csv and it will not appear on aws console post that..

Once the secret access key is lost, you need to perform following it to get it back,

☐ delete the user since there is no secret access key, he will not be able to use aws resources programatically

☐ secret access key cannot be regenerated

✓ ☒ regenerate a new secret access key from IAM console

☐ use KMS decryption tool to generate secret access key using the Access key of user account



The correct answer is regenerate a new secret access key from IAM console.

Which of the following is true for IAM password policy ?

- ☐ By default, AWS sets 90 days expiration policy
- ☐ By default, AWS sets do not allow password reuse checked
- ✓ ☒ User can define the password length using Password Policy console
- ☐ By Default, Password must contain one number and one alphabet, however this can be changed from console
- ✓ ☒ Password expiration requires administrator reset can be enabled while creating password policy

The correct answer is User can define the password length using Password Policy console, Password expiration requires administrator reset can be enabled while creating password policy.

You are a solutions architect working for a large engineering company who are moving their existing legacy hardware to AWS. You have configured their first AWS account and you have set up IAM. Your company will be primarily based out of West Germany, however they will have a small subsidiary operating out of South Korea and you will need an AWS environment configured there as well. Which of the following statements is true;

- ☐ You will then need to configure Users and Policy Documents for each region respectively.





☒ You will need to configure Users and Policy Documents only once, as these are applied globally.

☐ You will need to configure your users regionally, however your policy documents are global.

☐ You will need to configure your policy documents regionally, however your users are global.

The correct answer is You will need to configure Users and Policy Documents only once, as these are applied globally..

You are a security administrator working for a hotel chain. You have a new member of staff who has started as a systems administrator and they will need full access to the AWS console. You have created the user account and generated the access key id and the secret access key. You have moved this user into the group where the other administrators are and you have provided the new user with their secret access key and their access key id. However when they go to log in to the AWS console, they cannot sign in. What could be the cause of this?

☐ You have not applied the "log in from console" policy document to the user. You must apply this first so that they can log in.

☐ Your user is trying to log in from the AWS console from outside the corporate network. This is not possible.

☐ You have not yet activated multi-factor authentication for the user, so by default they will not be able to log in.

✓ ☒ You cannot log in to the AWS console using the Access Key ID and Secret Access Key, instead you must generate a password for the user and supply the user with this password, as well as the unique link to sign in to the AWS console.



The correct answer is You cannot log in to the AWS console using the Access Key ID and Secret Access Key, instead you must generate a password for the user and supply the user with this password, as well as the unique link to sign in to the AWS console..

.

In what language are policy documents written in?

- ☐ *.js
- ☐ .xml
- ☒ Javascript Object Notation
- ☐ Javascript Object Number
- ☐ .policy

The correct answer is Javascript Object Notation.

.

which of the following S3 do not provide?

- ☐ Security
- ☐ Durability
- ☐ High Availability
- ☐ High Scalability
- ☒ MFA



The correct answer is MFA.

which of the following is not S3 meta data?

- ☐ Update Date of the file
- ☐ Content Length
- ✓ ☒ Key and Value
- ☐ Create Date of the file


The correct answer is Key and Value.

Key and Value are those which creates metadata, they are not metadata itself.

SOAP support over HTTP is deprecated, but it is still available over HTTPS. New Amazon S3 features will not be supported for SOAP. We recommend that you use either the REST API or the AWS SDKs.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

 In S3, If some metadata contains unprintable characters, it is not returned. Instead, the _____ header is returned with a value of the number of the unprintable metadata entries.

- ✓ ☒ x-amz-missing-meta
- ☐ x-amz-corrupt-meta
- ☐ x-aws-missing-meta
- ☐ x-aws-corrupt-meta

The correct answer is x-amz-missing-meta.

Do Objects and Buckets have hierarchy in S3?

- ☐ Yes, since folder names comes before file names
- ✓ ☒ No
- ☐ Only for region in which bucket was created

The correct answer is No.

Amazon S3 supports buckets and objects, there is no hierarchy in Amazon S3. However, the prefixes and delimiters in an object key name, enables the Amazon S3 console and the AWS SDKs to infer hierarchy and introduce concept of folders..

which of the following S3 Support?

- ✓ ☒ Torrent
- ✓ ☒ Tiered Storage
- ☐ Google Authentication
- ☐ Identity Federation

The correct answer is Torrent, Tiered Storage.

S3 Supports Bit Torrent and there are Tiered Storage available for S3..

What is the concurrent facility fault tolerance for S3- RRS?

- ☐ 2
- ☐ We can loose data from RRS from all facilities, since we can always re-upload the files.
- ✓ ☒ 1
- ☐ None

The correct answer is 1.

.

What is the availability of S3-IA?



☐ 99.99

✓ ☒ 99.9

☐ 99.9999999999

☐ 99

The correct answer is 99.9.

What is the durability of S3 - RRS?

☐ 99.9999999999

☐ 99.9


✓ ☒ 99.99

☐ 99

The correct answer is 99.99.

What is the Availability SLA for amazon glacier?

☐ 99.9

-  ☐ 99.99
- ☐ 99.9999999999
- ✓ ☒ N/A

The correct answer is N/A.


S3 is object based, object consists of the following?

- ✓ ☒ Key
- ✓ ☒ Value
- ✓ ☒ Metadata
- ☐ Version Number
- ✓ ☒ Version ID

The correct answer is Key, Value, Metadata, Version ID.

When an EC2 EBS-backed (EBS root) instance is stopped, what happens to the data On any ephemeral store volumes?

- ☐ Data is automatically saved in an EBS volume.

-  ☐ Data is unavailable until the instance is restarted.
- ☒ Data will be deleted and will no longer be accessible.
- ☐ Data is automatically saved as an EBS snapshot.

The correct answer is Data will be deleted and will no longer be accessible..

True or False: If you add a tag that has the same key as an existing tag on a DB Instance, the new value overwrites the old value.

- ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

The SQL Server ____ feature is an efficient means of copying data from a source database to your DB Instance. It writes the data that you specify to a data file, such as an ASCII file.

- ☒ bulk copy
- ☐ group copy
- ☐ dual copy



The correct answer is bulk copy.

.


You have multiple Amazon EC2 instances running in a cluster across multiple Availability Zones within the same region. What combination of the following should be used to ensure the highest network performance (packets per second), lowest latency, and lowest jitter? Choose 3 answers

- ☐ Amazon EC2 placement groups
- ✓ ☒ Enhanced networking
- ☐ Amazon PV AMI
- ✓ ☒ Amazon HVM AMI
- ☐ Amazon Linux
- ✓ ☒ Amazon VPC

The correct answer is Enhanced networking, Amazon HVM AMI, Amazon VPC.

.

What does Amazon Elastic cache provide?

 ☐ A service by this name doesn't exist. Perhaps you mean Amazon Cloud Cache.

☐ A virtual server with a huge amount of memory.

✓ ☒ A managed In-memory cache service.

☐ An Amazon EC2 instance with the Memcached software already pre-installed.

The correct answer is A managed In-memory cache service..

Amazon S3 doesn't automatically give a user who creates permission to perform other actions on that bucket or object.

☐ a file

☐ a bucket or file

✓ ☒ a bucket or object

☐ an object or file

The correct answer is a bucket or object.

Do the system resources on the Micro instance meet the recommended configuration for Oracle?



- ☐ Yes completely
- ☐ Yes but only for certain situations
- ✓ ☒ Not in any circumstance


The correct answer is Not in any circumstance.

How are the EBS snapshots saved on Amazon S3?

- ☐ Exponentially
- ✓ ☒ Incrementally
- ☐ EBS snapshots are not stored in the Amazon S3
- ☐ Decrementally

The correct answer is Incrementally.

When automatic failover occurs, Amazon RDS will emit a DB Instance event to inform you that automatic failover occurred. You can use the _____ to return information about events related to your DB Instance

-  ☐ FetchFailures
- ☐ DescribeFailures
- ☒ DescribeEvents
- ☐ FetchEvents

The correct answer is DescribeEvents.

You are running a successful multi-tier web application on AWS and your marketing department has asked you to add a reporting tier to the application. The reporting tier will aggregate and publish status reports every 30 minutes from user-generated information that is being stored in your web applications database. You are currently running a Multi-AZ RDS MySQL instance for the database tier. You also have implemented ElastiCache as a database caching layer between the application tier and database tier. Please select the answer that will allow you to successfully implement the reporting tier with as little impact as possible to your database.

- ☐ Continually send transaction logs from your master database to an S3 bucket and generate the reports off the S3 bucket using S3 byte range requests.
- ☐ Generate the reports by querying the synchronously replicated standby RDS MySQL instance maintained through Multi-AZ
- ☒ Launch a RDS Read Replica connected to your Multi-AZ master database and generate reports by querying the Read Replica.
- ☐ Generate the reports by querying the ElastiCache database caching tier.



The correct answer is Launch a RDS Read Replica connected to your Multi-AZ master database and generate reports by querying the Read Replica..

A - too slow B - Standby instance cannot be used as a scaling solution D - ElasticCache does not maintain full data and is simply a caching solution.

A company is deploying a new two-tier web application in AWS. The company has limited staff and requires high availability, and the application requires complex queries and table joins. Which configuration provides the solution for the company's requirements?

- ☐ MySQL Installed on two Amazon EC2 Instances in a single Availability Zone
- ✓ ☒ Amazon RDS for MySQL with Multi-AZ
- ☐ Amazon ElastiCache
- ☐ Amazon DynamoDB

The correct answer is Amazon RDS for MySQL with Multi-AZ.

A - does not provide High Availability out of the box B - Just a caching solution C - Not suitable for complex queries and joins.

Your company is getting ready to do a major public announcement of a social media site on AWS. The website is running on EC2 instances deployed across multiple Availability Zones with a Multi-AZ RDS MySQL Extra Large DB Instance. The site performs a high number of small reads and writes per second and relies on an eventual consistency model. After comprehensive tests you discover that there is read contention on RDS MySQL. Which are the best approaches to meet these requirements? (Choose 2 answers)

- ✓ ☒ Deploy ElastiCache in-memory cache running in each availability zone



- ☐ Implement sharding to distribute load to multiple RDS MySQL instances
- ☐ Increase the RDS MySQL Instance size and Implement provisioned IOPS
- ✓ ☒ Add an RDS MySQL read replica in each availability zone

The correct answer is Deploy ElastiCache in-memory cache running in each availability zone, Add an RDS MySQL read replica in each availability zone.

B - this is only a read contention, the writes work fine; C - not scalable, this is only a read contention, the writes work fine;.

Your company has HQ in Tokyo and branch offices all over the world and is using logistics software with a multi-regional deployment on AWS in Japan, Europe and US. The logistic software has a 3-tier architecture and currently uses MySQL 5.6 for data persistence. Each region has deployed its own database. In the HQ region you run an hourly batch process reading data from every region to compute cross-regional reports that are sent by email to all offices this batch process must be completed as fast as possible to quickly optimize logistics. How do you build the database architecture in order to meet the requirements?

- ✓ ☒ For each regional deployment, use RDS MySQL with a master in the region and a read replica in the HQ region
- ☐ For each regional deployment, use MySQL on EC2 with a master in the region and send hourly EBS snapshots to the HQ region
- ☐ For each regional deployment, use RDS MySQL with a master in the region and send hourly RDS snapshots to the HQ region
- ☐ For each regional deployment, use MySQL on EC2 with a master in the region and use S3 to copy data files hourly to the HQ region
- ☐ Use Direct Connect to connect all regional MySQL deployments to the HQ region and reduce network latency for the batch process



The correct answer is For each regional deployment, use RDS MySQL with a master in the region and a read replica in the HQ region.

What would happen to an RDS (Relational Database Service) multi-Availability Zone deployment if the primary DB instance fails?

- ☐ IP of the primary DB Instance is switched to the standby DB Instance.
- ☐ A new DB instance is created in the standby availability zone.
- ✓ ☒ The canonical name record (CNAME) is changed from primary to standby.
- ☐ The RDS (Relational Database Service) DB instance reboots.

The correct answer is The canonical name record (CNAME) is changed from primary to standby..

Your business is building a new application that will store its entire customer database on a RDS MySQL database, and will have various applications and users that will query that data for different purposes. Large analytics jobs on the database are likely to cause other applications to not be able to get the query results they need to, before time out. Also, as your data grows, these analytics jobs will start to take more time, increasing the negative effect on the other applications. How do you solve the contention issues between these different workloads on the same data?



- ☐ Enable Multi-AZ mode on the RDS instance
- ☐ Use ElastiCache to offload the analytics job data
- ☒ Create RDS Read-Replicas for the analytics work
- ☐ Run the RDS instance on the largest size possible

The correct answer is Create RDS Read-Replicas for the analytics work.

Will my standby RDS instance be in the same Availability Zone as my primary?

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

The correct answer is No.

Is creating a Read Replica of another Read Replica supported?

- ☐ Only in certain regions



- ☒ Only with MySQL based RDS
- ☐ Only for Oracle RDS types
- ☐ No
- ☐ Yes


The correct answer is Only with MySQL based RDS.

A user is planning to set up the Multi-AZ feature of RDS. Which of the below mentioned conditions won't take advantage of the Multi-AZ feature?

- ☐ Availability zone outage
- ☐ A manual failover of the DB instance using Reboot with failover option
- ☒ Region outage
- ☐ When the user changes the DB instance's server type

The correct answer is Region outage.

When you run a DB Instance as a Multi-AZ deployment, the "____" serves database writes and reads

- 
- ☐ secondary
 - ☐ backup
 - ☐ stand by
 - ✓ ☒ primary


The correct answer is primary.

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

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

The correct answer is No.

Read Replicas require a transactional storage engine and are only supported for the _____ storage engine

-  ☐ OracleISAM
- ☐ MSSQLDB
- ☒ InnoDB
- ☐ MyISAM

The correct answer is InnoDB.

A user is configuring the Multi-AZ feature of an RDS DB. The user came to know that this RDS DB does not use the AWS technology, but uses server mirroring to achieve replication. Which DB is the user using right now?

- ☐ MySQL
- ☐ Oracle
- ☒ MS SQL
- ☐ PostgreSQL

The correct answer is MS SQL.

If I have multiple Read Replicas for my master DB Instance and I promote one of them, what happens to the rest of the Read Replicas?




- ☒ The remaining Read Replicas will still replicate from the older master DB Instance
- ☐ The remaining Read Replicas will be deleted
- ☐ The remaining Read Replicas will be combined to one read replica

The correct answer is The remaining Read Replicas will still replicate from the older master DB Instance.

If you have chosen Multi-AZ deployment, in the event of a planned or unplanned outage of your primary DB Instance, Amazon RDS automatically switches to the standby replica. The automatic failover mechanism simply changes the _____ record of the main DB Instance to point to the standby DB Instance.

- ☐ DNAME
- ☒ CNAME
- ☐ TXT
- ☐ MX

The correct answer is CNAME.

 The new DB Instance that is created when you promote a Read Replica retains the backup window period.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

Will I be alerted when automatic fail over occurs?

- ✓ ☒ Only if SNS configured
- ☐ No
- ☐ Yes
- ☐ Only if Cloudwatch configured

The correct answer is Only if SNS configured.

Can I initiate a "forced failover" for my MySQL Multi-AZ DB Instance deployment?

- ☐ Only in certain regions

-  ☐ Only PC
- ☒ Yes
- ☐ No

The correct answer is Yes.

A user is accessing RDS from an application. The user has enabled the Multi-AZ feature with the MS SQL RDS DB. During a planned outage how will AWS ensure that a switch from DB to a standby replica will not affect access to the application?

- ☐ RDS will have an internal IP which will redirect all requests to the new DB
- ☒ RDS uses DNS to switch over to standby replica for seamless transition
- ☐ The switch over changes Hardware so RDS does not need to worry about access
- ☐ RDS will have both the DBs running independently and the user has to manually switch over

The correct answer is RDS uses DNS to switch over to standby replica for seamless transition.

Which of the following is part of the failover process for a Multi-AZ Amazon Relational Database Service (RDS) instance?

- ☐ The failed RDS DB instance reboots.
- ☐ The IP of the primary DB instance is switched to the standby DB instance.
- ✓ ☒ The DNS record for the RDS endpoint is changed from primary to standby.
- ☐ A new DB instance is created in the standby availability zone.

The correct answer is The DNS record for the RDS endpoint is changed from primary to standby..

S3 is being used to capture logs from multiple EC2 instances, data is being stored in same S3 bucket? Which method can avoid performance bottleneck, assuming the fact that file name in the bucket can have same names from different EC2 instances?

- ✓ ☒ Add Randomness in the file name before storing in S3 bucket.
- ☐ Use Provisioned IOPS
- ☐ Keep transferring the data from the bucket to different bucket using cloud front
- ☐ Use S3 Glacier



The correct answer is Add Randomness in the file name before storing in S3 bucket..


What are the charges for S3? (Choose 5 options)

- ✓ ☒ Storage
- ✓ ☒ Requests
- ☐ Versioning
- ✓ ☒ Storage Management Pricing via tags
- ☐ Cross Region Replication
- ✓ ☒ Data Transfer Pricing
- ✓ ☒ Transfer Acceleration

The correct answer is Storage, Requests, Storage Management Pricing via tags, Data Transfer Pricing, Transfer Acceleration.

Amazon S3 is also designed to be highly flexible. Store any type and amount of data that you want; read the same piece of data a million times or only for emergency disaster recovery; build a simple FTP application, or a sophisticated web application such as the Amazon.com retail web site.

- ✓ ☒ TRUE
- ☐ FALSE
- ☐ Only for certain regions

 Only for Glacier and Infrequent Access Data

The correct answer is TRUE.

Amazon S3 was carefully engineered to meet the requirements for scalability, reliability, speed, low-cost, and simplicity that must be met for Amazon's internal developers. Amazon S3 passes these same benefits onto any external developer.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

How much data can I store in S3?

- ☐ The total volume of data and number of objects you can store are 100TB. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 terabytes. The largest object that can be uploaded in a single PUT is 5 gigabytes. For objects larger than 100 megabytes, customers should consider using the Multipart Upload capability.
- ☐ The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 gigabytes. The largest object that can be uploaded in a single PUT



is 5 megabytes. For objects larger than 5 gigabytes, customers should consider using the Multipart Upload capability.

- ✓ ☒ The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 terabytes. The largest object that can be uploaded in a single PUT is 5 gigabytes. For objects larger than 100 megabytes, customers should consider using the Multipart Upload capability.
- ☐ The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from a minimum of 1 bytes to a maximum of 5 terabytes. The largest object that can be uploaded in a single PUT is 5 gigabytes. For objects larger than 100 megabytes, customers should consider using the Multipart Upload capability.

The correct answer is The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 terabytes. The largest object that can be uploaded in a single PUT is 5 gigabytes. For objects larger than 100 megabytes, customers should consider using the Multipart Upload capability..

How can I delete large numbers of objects from S3?

- ✓ ☒ You can use Multi-Object Delete to delete large numbers of objects from Amazon S3.
- ☐ You can use Multi-Byte Delete to delete large numbers of objects from Amazon S3.
- ☐ You can use Multipart Delete to delete large numbers of objects from Amazon S3.
- ☐ You cannot delete multiple object at once. Each object is separate and has to be deleted one by one.



The correct answer is You can use Multi-Object Delete to delete large numbers of objects from Amazon S3. .


Amazon S3 is a simple key-based object store. When you store data, you assign a unique object key that can later be used to retrieve the data. Keys can be any string, and can be constructed to mimic hierarchical attributes.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

How can I Increase the number of Amazon S3 buckets that I can provision?

- ☐ By default, customers can provision up to 100 buckets per AWS account. For addition buckets, separate AWS account should be used.
- ✓ ☒ By default, customers can provision up to 100 buckets per AWS account. However, you can increase your Amazon S3 bucket limit by visiting AWS Service Limits.
- ☐ By default, customers can provision up to 10 buckets per region. However, you can increase your Amazon S3 region bucket limit by visiting AWS Service Limits.

 You should worry about number as there is no limit, since S3 is infinite storage.

The correct answer is By default, customers can provision up to 100 buckets per AWS account. However, you can increase your Amazon S3 bucket limit by visiting AWS Service Limits..

In Amazon S3, How do I decide which region to store my data in?

- ✓ ☒ You may want to store your data in a region that is near to your customers, your data centers, or your other AWS resources in order to reduce data access latencies.
- ✓ ☒ You may want to store your data in a region that is remote from your other operations for geographic redundancy and disaster recovery purposes.
- ✓ ☐ You may want to store your data in a region that is enables you to address specific legal and regulatory requirements.
- ✓ ☒ You may want to store your data in a region that is allows you to reduce storage costs. You can choose a lower priced region to save money.
 - ☐ S3 is universal, data need not be stored in a region
 - ☐ You may want to store your data in a region that is having very less traffic from other AWS resources.



The correct answer is You may want to store your data in a region that is near to your customers, your data centers, or your other AWS resources in order to reduce data access latencies., You may want to store your data in a region that is remote from your other operations for geographic redundancy and disaster recovery purposes., You may want to store your data in a region that is enables you to address specific legal and regulatory requirements., You may want to store your data in a region that is allows you to reduce storage costs. You can choose a lower priced region to save money..

How to secure my data in S3?

- ✓ ☒ You can securely upload/download your data to Amazon S3 via SSL endpoints using the HTTPS protocol.
 - ☐ Using multipart upload, data is secured since they are divided in chunks and each chunks are random.
- ✓ ☒ If you need extra security you can use the Server Side Encryption (SSE) option or the Server Side Encryption with Customer-Provide Keys (SSE-C) option to encrypt data stored-at-rest.
- ✓ ☒ Alternatively you can use your own encryption libraries to encrypt data before storing it in Amazon S3.
 - ☐ S3- RRS cannot be secured, since there is no point of securing it as we can always get the data from secure S3 or S3-IA
- ✓ ☐ Amazon S3 is secure by default. You can use access control mechanisms such as bucket policies and Access Control Lists (ACLs) to selectively grant permissions to users and groups of users.

The correct answer is You can securely upload/download your data to Amazon S3 via SSL endpoints using the HTTPS protocol., If you need extra security you can use the Server Side Encryption (SSE) option or the Server Side Encryption with



Customer-Provide Keys (SSE-C) option to encrypt data stored-at-rest., Alternatively you can use your own encryption libraries to encrypt data before storing it in Amazon S3., Amazon S3 is secure by default. You can use access control mechanisms such as bucket policies and Access Control Lists (ACLs) to selectively grant permissions to users and groups of users..

You can choose to encrypt data using SSE-S3, SSE-C, SSE-KMS, or a client library such as the Amazon S3 Encryption Client. All four enable you to store sensitive data encrypted at rest in Amazon S3.



☒ TRUE

☐ FALSE

☐ Only when client library is approved by amazon

☐ Only for certain regions

The correct answer is TRUE.

SSE-S3 provides an integrated solution where Amazon handles key management and key protection using multiple layers of security. You should choose SSE-S3 if you prefer to manage your own keys.

☐ TRUE



☒ FALSE



The correct answer is FALSE.

SSE-S3 provides an integrated solution where Amazon handles key management and key protection using multiple layers of security. You should choose SSE-S3 if you prefer to have Amazon manage your keys..

Which of the following allows encryption and decryption of your objects while retaining control of the keys used to encrypt objects in S3 via your own managed keys?

- ☐ SSE-S3
- ✓ ☒ SSE-C
- ☐ SSE-KMS
- ☐ Encryption client library

The correct answer is SSE-C.

SSE-C enables you to leverage Amazon S3 to perform the encryption and decryption of your objects while retaining control of the keys used to encrypt objects. With SSE-C, you don't need to implement or use a client-side library to perform the encryption and decryption of objects you store in Amazon S3, but you do need to manage the keys that you send to Amazon S3 to encrypt and decrypt objects. Use SSE-C if you want to maintain your own encryption keys, but don't want to implement or leverage a client-side encryption library. .

AWS KMS provides an audit trail so you can see who used your key to access which object and when, as well as view failed attempts to access data from users without permission to decrypt the data.

- ✓ ☒ TRUE
- ☐ FALSE



The correct answer is TRUE.

How does Amazon protect SSE encryption keys?

- ☐ With SSE, every protected object is encrypted with a random key. This object key is itself encrypted by a separate unique key. A new unique key is issued at least yearly. Encrypted data, encryption keys and master keys are stored and secured on same hosts for multiple layers of protection.
- ☐ With SSE, every protected object is encrypted with a unique key. This object key is itself encrypted by a separate master key. A new master key is issued at least monthly. Encrypted data, encryption keys and master keys are stored and secured on same hosts for multiple layers of protection.
- ☒ With SSE, every protected object is encrypted with a unique key. This object key is itself encrypted by a separate master key. A new master key is issued at least monthly. Encrypted data, encryption keys and master keys are stored and secured on separate hosts for multiple layers of protection.
- ☐ Keys are random and generated once a month, however it is not AWS responsibility to perform protection of SSE encryption keys as per the AWS responsibility guidelines

The correct answer is With SSE, every protected object is encrypted with a unique key. This object key is itself encrypted by a separate master key. A new master key is issued at least monthly. Encrypted data, encryption keys and master keys are stored and secured on separate hosts for multiple layers of protection..



Amazon S3 event notifications can be sent in response to actions in Amazon S3 like PUTs, POSTs, COPYs, or DELETEs. Notification messages can be sent through either


- ☐ Cloudwatch, Amazon SNS, EC2 Instances
- ✓ ☒ Amazon SNS, Amazon SQS, or directly to AWS Lambda.
- ☐ Amazon SQS, Auto scaling, Glacier
- ☐ AWS Lambda Only

The correct answer is Amazon SNS, Amazon SQS, or directly to AWS Lambda..

What is the url of static website hosted at S3?

- ☐ s3-website.regionname.amazonaws.com/bucketname
- ✓ ☒ bucketname.s3-website.regionname.amazonaws.com
- ☐ bucketname.s3-website.regionname.amazon.com
- ☐ s3-website.regionname.aws.com/bucketname

The correct answer is bucketname.s3-website.regionname.amazonaws.com.

 Is there an additional charge for hosting static websites on Amazon S3?

- ☐ Yes it depends on the size of the object used for static websites
- ☐ Yes it depends on the traffic which is being served from the static website.
- ☐ Charge is same as regular S3 objects.
- ✓ ☒ There is no additional charge for hosting static websites on Amazon S3. The same pricing dimensions of storage, requests, and data transfer apply to your website objects.

The correct answer is There is no additional charge for hosting static websites on Amazon S3. The same pricing dimensions of storage, requests, and data transfer apply to your website objects..

What is the maximum number of tags that can be added to S3 object?

- ☐ Infinite
- ✓ ☒ 10
- ☐ Tags cannot be added, as S3 object uses key-value pairs
- ☐ 50

The correct answer is 10.



What is the restriction for bucket name in S3?

- ✓ ☒ It should be in lower case for all regions
- ☐ Except your default region, It should be in lower case for all other regions
- ☐ Alphanumeric and First Letter should be capital
- ☐ It should be in capital case for all regions

The correct answer is It should be in lower case for all regions.


.

You can simplify and speed up business workflows and big data jobs using

- ☐ Cloudwatch
- ☐ Cloudtrail
- ✓ ☒ S3 Inventory
- ☐ S3 Bucket

The correct answer is S3 Inventory.

.

 By default, Objects in S3 when stored for the first time are?

- ✓ ☒ S3 bucket and the object stored in it has private access
- ☐ Public for the default region in which the bucket was created
- ☐ S3 is global so can be accessed by anyone
- ☐ S3 bucket has private access however files stored in it are publicly accessible.

The correct answer is S3 bucket and the object stored in it has private access.

Management Section in S3 has following? Choose 3 answers

- ✓ ☒ Analytics
- ☐ Permissions
- ✓ ☒ Inventory
- ☐ Lifecycle
- ✓ ☒ Metrics
- ☐ Transfer Acceleration

The correct answer is Analytics, Inventory, Metrics .



If the bucket policy says public read, does that mean that objects in the bucket are publicly accessible as well?

- ☐ Yes for public buckets, all the objects are publicly accessible
- ✓ ☒ No bucket policy and object permissions are different and each object is required to have their own access control list.
- ☐ Yes for public buckets, all the objects are publicly accessible in the region where bucket was created
- ☐ objects are always accessible if they are made public, irrespective of bucket policy

The correct answer is No bucket policy and object permissions are different and each object is required to have their own access control list..

If a version is deleted from the S3 version enabled bucket, which of the following is true?

- ☐ version deletion can be restored using delete markers
- ☐ version deletion can be restored using insert markers
- ✓ ☒ version deletion cannot be restored
- ☐ when version is deleted, if life cycle management policy is enabled, it can be found in the glacier as backup.



The correct answer is version deletion cannot be restored.

Entire object deletion can be restored by deleting the delete marker, however when a particular etag version id is deleted, it cannot be restored..

In a lifecycle enabled bucket in S3, if the previous version was transferred to infrequent access storage after 30 days and then it was transferred to glacier after another 30 days, and eventually it was deleted after 90 days from the date it was created, will there be a charge for glacier post that date?


- ☐ No, Glacier has 90 days of storage policy, even if the object is deleted earlier, amazon still charges for object till 90 days.
- ✓ ☒ Yes, Glacier has 90 days of storage policy, since the object was deleted earlier than 90 days. user will be charged for the deleted object as well.
- ☐ There is no charge of previous versions
- ☐ You cannot have version enabled for S3 bucket when lifecycle is enabled, however you can have delete markers for the deleted object.

The correct answer is Yes, Glacier has 90 days of storage policy, since the object was deleted earlier than 90 days. user will be charged for the deleted object as well..

Since object was created 90 days ago, it needs to be kept in glacier for 90 days from the date when it was added to glacier . or 150 days from the date when it was created..

Which of the following amazon web services can be used with Cloud Front? Choose 4 options

- ✓ ☒ Amazon Elastic Compute Cloud
- ✓ ☒ Amazon Simple Storage Service

- 
- ☒ Amazon Elastic Load Balancing
 - ☒ Amazon Route 53
 - ☐ Amazon Cloud Watch
 - ☐ Amazon Edge Location Services

The correct answer is Amazon Elastic Compute Cloud, Amazon Simple Storage Service, Amazon Elastic Load Balancing, Amazon Route 53.

What are the various distribution types in cloud front?

- ☒ Web Distribution
- ☐ Client Distribution
- ☒ RTMP
- ☐ Bit Torrent

The correct answer is Web Distribution, RTMP.

Can edge locations can be used for write in cloud front?

- ☒ YES



☐ NO

☐ Only for the region in which cloud front was created

The correct answer is YES.

Can there be multiple origins in the same distribution in Cloud Front?

✓ ☒ YES

☐ NO

☐ Only in the region where cloud front was created

☐ only when origins are created in separate region in this way edge location will know that the request from origin is coming from same vpc.

The correct answer is YES.

What are the allowed HTTP Methods in Cloud Front?

☐ GET, POST ,ACTION

☐ GET, POST, PUT, ACTION, OPERATION

✓ ☒ GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE



The correct answer is GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE.

What are the different options of Geo restriction in Cloud Front?

- ☐ Whitelist Only
- ☐ Blacklist Only
- ☐ Whitelist and Blacklist
- ✓ ☒ Whitelist or Blacklist

The correct answer is Whitelist or Blacklist.

Where is HyperV or eSxi storage gateway installed?

- ✓ ☒ At Customer Data Center
- ☐ At AWS VPC level
- ☐ At AWS Region Level
- ☐ At AWS Edge location Level



The correct answer is At Customer Data Center.

What are the different types of storage gateway? Choose 4 Options

- ✓ ☒ File Gateway (NFS)
- ☐ Bucket Gateway
- ✓ ☒ Stored Volume Gateway
- ✓ ☒ Cache Volume Gateway
- ✓ ☒ Tape Gateway (VTL)
- ☐ FAT

The correct answer is File Gateway (NFS), Stored Volume Gateway, Cache Volume Gateway, Tape Gateway (VTL).

Data written to Volume disk using the iSCSI protocol can be asynchronously backed up as point-in-time snapshots of your volumes and stored in the cloud as Amazon EBS snapshots.

- ✓ ☒ TRUE
- ☐ FALSE



The correct answer is TRUE.

.

One of your users is trying to upload a 7.5GB file to S3 however they keep getting the following error message - "Your proposed upload exceeds the maximum allowed object size.". What is a possible solution for this?

- ☐ Design your application to use large object upload API for this object
- ☐ Raise a ticket with AWS to increase your maximum object size
- ☐ Log in to the S3 console, click on the bucket and then click properties. You can then increase your maximum object size to 1TB
- ☒ Design your application to use the multi-part upload API for all objects

The correct answer is Design your application to use the multi-part upload API for all objects.

.

You are a solutions architect who works with a large digital media company. The company has decided that they want to operate within the Japanese region and they need a bucket called "testbucket" set up immediately to test their web application on. You log in to the AWS console and try to create this bucket in the Japanese region however you are told that the bucket name is already taken. What should you do to resolve this?




- ☐ Change your region to Korea and then create the bucket "testbucket".
- ☐ Raise a ticket with AWS and ask them to release the name "testbucket" to you.
- ✓ ☒ Bucketnames are global, not regional. This is a popular bucket name and is already taken. You should choose another bucket name.
- ☐ Run a WHO IS request on the bucket name and get the registered owners email address. Contact the owner and ask if you can purchase the rights to the bucket.

The correct answer is Bucketnames are global, not regional. This is a popular bucket name and is already taken. You should choose another bucket name..

What is the minimum file size that I can store on S3?

- ☐ 1 KB
- ☐ 1 MB
- ☐ 5 TB
- ✓ ☒ 1 BYTE


The correct answer is 1 BYTE.

 You work for a busy digital marketing company who currently store their data on premise. They are looking to migrate to AWS S3 and to store their data in buckets. Each bucket will be named after their individual customers, followed by a random series of letters and numbers. Once written to S3 the data is rarely changed, as it has already been sent to the end customer for them to use as they see fit. However on some occasions, customers may need certain files updated quickly, and this may be for work that has been done months or even years ago. You would need to be able to access this data immediately to make changes in that case, but you must also keep your storage costs extremely low. The data is not easily reproducible if lost. Which S3 storage class should you choose to minimise costs and to maximise retrieval times?

- ☐ S3
-  ☒ S3 - IA
- ☐ S3 - RRS
- ☐ Glacier

The correct answer is S3 - IA.

You run a popular photo sharing website that is based off S3. You generate revenue from your website via paid for adverts, however you have discovered that other websites are linking directly to the images on your site, and not to the HTML pages that serve the content. This means that people are not seeing your adverts and every time a request is made to S3 to serve an image it is costing your business money. How could you resolve this issue?

- ☐ Use CloudFront to serve the static content.
-  ☒ Remove the ability for images to be served publicly to the site and then used signed URL's with expiry dates.



- ☐ Use security groups to blacklist the IP addresses of the sites that do this.
- ☐ Use EBS rather than S3 to store the content.

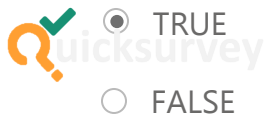
The correct answer is Remove the ability for images to be served publicly to the site and then used signed URL's with expiry dates..

Which of the following are bootable Volumes?

- ✓ ☒ General Purpose SSD (GP2)
- ☐ High Capacity SSD
- ✓ ☒ Provisioned IOPS SSD (IO1)
- ☐ Throughput Optimized HDD (ST1)
- ☐ Cold HDD (SC1)
- ✓ ☒ Magnetic (Standard)

The correct answer is General Purpose SSD (GP2), Provisioned IOPS SSD (IO1), Magnetic (Standard).

Termination protection is turned off by default, you must turn it on.



The correct answer is TRUE.

On an EBS-backed instance, the default action is for the root EBS volume to be deleted when instance is terminated.

- ✓ ☒ YES
- ☐ NO
- ☐ Only when you have checked the option to delete the volume when instance is terminated
- ☐ Only when delete on termination is checked during launch

The correct answer is YES.

By default it is checked, hence option 4 is just saying that user has to check, which is wrong..

What happens when outbound rule is deleted from security group? There is a inbound rule for allowing HTTP traffic on port 80?

- ☐ It doesnt matter if outbound rule is there or not, since security groups are stateless it will allow the traffic.



☒ When user requests an index page from the browser, he will see an output on the browser.

☐ HTTP traffic will hit the underlying EC2 resource however there will be no data sent out as there is no outbound rule.

☐ if HTTPS was used there is no need of outbound rule as security groups are stateful.

The correct answer is When user requests an index page from the browser, he will see an output on the browser..

If your EC2 instances is in eu-west-2b, can you attach a cold HDD volume which was created in different availability zone?

☐ Cold HDD volumes are not root volumes, so there will no problem in attaching them.

☐ YES

☒ NO

☐ Only when both volumes are different region.

The correct answer is NO.

What are the different options of taking RAID array snapshot?

- ✓ ☒ Unmount the RAID Array
 - ☐ Remove the striping from RAID and take snapshot of each EBS volume and restrip the volumes created from snapshot taken
- ✓ ☒ Freeze the File System
- ✓ ☒ Shutting down the associated EC2 instance

The correct answer is Unmount the RAID Array, Freeze the File System, Shutting down the associated EC2 instance.

How to encrypt the root volume for an ec2 instance?

- ☐ Root Volume cannot be encrypted since amazon market place do not have encrypted images.
- ☐ Create a snapshot from an un-encrypted volume, copy the snapshot, create an image from the copied snapshot, launch an ec2 instance from the created image
- ☐ Create a snapshot from an un-encrypted volume, copy the snapshot and check encrypted option, create a volume from the copied snapshot, attach the volume to an ec2 instance, mark this volume as root
- ✓ ☒ Create a snapshot from an un-encrypted volume, copy the snapshot and check encrypted option, create an image from the copied snapshot, launch an ec2 instance from the created image



The correct answer is Create a snapshot from an un-encrypted volume, copy the snapshot and check encrypted option, create an image from the copied snapshot, launch an ec2 instance from the created image.

which of the following is true for placement group?

- ✓ ☒ You cannot merge placement groups
- ✓ ☒ You cannot move an existing instance into a placement group. you can create an AMI from your existing instance, an then launch a new instance from the AMI into placement group
- ✓ ☒ A placement group cant't span multiple availability zones.
 - ☐ AWS recommend non-homogeneous instances within placement groups.
 - ☐ Placegroup can have any instances type

The correct answer is You cannot merge placement groups, You cannot move an existing instance into a placement group. you can create an AMI from your existing instance, an then launch a new instance from the AMI into placement group, A placement group cant't span multiple availability zones..


Do Amazon EBS volumes persist independently from the life of an Amazon EC2 instance, for example, if I terminated an EC2 instance, would that EBS volume remain?

- ☐ yes
- ☐ no
- ☐ depends on the region

 ☒ only if instructed to when created


The correct answer is only if instructed to when created.

What happens when an IAM role with s3 access policy attached to EC2 instance is deleted?

-  ☒ EC2 instance loses the access to S3
- ☐ you cannot remove iam role when EC2 instance is running
- ☐ No changes, EC2 will still have access to S3, since secret access key and access id was saved when iam role was attached to EC2 instance.
- ☐ IAM roles cannot be deleted once they are created

The correct answer is EC2 instance loses the access to S3 .

Can I delete a snapshot of an EBS Volume that is used as the root device of a registered AMI?

- ☐ Yes
-  ☒ No
- ☐ Only via the command line



The correct answer is No.

you must deregister the AMI before being able to delete the root device.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-deleting-snapshot.html>.

A placement group is ideal for

- ☐ Distributing content on a CDN network
- ☐ EC2 instances that require high disk IO
- ☐ EC2 Instances that require low latency and high network throughput across multiple availability zones.
- ✓ ☒ EC2 Instances that require low latency and high network throughput across single availability zones.

The correct answer is EC2 Instances that require low latency and high network throughput across single availability zones..

The name of the server that supplied the data for the zone is called _____

- ☐ CNAME
- ☐ MX



The correct answer is SOA.

A ____ record is the fundamental type of DNS record. It is used by a computer to translate the name of the domain to the IP address.

- ✓ ☒ A
- ☐ MX
- ☐ NS
- ☐ CNAME

The correct answer is A.


The length that a DNS record is cached on either the resolving server or the users own local pc is equal to the value of the _____

- ☐ Alias Record
- ☐ MX Record

- 
- ☒ Time to Live
- ☐ CNAME


The correct answer is Time to Live.

which of the following is used to move one domain to another?

- ☐ TNAME
- ☐ SNAME
-  ☒ CNAME
- ☐ MX

The correct answer is CNAME.

A CNAME can't be used for naked domain names (zone apex).

-  ☒ TRUE
- ☐ FALSE

 The correct answer is TRUE.

___ records are used by top level domain servers to direct traffic to the content DNS server which contains the authoritative DNS records.

- ✓ ☒ NS
- ☐ SOA
- ☐ CNAME
- ☐ MX

The correct answer is NS.

What are the five routing policies of route 53?

- ☐ Region level routing policy, Availability zone level routing policy, Placement group level level routing policy, Global routing policy, Multi routing policy
- ☐ Complex, Weighted, Latency, Redundant, Location
- ☐ NS,SOA,A,CNAME,MX
- ✓ ☒ Simple, Weighted, Latency, Failover, GeoLocation



The correct answer is Simple, Weighted, Latency, Failover, GeoLocation.

What are the three different private IP Address Ranges?

- ✓ ☒ 10.0.0.0 - 10.255.255.255 (10/8 prefix)
- ☐ 0.0.0.0 - 0.255.255.255 (10/8 prefix)
- ☐ 172.0.0.0 - 172.255.255.255 (172. 10/8 prefix)
- ✓ ☒ 172.16.0.0 - 172.31.255.255 (172. 16/12 prefix)
- ✓ ☒ 192.168.0.0 - 192.168.255.255 (192. 168/16 prefix)
- ☐ 192.0.168.0 - 192.255.168.255 (192. /24 . 168 . /24 prefix)

The correct answer is 10.0.0.0 - 10.255.255.255 (10/8 prefix), 172.16.0.0 - 172.31.255.255 (172. 16/12 prefix), 192.168.0.0 - 192.168.255.255 (192. 168/16 prefix).

Which of the following is not true for VPC?

- ☐ It is a good practice to deploy application and database in private subnet.
- ✓ ☒ one subnet can be attached to multiple availability zone.
- ☐ You can have multiple VPC in a region and transitive peering is not allowed.
- ✓ ☒ one vpc can have multiple internet gateway to increase the throughput of the system.
- ✓ ☒ one subnet can be attached to multiple network ACLs



The correct answer is one subnet can be attached to multiple availability zone., one vpc can have multiple internet gateway to increase the throughput of the system., one subnet can be attached to multiple network ACLs.

What does CIDR stands for?

- ☐ Classical Inter-Domain Routing
- ☐ Classless Internet-Domain Route
- ☒ Classless Inter-Domain Routing
- ☐ Classical IP DHCP Route

The correct answer is Classless Inter-Domain Routing.

In VPC, you can create a VPC with /8 CIDR

- ☐ TRUE
- ☒ FALSE



The correct answer is FALSE.

You cannot create a VPC larger than /16..

What are created by default when custom VPC is created inside a us-east region?

- ☐ Subnets
- ✓ ☒ Main Route Tables
- ☐ Availability Zone
- ✓ ☒ Network ACLS
- ✓ ☒ Security Groups
- ☐ Internet Gateway

The correct answer is Main Route Tables, Network ACLS, Security Groups.

What is the number of available IP when /24 CIDR block is created?

- ✓ ☒ 251
- ☐ 255
- ☐ 254
- ☐ 256



The correct answer is 251.

10.0.0.0 - Network Address | 10.0.0.1 - Reserved by aws for the vpc router | 10.0.0.2 - Reserved by AWS, IP address of the DNS Server is always base of the VPC network range plus two; However aws reserve the base of each subnet range plus two. | 10.0.0.3 - Reserved by AWS for future use | 10.0.0.255 - Network broadcast address. we do not support broadcast in a VPC, therefore we reserve this address. .

By Default, Internet Gateway is attached to default VPC of the region in which it was created?

☐ TRUE

✓ ☒ FALSE

The correct answer is FALSE.

.

With NAT Gateway security groups needs to be selected manually however for NAT instances it is AWS responsibility to select a security group?

☐ TRUE

✓ ☒ FALSE

☐ NAT Instance and NAT gateway are same, it is AWS responsibility to attach security group to both

☐ Only when NAT instance is in public subnet, if it is in private subnet it is user responsibility to attach security group



The correct answer is FALSE.

With NAT instance security groups needs to be selected manually however for NAT gateway it is AWS responsibility to select a security group.

What is the status of route when NAT instance associated with that route is deleted?

- ☐ Unavailable
- ☐ Unreachable
- ☒ Black Hole
- ☐ In Active

The correct answer is Black Hole.

.

NAT gateways can be deployed in private subnet?

- ☐ TRUE
- ☒ FALSE

The correct answer is FALSE.

.

Network Access Control list are close to internet gateway that is why they are called first layer of defense, however security group is at instance level that is why they are called second layer of defense.

- ☐ TRUE
- ✓ ☒ FALSE
- ☐ Only for public subnets, private subnet do not require any layer of defense
- ☐ Only for private subnets, public subnet do not require any layer of defense

The correct answer is FALSE.

When a default network ACL are created, all inbound and outbound traffic is allowed by default, however when custom network ACL is created, all inbound and outbound is denied?

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

90. However, inbound and outbound rules are defined to allow traffic on port 80, however webserver associated with the NACL is still not accessible?

- ✓ ☒ Ephemeral Ports (1024 - 65535) are not added to the NACL
- ☐ Webserver needs elastic IP
- ☐ Security groups are stateless outbound rule should be defined for the webserver ec2 instance
- ☐ Ephemeral Ports (1024 - 65535) are added to the NACL which needs to be removed


The correct answer is Ephemeral Ports (1024 - 65535) are not added to the NACL.

You can associate a network ACL with single subnet; however multiple subnet can be associated with one network ACL at a time. When you associate a network ACL with a subnet, the previous association is removed.

- ✓ ☒ TRUE
- ☐ FALSE



The correct answer is TRUE.

 A network ACL contains a numbered list of rule that is evaluated in order, starting with the _____ numbered rule.

- ☐ highest
-  ☒ lowest
- ☐ random
- ☐ even or odd

The correct answer is lowest.

In SQS, to send message to FIFO queue what are the required fields?

- ☐ Message Body
-  ☒ Message Group ID
-  ☒ Message Deduplication ID
- ☐ Message Duplication ID

The correct answer is Message Group ID, Message Deduplication ID.

Standard queues provide a loose-FIFO capability that attempts to preserve the order of messages. However, because standard queues are designed to be massively scalable using a highly distributed architecture, receiving messages in the exact order they are sent is not guaranteed.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

Which of the following is true for SWF and SQS? Choose 3 Answers

- ☐ Amazon SWF API actions are message-oriented. Amazon SQS API actions are task-oriented.
- ✓ ☒ Amazon SWF keeps track of all tasks and events in an application. Amazon SQS requires you to implement your own application-level tracking, especially if your application uses multiple queues.
- ☐ The Amazon SQS Console and visibility APIs provide an application-centric view that lets you search for executions, drill down into an execution's details, and administer executions. Amazon SWF requires implementing such additional functionality.
- ✓ ☒ Amazon SWF offers several features that facilitate application development, such as passing data between tasks, signaling, and flexibility in distributing tasks. Amazon SQS requires you to implement some application-level functionality.
- ✓ ☒ In addition to a core SDK that calls service APIs, Amazon SWF provides the AWS Flow Framework with which you can write distributed applications using programming constructs that structure asynchronous interactions.




The correct answer is Amazon SWF keeps track of all tasks and events in an application. Amazon SQS requires you to implement your own application-level tracking, especially if your application uses multiple queues., Amazon SWF offers several features that facilitate application development, such as passing data between tasks, signaling, and flexibility in distributing tasks. Amazon SQS requires you to implement some application-level functionality., In addition to a core SDK that calls service APIs, Amazon SWF provides the AWS Flow Framework with which you can write distributed applications using programming constructs that structure asynchronous interactions..

In SQS, What is the maximum limit for message visibility?

- ☐ 1 hour
- ✓ ☒ 12 hours
- ☐ 24 hours
- ☐ 2 hours

The correct answer is 12 hours.

To determine the time-in-queue value, you can request the _____ attribute when receiving a message. Subtracting that value from the current time results in the time-in-queue value.

-  ☐ TimestampSent
- ☐ TimeInQueue
- ✓ ☒ SentTimestamp
- ☐ TimestampInQueue

The correct answer is SentTimestamp .

What type of SQS polling has less cost associated with it?

- ✓ ☒ Long Polling
- ☐ Short Polling
- ☐ Temporary Polling
- ☐ Spot Polling

The correct answer is Long Polling.

Which SQS Polling method is good for a single thread application which needs an immediate response?

- ☐ Long Polling



- ☒ Short Polling
- ☐ Spot Polling
- ☐ Temporary Polling

The correct answer is Short Polling.

Amazon SQS supports the HTTP traffic over

- ☒ SSL/TLS
- ☐ TCP
- ☐ IP
- ☐ FTP

The correct answer is SSL/TLS.

You can configure the Amazon SQS message retention period to a value from ____ minute/s to ____ day/s. The default is ____ day/s. Once the message retention limit is reached, your messages are automatically deleted. (Fill in the three blanks in the respective order)

- ☐ 1, 1, 1

- 
- ☒ 1, 14, 4
- ☐ 1, 4, 14
- ☐ 1, 4, 4

The correct answer is 1, 14, 4.

You have launched an Amazon Elastic Compute Cloud (EC2) instance into a public subnet with a primary private IP address assigned, an internet gateway is attached to the VPC, and the public route table is configured to send all Internet-based traffic to the Internet gateway. The instance security group is set to allow all outbound traffic but cannot access the internet. Why is the Internet unreachable from this instance?

- ☐ The internet gateway security group must allow all outbound traffic.
- ☒ The instance does not have a public IP address.
- ☐ The instance security group must allow all inbound traffic.
- ☐ The instance "Source/Destination check" property must be enabled.

The correct answer is The instance does not have a public IP address..

If you're unable to connect via SSH to your EC2 instance, which of the following should you check and possibly correct to restore connectivity?




- ☐ Adjust Security Group to permit egress traffic over TCP port 443 from your IP.
- ☐ Configure the IAM role to permit changes to security group settings.
- ☐ Modify the instance security group to allow ingress of ICMP packets from your IP.
- ✓ ☒ Adjust the instance's Security Group to permit ingress traffic over port 22 from your IP.
- ☐ Apply the most recently released Operating System security patches.

The correct answer is Adjust the instance's Security Group to permit ingress traffic over port 22 from your IP..

A customer needs corporate IT governance and cost oversight of all AWS resources consumed by its divisions. The divisions want to maintain administrative control of the discrete AWS resources they consume and keep those resources separate from the resources of other divisions. Which of the following options, when used together will support the autonomy/control of divisions while enabling corporate IT to maintain governance and cost oversight? Choose 2 answers


- ☐ Use AWS Consolidated Billing and disable AWS root account access for the child accounts.
- ✓ ☒ Enable IAM cross-account access for all corporate IT administrators in each child account.
- ☐ Create separate VPCs for each division within the corporate IT AWS account.
- ✓ ☒ Use AWS Consolidated Billing to link the divisions' accounts to a parent corporate account.

-  ☐ Write all child AWS CloudTrail and Amazon CloudWatch logs to each child account's Amazon S3 'Log' bucket.

The correct answer is Enable IAM cross-account access for all corporate IT administrators in each child account., Use AWS Consolidated Billing to link the divisions' accounts to a parent corporate account..

A - Need to link accounts and disabling root access is just a best practice E - Preferred approach would be to store logs from multiple accounts to a single S3 bucket with CloudTrail for IT Governance and CloudWatch alerts for Cost Oversight.

Before I delete an EBS volume, what can I do if I want to recreate the volume later?

- ☐ Create a copy of the EBS volume (not a snapshot)
- ☒  Store a snapshot of the volume
- ☐ Download the content to an EC2 instance
- ☐ Back up the data in to a physical disk

The correct answer is Store a snapshot of the volume.

Select the most correct answer: The device name /dev/sda1 (within Amazon EC2) is

- ☐ Possible for EBS volumes



- ☒ Reserved for the root device
- ☐ Recommended for EBS volumes
- ☐ Recommended for instance store volumes

The correct answer is Reserved for the root device.

What is the Reduced Redundancy option in Amazon S3?

- ☐ It doesn't exist in Amazon S3, but in Amazon EBS.
- ☒ Less redundancy for a lower cost.
- ☐ More redundancy for a lower cost.
- ☐ It allows you to destroy any copy of your files outside a specific jurisdiction.

The correct answer is Less redundancy for a lower cost..

Fill in the blanks: Resources that are created in AWS are identified by a unique identifier called an ____

- ☐ Amazon Resource Number
- ☐ Amazon Resource Nametag



- ☒ Amazon Resource Name
- ☐ Amazon Reesource Namespace

The correct answer is Amazon Resource Name.

If I write the below command, what does it do? `ec2-run ami-e3a5408a -n 20 -g appserver`

- ☒ Start twenty instances as members of appserver group.
- ☐ Creates 20 rules in the security group named appserver
- ☐ Terminate twenty instances as members of appserver group.
- ☐ Start 20 security groups

The correct answer is Start twenty instances as members of appserver group..

Can I control if and when MySQL based RDS Instance is upgraded to new supported versions?

- ☐ No
- ☐ Only in VPC



☒ Yes

☐ Only for Oracle RDS

The correct answer is Yes.

When you view the block device mapping for your instance, you can see only the EBS volumes, not the instance store volumes.


- ☐ Depends on the instance type
- ☐ FALSE
- ☐ Depends on whether you use API call

✓ ☒ TRUE

The correct answer is TRUE.

By default, EBS volumes that are created and attached to an instance at launch are deleted when that instance is terminated. You can modify this behavior by changing the value of the flag_____ to false when you launch the instance

- ✓ ☒ DeleteOnTermination
- ☐ RemoveOnDeletion

-  ☐ TerminateOnDeletion
- ☐ RemoveOnTermination

The correct answer is DeleteOnTermination.

What are the two permission types used by AWS?

- ☐ Resource-based and Product-based
- ☐ Product-based and Service-based
- ☐ Service-based and Policy Based
- ✓ ☒ User-based and Resource-based

The correct answer is User-based and Resource-based.

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

- ☐ FreeStorage
- ✓ ☒ FreeStorageSpace
- ☐ FreeStorageVolume



The correct answer is FreeStorageSpace.

What is the maximum key length of a tag?

- ☐ 512 Unicode characters
- ☐ 64 Unicode characters
- ☐ 256 Unicode characters
- ✓ ☒ 128 Unicode characters

The correct answer is 128 Unicode characters.

You must increase storage size in increments of at least ____ %

- ☐ 40
- ☐ 20
- ✓ ☒ 10
- ☐ 50



The correct answer is 10.

.

Changes to the backup window take effect ____.

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

The correct answer is immediately.

.

Using Amazon CloudWatch's Free Tier, what is the frequency of metric updates which you receive?

- ✓ ☒ 5 minutes
- ☐ 500 milliseconds.
- ☐ 30 seconds
- ☐ 1 minute

 The correct answer is 5 minutes.

Which is the default region in AWS?

- ☐ eu-west-1
- ✓ ☒ us-east-1
- ☐ us-east-2
- ☐ ap-southeast-1

The correct answer is us-east-1.

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

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

The correct answer is BYOL and License Included.



BYOL: Under this model, you will continue to use your active Oracle support account and contact Oracle directly for Oracle Database specific service requests. If you have an active AWS Premium Support account, you can contact AWS Premium Support for Amazon RDS specific issues. Amazon Web Services and Oracle have multi-vendor support process for cases which require assistance from both organisations. License Included: In this model, if you have an active AWS Premium Support account, you should contact AWS Premium Support for both Amazon RDS and Oracle Database specific service requests..

EBS Snapshots occur ____

- ✓ ☒ Asynchronously
- ☐ Synchronously
- ☐ Weekly
- ☐ Daily

The correct answer is Asynchronously.

Out of the stripping options available for the EBS volumes, which one has the following disadvantage : 'Doubles the amount of I/O required from the instance to EBS compared to RAID 0, because you're mirroring all writes to a pair of volumes, limiting how much you can stripe.' ?

- ☐ Raid 5
- ✓ ☒ RAID 1+0 (RAID 10)
- ☐ Raid 1
- ☐ Raid 2



The correct answer is RAID 1+0 (RAID 10).

Is creating a Read Replica of another Read Replica supported?

- ☐ Only in certain regions
- ☐ Only with MSSQL based RDS
- ☐ Only for Oracle RDS types
- ☒ No

The correct answer is No.

It is only supported for MYSQL based RDS and in all regions.

Can Amazon S3 uploads resume on failure or do they need to restart?

- ☐ Restart from beginning
- ☐ You can resume them, if you flag the "resume on failure" option before uploading.
- ☒ Resume on failure
- ☐ Depends on the file size

 The correct answer is **Resume on failure.**

Which of the following cannot be used in Amazon EC2 to control who has access to specific Amazon EC2 instances?

- ☐ Security Groups
- ✓ ☒ IAM System
- ☐ SSH keys
- ☐ Windows passwords

The correct answer is **IAM System.**

How can I change the security group membership for interfaces owned by other AWS, such as Elastic Load Balancing?

- ✓ ☒ By using the service specific console or API\CLI commands
- ☐ None of these
- ☐ Using Amazon EC2 API/CLI
- ☐ using all these methods



The correct answer is By using the service specific console or API\CLI commands.

What is the maximum write throughput I can provision for a single DynamoDB table?

- ☐ 1,000 write capacity units
- ☐ 100,000 write capacity units
- ☒ **DynamoDB is designed to scale without limits, but if you go beyond 10,000 you have to contact AWS first.**
- ☐ 10,000 write capacity units

The correct answer is DynamoDB is designed to scale without limits, but if you go beyond 10,000 you have to contact AWS first..

Can a 'user' be associated with multiple AWS accounts?

- ☐ YES
- ☒ **NO**
- ☐ yes via Federation
- ☐ Only for US region



The correct answer is NO.

Accessing using federation is not same as associating user.

Manually created DB Snapshots are deleted after the DB Instance is deleted.

☐ TRUE



☒ FALSE

The correct answer is FALSE.

.

Can I move a Reserved Instance from one Region to another?

☐ Yes

☐ Only if they are moving into GovCloud



☒ No

☐ Only if they are moving to US East from another region

The correct answer is No.

Reserved Instance can be moved from one availability zone to another, but region movement is not possible.

What does specifying the mapping /dev/sdc=none when launching an instance do?



- ☐ Prevents /dev/sdc from creating the instance.
- ☐ Prevents /dev/sdc from deleting the instance.
- ☐ Set the value of /dev/sdc to 'zero'.
- ✓ ☒ Prevents /dev/sdc from attaching to the instance.

The correct answer is Prevents /dev/sdc from attaching to the instance..

What is the durability of S3 RRS?

- ✓ ☒ 99.99%
- ☐ 99.95%
- ☐ 99.995%
- ☐ 99.999999999%

The correct answer is 99.99%.

Is Federated Storage Engine currently supported by Amazon RDS for MySQL?

- ☐ Only for Oracle RDS instances

- 
- ☒ No
- ☐ Yes
- ☐ Only in VPC

The correct answer is No.

Is there a limit to how many groups a user can be in?



- ✓ ☒ Yes for all users
- ☐ Yes for all users except root
- ☐ No
- ☐ Yes unless special permission granted

The correct answer is Yes for all users.

Groups a user can be a member of: 10.

If you need to add a large number of users, consider using


- ☐ temporary security groups
- ☐ temporary security Policies

-  ☐ temporary security Roles
-  ☒ temporary security credentials

The correct answer is temporary security credentials.



If you need to add a large number of users, consider using temporary security credentials. For more information about temporary security credentials, go to Temporary Security Credentials.




Can you increase the number of roles in an instance profile?

- ☐ YES
-  ☒ NO
- ☐ You can increase it by contacting AWS
- ☐ In certain regions

The correct answer is NO.


You can request to increase some of these quotas for your AWS account on the IAM Limit Increase Contact Us Form.

-  ☒ users per AWS account
-  ☒ groups per AWS account

-  ☐ Roles in instance profiles per AWS account
-  ☒ roles per AWS account
-  ☒ instance profiles per AWS account
- ☐ Virtual MFA devices per AWS account
-  ☒ server certificates per AWS account.

The correct answer is users per AWS account, groups per AWS account, roles per AWS account, instance profiles per AWS account, server certificates per AWS account..

For inline policies: You can add as many inline policies as you want to a user, role, or group, but the total aggregate policy size (the sum size of all inline policies) per entity cannot exceed the following limits (which of the following is false)

- ☐ User policy size cannot exceed 2,048 characters
- ☐ Role policy size cannot exceed 10,240 characters
- ☐ Group policy size cannot exceed 5,120 characters
-  ☒ IAM counts whitespaces when calculating the size of a policy against these limitations.



The correct answer is IAM counts whitespaces when calculating the size of a policy against these limitations..

IAM does not count whitespace when calculating the size of a policy against these limitations..

To get account-level information about entity usage and quotas, use the _____ API action or the _____ AWS CLI command.

- ☐ GetSummaryAccount, get-summary-account
- ☐ GetAccountLevelInfo, get-account-level-info
- ☒ GetAccountSummary, get-account-summary
- ☐ GetLevelInfoAccount, get-level-info-account

The correct answer is GetAccountSummary, get-account-summary.

A/An _____ acts as a firewall that controls the traffic allowed to reach one or more instances.

- ☒ security group
- ☐ ACL
- ☐ IAM
- ☐ Private IP Addresses

 The correct answer is security group.

While launching an RDS DB instance, on which page I can select the Availability Zone?

- ☐ REVIEW
- ☐ DB INSTANCE DETAILS
- ☐ MANAGEMENT OPTIONS
- ✓ ☒ ADDITIONAL CONFIGURATION

The correct answer is **ADDITIONAL CONFIGURATION**.

What does the following command do with respect to the Amazon EC2 security groups?
ec2-create-group CreateSecurityGroup

- ☐ Groups the user created security groups in to a new group for easy access.
- ✓ ☒ Creates a new security group for use with your account.
- ☐ Creates a new group inside the security group.
- ☐ Creates a new rule inside the security group.



The correct answer is Creates a new security group for use with your account..

In the Launch Db Instance Wizard, where can I select the backup and maintenance options?

- ☐ Under DB INSTANCE DETAILS
- ☐ Under REVIEW
- ☒ Under MANAGEMENT OPTIONS
- ☐ Under ENGINE SELECTION

The correct answer is Under MANAGEMENT OPTIONS.

What happens to the data on an instance if the instance reboots (intentionally or unintentionally)?

- ☐ Data will be lost
- ☒ Data persists
- ☐ Data may persist however cannot be sure
- ☐ Instance Store-Backed instances cannot be rebooted



The correct answer is Data persists.

How many types of block devices does Amazon EC2 support

- ✓ ☒ 2
- ☐ 3
- ☐ 4
- ☐ 1

The correct answer is 2.

Amazon EC2 supports two types of block devices: Instance store volumes (virtual devices whose underlying hardware is physically attached to the host computer for the instance) and EBS volumes (remote storage devices).

While performing the volume status checks, if the status is insufficient-data, what does it mean?

- ✓ ☒ the checks may still be in progress on the volume
- ☐ the check has passed
- ☐ the check has failed
- ☐ None of the above



The correct answer is the checks may still be in progress on the volume.

By default, when an EBS volume is attached to a Windows instance, it may show up as any drive letter on the instance. You can change the settings of the ____ Service to set the drive letters of the EBS volumes per your specifications.

- ☐ EBSSConfig Service
- ☐ AMIConfig Service
- ☒ EC2Config Service
- ☐ EC2-AMIConfig Service

The correct answer is EC2Config Service.

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

- ☐ 5GB
- ☐ 1TB
- ☐ 2TB
- ☒ 6TB



The correct answer is 6TB.

SQL Server ____ store logins and passwords in the master database.

- ☐ can be configured to but by default does not
- ☐ doesn't
- ☒ does
- ☐ only for certain regions

The correct answer is does.

Using Amazon IAM, can I give permission based on organizational groups?

- ☐ Yes but only in certain cases
- ☐ No
- ☒ Yes always
- ☐ Yes for all region

The correct answer is Yes always.



IAM is global, that is why D is incorrect.

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

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

The correct answer is CreateSnapshot.

Read Replicas require a transactional storage engine and are only supported for the ____ storage engine

- ☐ OracleISAM
- ☐ MSSQLDB
- ✓ ☒ InnoDB
- ☐ MyISAM

The correct answer is InnoDB.

 When should I choose Provisioned IOPS over Standard RDS storage?

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

The correct answer is If you use production online transaction processing (OLTP) workloads..

In the 'Detailed' monitoring data available for your Amazon EBS volumes, Provisioned IOPS volumes automatically send ____ minute metrics to Amazon CloudWatch.

- ☐ 2
- ☐ 3
- ☒ 1
- ☐ 5

The correct answer is 1.

Are Reserved Instances available for Multi-AZ Deployments?



- ☐ Only for Cluster Compute instances
- ✓ ☒ Yes for all instance types
- ☐ Only for M3 instance types
- ☐ No

The correct answer is Yes for all instance types.

When you call the DescribeReservedDBInstancesOfferings API, simply look for the Multi-AZ options listed among the DB Instance configurations available for purchase. If you want to purchase a reservation for a DB Instance with synchronous replication across multiple Availability Zones, specify one of these offerings in your PurchaseReservedDBInstancesOffering call..

Which Amazon Storage behaves like raw, unformatted, external block devices that you can attach to your instances?

- ✓ ☒ EBS
- ☐ Instance Store
- ☐ EFS
- ☐ All of the above

The correct answer is EBS.



If you have chosen Multi-AZ deployment, in the event of a planned or unplanned outage of your primary DB Instance, Amazon RDS automatically switches to the standby replica. The automatic failover mechanism simply changes the _____ record of the main DB Instance to point to the standby DB Instance.

- ☐ DNAME
- ✓ ☒ CNAME
- ☐ TXT
- ☐ MX

The correct answer is CNAME.

If I want to run a database in an Amazon instance, which is the most recommended Amazon storage option?

- ☐ Amazon Instance Store
- ✓ ☒ Amazon EBS
- ☐ Amazon S3
- ☐ Amazon Dynamo DB

 The correct answer is Amazon EBS.

Can I test my DB Instance against a new version before upgrading?

- ☐ No
- ✓ ☒ Yes
- ☐ Only in VPC

The correct answer is Yes.

Can I use Provisioned IOPS with VPC?

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

The correct answer is Yes for all RDS instances.

 Making your snapshot public shares all snapshot data with everyone. Can the snapshots with AWS Marketplace product codes be made public?

- ☐ YES
- ✓ ☒ NO

The correct answer is NO.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-modifying-snapshot-permissions.html>.

Can I encrypt connections between my application and my DB Instance using SSL?

- ☐ No
- ✓ ☒ Yes
- ☐ Only in VPC
- ☐ Only in certain regions

The correct answer is Yes.

What are the four levels of AWS Premium Support?

- ✓ ☒ Basic, Developer, Business, Enterprise



- ☐ Basic, Startup, Business, Enterprise
- ☐ Free, Bronze, Silver, Gold
- ☐ All support is free

The correct answer is Basic, Developer, Business, Enterprise.


What can I access by visiting the URL: <http://status.aws.amazon.com/> ?

- ☐ Amazon Cloud Watch
- ☐ Status of the Amazon RDS DB
- ☒ AWS Service Health Dashboard
- ☐ AWS Cloud Monitor

The correct answer is AWS Service Health Dashboard.


Please select the Amazon EC2 resource which cannot be tagged.

- ☐ images (AMIs, kernels, RAM disks)
- ☐ Amazon EBS volumes

- 
- ☒ Elastic IP addresses
- ☐ VPCs


The correct answer is Elastic IP addresses.

Can the string value of 'Key' be prefixed with: aws:

- ☐ Only in GovCloud
- ☐ Only for S3 not EC2
- ☐ Yes
-  ☒ No

The correct answer is No.

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

-  ☒ SQL Server
- ☐ MySQL
- ☐ Oracle



The correct answer is SQL Server.

REST or Query requests are HTTP or HTTPS requests that use an HTTP verb (such as GET or POST) and a parameter named Action or Operation that specifies the API you are calling.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

Through which of the following interfaces is AWS Identity and Access Management available? A) AWS Management Console B) Command line interface (CLI) C) IAM Query API D) Existing libraries

- ☐ Only through Command line interface (CLI)
- ☐ A, B and C
- ☐ A and C
- ✓ ☒ All of the above



The correct answer is All of the above.

.

Which of the following programming languages have an officially supported AWS SDK?
Choose 2 answers

- ✓ ☒ PHP
- ☐ Pascal
- ✓ ☒ Java
- ☐ SQL
- ☐ Perl

The correct answer is PHP, Java.

.

HTTP Query-based requests are HTTP requests that use the HTTP verb GET or POST and a Query parameter named_____

- ✓ ☒ Action
- ☐ Value
- ☐ Reset



The correct answer is Action.

.

Select the incorrect statement

- ☐ In Amazon EC2, this private IP address is only returned to Amazon EC2 when the instance is stopped or terminated
- ☐ In Amazon VPC, an instance retains its private IP addresses when the instance is stopped.
- ✓ ☒ In Amazon VPC, an instance does NOT retain its private IP addresses when the instance is stopped.
- ☐ In Amazon EC2, the private IP address is associated exclusively with the instance for its lifetime

The correct answer is In Amazon VPC, an instance does NOT retain its private IP addresses when the instance is stopped..

.

The new DB Instance that is created when you promote a Read Replica retains the backup window period.

- ✓ ☒ TRUE



The correct answer is TRUE.


Your company policies require encryption of sensitive data at rest. You are considering the possible options for protecting data while storing it at rest on an EBS data volume, attached to an EC2 instance. Which of these options would allow you to encrypt your data at rest? (Choose 3 answers)

- ✓ ☒ Implement third party volume encryption tools
- ☐ Do nothing as EBS volumes are encrypted by default
- ✓ ☒ Encrypt data inside your applications before storing it on EBS
- ✓ ☒ Encrypt data using native data encryption drivers at the file system level
- ☐ Implement SSL/TLS for all services running on the server

The correct answer is Implement third party volume encryption tools, Encrypt data inside your applications before storing it on EBS, Encrypt data using native data encryption drivers at the file system level.

What is the maximum response time for a Business level Premium Support case?

- ☐ 120 seconds

- 
- ☒ 1 hour
- ☐ 10 minutes
- ☐ 12 hours

The correct answer is 1 hour.

True or False: Without IAM, you cannot control the tasks a particular user or system can do and what AWS resources they might use.

- ☐ FALSE
- ☒ TRUE

The correct answer is TRUE.

When you use the AWS Management Console to delete an IAM user, IAM also deletes any signing certificates and any access keys belonging to the user. True or False?

- ☐ FALSE
- ☐ This is configurable
- ☒ TRUE



The correct answer is TRUE.

Select the correct set of options. These are the initial settings for the default security group:

- ✓ ☒ Allow no inbound traffic, Allow all outbound traffic and Allow instances associated with this security group to talk to each other
- ☐ Allow all inbound traffic, Allow no outbound traffic and Allow instances associated with this security group to talk to each other
- ☐ Allow no inbound traffic, Allow all outbound traffic and Does NOT allow instances associated with this security group to talk to each other
- ☐ Allow all inbound traffic, Allow all outbound traffic and Does NOT allow instances associated with this security group to talk to each other

The correct answer is Allow no inbound traffic, Allow all outbound traffic and Allow instances associated with this security group to talk to each other.

The one-time payment for Reserved Instances is ____ refundable if the reservation is cancelled.

- ☐ always
- ☐ in some circumstances



The correct answer is never.

After an Amazon VPC instance is launched, can I change the VPC security groups it belongs to?

- ☐ Only if the tag "VPC_Change_Group" is true
- ☒ Yes. You can.
- ☐ No. You cannot.
- ☐ Only if the tag "VPC Change Group" is true

The correct answer is Yes. You can..

A_____ is an individual, system, or application that interacts with AWS programmatically.

- ☒ User
- ☐ AWS Account
- ☐ Group
- ☐ Role



The correct answer is User.

Select the correct statement:

- ☐ You don't need not specify the resource identifier while stopping a resource
- ☐ You can terminate, stop, or delete a resource based solely on its tags
- ☒ You can't terminate, stop, or delete a resource based solely on its tags
- ☐ You don't need to specify the resource identifier while terminating a resource

The correct answer is You can't terminate, stop, or delete a resource based solely on its tags.

Amazon EC2 has no Amazon Resource Names (ARNs) because you can't specify a particular Amazon EC2 resource in an IAM policy. True or False?

- ☒ TRUE
- ☐ FALSE

 The correct answer is TRUE.

You can work with tags using the A) AWS Management Console B) the Amazon EC2 command line interface (CLI) C) the AWS CLI D) the Amazon EC2 API.

- ☐ A, B, C
- ✓ ☒ All of the above
- ☐ A, C
- ☐ B, D

The correct answer is All of the above.

Which of the following is possible for tags?

- ✓ ☒ You can edit the tag keys and values
- ✓ ☒ You can remove tags from a resource any time
- ✓ ☒ you can set a tag's value to the empty string
- ☐ you can set a tag's value to null



The correct answer is You can edit the tag keys and values, You can remove tags from a resource any time, you can set a tag's value to the empty string.

Can you assign a tag when you create a resource using AWS CLI command.

- ☐ YES
- ✓ ☒ NO

The correct answer is NO.

You can assign tags only to resources that already exist. You cannot assign tags when you create a resource; for example, when you use the run-instances AWS CLI command. When you use the Amazon EC2 console, some resource creation screens enable you to specify tags which are applied immediately after the resource is created..

If you're using AWS Identity and Access Management (IAM), you can control which users in your AWS account have permission to create, edit, or delete tags.

- ☐ Only for few services
- ☐ Only for users in groups
- ☐ FALSE
- ✓ ☒ TRUE

The correct answer is TRUE.



Maximum number of tags per resource is 50, does aws: prefixed tags count among the 50 limit?

- ☐ YES
- ✓ ☒ NO

The correct answer is NO.

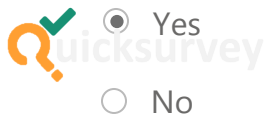
You can tag public or shared resources, but the tags you assign are available only to your AWS account and not to the other accounts sharing the resource.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

Can I initiate a "forced failover" for my MySQL Multi-AZ DB Instance deployment?

- ☐ Only in certain regions
- ☐ Only in VPC



The correct answer is Yes.

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

- ✓ ☒ Yes always
- ☐ No
- ☐ Yes but only if they are using two factor authentication
- ☐ Yes but only in VPC

The correct answer is Yes always.

Is the encryption of connections between my application and my DB Instance using SSL for the MySQL server engines available?

- ✓ ☒ Yes
- ☐ Only in VPC
- ☐ Only in certain regions



The correct answer is Yes.

```
PROMPT> mysql -h myinstance.mydnsnameexample.rds.amazonaws.com --ssl_ca=cert-rds-ssl-ca.pem.
```

Which of the following cannot be tagged?

- ✓ ☒ Instance Store Volume
- ✓ ☒ Elastic IP
- ✓ ☒ Egress-Only Internet Gateway
- ✓ ☒ Key Pair
- ✓ ☒ NAT Gateway
- ✓ ☒ Placement Group
- ✓ ☒ VPC End Point

The correct answer is Instance Store Volume, Elastic IP, Egress-Only Internet Gateway, Key Pair, NAT Gateway, Placement Group, VPC End Point.

Which AWS instance address has the following characteristics? : "If you stop an instance, its Elastic IP address is unmapped, and you must remap it when you restart the instance."

- ☐ VPC Addresses
- ✓ ☒ EC2 Addresses
- ☐ Both A and B
- ☐ None of these

The correct answer is EC2 Addresses.

True or False: Common points of failures like generators and cooling equipment are shared across Availability Zones.

- ☐ TRUE
- ✓ ☒ FALSE

The correct answer is FALSE.

Multi-AZ deployment ____ supported for Microsoft SQL Server DB Instances.



☒ is not currently

☐ is as of 2013

☐ is planned to be in 2014

☐ will never be

The correct answer is is not currently.

Does AWS allow for the use of Multi Factor Authentication tokens?



☒ Yes, with both hardware or virtual MFA devices.

☐ Yes, but it offers only virtual MFA devices.

☐ Yes, but it offers only physical (hardware) MFA devices.

☐ No

The correct answer is Yes, with both hardware or virtual MFA devices..

Is the SQL Server Audit feature supported in the Amazon RDS SQL Server engine?



☒ No



The correct answer is No.

Which of the following is not currently supported for Amazon RDS SQL Server?

- ✓ ☒ Replication
- ✓ ☒ SQL Server Audit
- ✓ ☒ Policy-Based Management
- ✓ ☒ Data Quality Services
- ✓ ☒ Distributed Queries

The correct answer is Replication, SQL Server Audit, Policy-Based Management, Data Quality Services, Distributed Queries.

Which DNS name can only be resolved within Amazon EC2?

- ✓ ☒ Private DNS name
- ☐ Internal DNS name
- ☐ External DNS name



The correct answer is Private DNS name.

If your DB instance runs out of storage space or file system resources, its status will change to____ and your DB Instance will no longer be available.

- ☐ storage-overflow
- ✓ ☒ storage-full
- ☐ storage-exceed
- ☐ storage-overage

The correct answer is storage-full.

Is it possible to access your EBS snapshots?

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

 ☐ EBS doesn't provide snapshots.

The correct answer is Yes, through the Amazon EC2 APIs..

Will my standby RDS instance be in the same Availability Zone as my primary?

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

The correct answer is No.

Does Amazon RDS for SQL Server currently support importing data into the msdb database?

- ☒ No
- ☐ Yes



The correct answer is No.

Every instance in a VPC has a default network interface, called the _____ network interface (eth0).

- ☐ private
- ☐ elastic
- ☒ primary
- ☐ secondary

The correct answer is primary.

You can place a network interface on each of your web servers that connects to a mid-tier network where an application server resides. The application server can also be _____ to a back-end network (subnet) where the database server resides.

- ☒ dual-homed
- ☐ single-homed
- ☐ elastic-homed
- ☐ black-homed



The correct answer is dual-homed.

How to create a low budget high availability solution

- ☐ Deploy in Multiple Regions
- ☐ Deploy in same region but multiple availability zone
- ✓ ☒ network interface can be attached to a replacement or hot standby instance pre-configured for the same role in order to rapidly recover the service.
- ☐ Use free tier aws account resources

The correct answer is network interface can be attached to a replacement or hot standby instance pre-configured for the same role in order to rapidly recover the service..

If one of your instances serving a particular function fails, its network interface can be attached to a replacement or hot standby instance pre-configured for the same role in order to rapidly recover the service. For example, you can use a network interface as your primary or secondary network interface to a critical service such as a database instance or a NAT instance. If the instance fails, you (or more likely, the code running on your behalf) can attach the network interface to a hot standby instance. Because the interface maintains its private IP addresses, Elastic IP addresses, and MAC address, network traffic begins flowing to the standby instance as soon as you attach the network interface to the replacement instance. Users experience a brief loss of connectivity between the time the instance fails and the time that the network interface is attached to the standby instance, but no changes to the VPC route table or your DNS server are required..

You can detach secondary (ethN) network interfaces when the instance is running or stopped. However, you can't detach the primary (eth0) interface.

- ✓ ☒ TRUE



The correct answer is TRUE.

.

If the public IPv4 address on your instance is released, it does not receive a new one if there is more than one network interface attached to the instance.

- ✓ ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

.

By default, network interfaces that are automatically created and attached to instances using the console are set to terminate when the instance terminates. Network interfaces created using the command line interface are also set to terminate when the instance terminates.

- ☐ TRUE
- ✓ ☒ FALSE



The correct answer is FALSE.

By default, network interfaces that are automatically created and attached to instances using the console are set to terminate when the instance terminates. However, network interfaces created using the command line interface aren't set to terminate when the instance terminates..

You can attach a network interface in one subnet to an instance in another subnet in the same VPC; however, both the network interface and the instance must reside in the same Availability Zone.

- ✓ ☒ Yes this is possible
- ☐ 1 Subnet = 1 Availability Zone , hence this is not possible
- ☐ Only in US East Region

The correct answer is Yes this is possible.

In the Amazon RDS Oracle DB engine, the Database Diagnostic Pack and the Database Tuning Pack are only available with ____

- ☐ Oracle Standard Edition
- ☐ Oracle Express Edition
- ✓ ☒ Oracle Enterprise Edition
- ☐ None of these

 The correct answer is Oracle Enterprise Edition.

It is advised that you watch the Amazon CloudWatch "____" metric (available via the AWS Management Console or Amazon Cloud Watch APIs) carefully and recreate the Read Replica should it fall behind due to replication errors.

- ☐ Write Lag
- ☐ Read Replica
- ☒ Replica Lag
- ☐ Single Replica

The correct answer is Replica Lag.

In the context of MySQL, version numbers are organized as MySQL version = X.Y.Z.
What does X denote here?

- ☐ Release level
- ☐ Minor version
- ☐ Version number
- ☒ Major version

 The correct answer is Major version.

During the scaling process, the DB instance will be available for use, but may experience performance degradation. While storage is being added, nightly backups are suspended and no other Amazon RDS operations can take place, including modify, reboot, delete, create Read Replica. However, only create DB snapshot is possible.

☐ TRUE

✓ ☒ FALSE

The correct answer is FALSE.

During the scaling process, the DB instance will be available for use, but may experience performance degradation. While storage is being added, nightly backups are suspended and no other Amazon RDS operations can take place, including modify, reboot, delete, create Read Replica, and create DB Snapshot..

Is decreasing the storage size of a DB Instance permitted?

☐ Depends on the RDMS used

☐ Yes

✓ ☒ No



The correct answer is No.

Select the correct set of steps for exposing the snapshot only to specific AWS accounts?

- ☐ Select public for all the accounts and check mark those accounts with whom you want to expose the snapshots and click save.
- ✓ ☒ Select Private, enter the IDs of those AWS accounts, and click Save
- ☐ Select Public, enter the IDs of those AWS accounts, and click Save.
- ☐ Select Public, mark the IDs of those AWS accounts as private, and click Save.

The correct answer is Select Private, enter the IDs of those AWS accounts, and click Save.

In a management network scenario the which interface on the instance handles public-facing traffic?

- ☐ Primary network interface
- ☐ Subnet interface
- ✓ ☒ Secondary network interface

The correct answer is Secondary network interface.



Which Amazon storage do you think is the best for my database-style applications that frequently encounter many random reads and writes across the dataset?

- ✓ ☒ Amazon EBS
- ☐ Amazon Instance Storage
- ☐ None of the these
- ☐ Any of these

The correct answer is Amazon EBS.

If you are using Amazon RDS Provisioned IOPS storage with MySQL and Oracle database engines, you can scale the throughput of your database Instance by specifying the IOPS rate from ____ .

- ☐ 1,000 to 1,00,000
- ☐ 100 to 1,000
- ☐ 10,000 to 1,00,000
- ✓ ☒ 1,000 to 10,000



The correct answer is 1,000 to 10,000.

Push-Button Scaling DB Instance Class – Using the Amazon RDS APIs or a few clicks of the AWS Management Console, you can scale the compute and memory resources powering your deployment up or down. Scaling operations typically complete within a handful of minutes. Storage and IOPS – As your storage requirements grow you can provision additional storage on-the-fly with zero downtime. If you are using RDS Provisioned IOPS, you can also scale the throughput of your DB Instance by specifying the IOPS rate from 1,000 IOPS to 10,000 IOPS in 1,000 IOPS increments and storage from 100GB to 6TB..

By Default, what is the limit of the elastic IP in aws?

- ☐ 0 elastic ip
- ☐ 2 elastic ip
- ☒ 5 elastic ip
- ☐ 4 elastic ip

The correct answer is 5 elastic ip.

A customer's nightly EMR job processes a single 2-TB data file stored on Amazon Simple Storage Service (S3). The EMR job runs on two On-Demand core nodes and three On-Demand task nodes. Which of the following may help reduce the EMR job completion time? Choose 2 answers

- ☐ Use three Spot Instances rather than three On-Demand instances for the task nodes.
- ☒ Change the input split size in the MapReduce job configuration.
- ☐ Use a bootstrap action to present the S3 bucket as a local filesystem.



- ☐ Launch the core nodes and task nodes within an Amazon Virtual Cloud.
- ☒ Adjust the number of simultaneous mapper tasks.
- ☐ Enable termination protection for the job flow.

The correct answer is Change the input split size in the MapReduce job configuration., Adjust the number of simultaneous mapper tasks..


You have an application running in us-west-2 that requires six EC2 instances running at all times. With three AZs available in that region (us-west-2a, us-west-2b, and us-west-2c), which of the following deployments provides 100 percent fault tolerance if any single AZ in us-west-2 becomes unavailable? Choose 2 answers

- ☐ Us-west-2a with two EC2 instances, us-west-2b with two EC2 instances, and us-west-2c with two EC2 instances
- ☐ Us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with no EC2 instances
- ☐ Us-west-2a with four EC2 instances, us-west-2b with two EC2 instances, and us-west-2c with two EC2 instances
- ☒ Us-west-2a with six EC2 instances, us-west-2b with six EC2 instances, and us-west-2c with no EC2 instances
- ☒ Us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with three EC2 instances



The correct answer is Us-west-2a with six EC2 instances, us-west-2b with six EC2 instances, and us-west-2c with no EC2 instances, Us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with three EC2 instances.


You have a business-critical two-tier web app currently deployed in two AZs in a single region, using Elastic Load Balancing and Auto Scaling. The app depends on synchronous replication (very low latency connectivity) at the database layer. The application needs to remain fully available even if one application AZ goes off-line, and Auto Scaling cannot launch new instances in the remaining Availability Zones. How can the current architecture be enhanced to ensure this?

- ☐ Deploy in two regions using Weighted Round Robin (WRR), with Auto Scaling minimums set for 50 percent peak load per Region.
- ☐ Deploy in two regions using Weighted Round Robin (WRR), with Auto Scaling minimums set for 100 percent peak load per region.
- ☒  Deploy in three Availability Zones, with Auto Scaling minimum set to handle 50 percent peak load per zone.
- ☐ Deploy in three Availability Zones, with Auto Scaling minimum set to handle 33 percent peak load per zone.

The correct answer is Deploy in three Availability Zones, with Auto Scaling minimum set to handle 50 percent peak load per zone..

A VPC public subnet is one that:



-  ☒ Has at least one route in its associated routing table that uses an Internet Gateway (IGW).
- ☐ Includes a route in its associated routing table via a Network Address Translation (NAT) instance.
- ☐ Has a Network Access Control List (NACL) permitting outbound traffic to 0.0.0.0/0.
- ☐ Has the Public Subnet option selected in its configuration.

The correct answer is Has at least one route in its associated routing table that uses an Internet Gateway (IGW)..

You have been tasked with creating a VPC network topology for your company. The VPC network must support both Internet-facing applications and internally-facing applications accessed only over VPN. Both Internet-facing and internally-facing applications must be able to leverage at least three AZs for high availability. At a minimum, how many subnets must you create within your VPC to accommodate these requirements?

- ☐ 2
- ☐ 3
- ☐ 4
- ☒ 6

 The correct answer is 6.

You are deploying an application on EC2 that must call AWS APIs. What method of securely passing credentials to the application should you use?

- ✓ ☒ Use AWS Identity and Access Management roles for EC2 instances.
- ☐ Pass API credentials to the instance using instance userdata
- ☐ Embed the API credentials into your JAR files.
- ☐ Store API credentials as an object in Amazon Simple Storage Service.

The correct answer is Use AWS Identity and Access Management roles for EC2 instances..

if you are using RDS Provisioned IOPS for MySQL , you can also scale the throughput of your DB Instance by specifying the IOPS rate from _____ in 1,000 IOPS increments and storage from 100GB to 6TB.

- ☐ 1,000 to 1, 00, 000
- ☐ 100 to 1, 000
- ☐ 10, 000 to 1, 00, 000
- ✓ ☒ 1, 000 to 10, 000



The correct answer is 1, 000 to 10, 000.

if you are using RDS Provisioned IOPS for SQL Server, you can also scale the throughput of your DB Instance by specifying the IOPS rate from _____ in 1,000 IOPS increments and storage from 100GB to 6TB.

- ☐ 1,000 to 1, 00, 000
- ☐ 100 to 1, 000
- ☐ 10, 000 to 1, 00, 000
- ✓ ☒ 1, 000 to 20, 000


The correct answer is 1, 000 to 20, 000.

Will I be alerted when automatic fail over occurs?

- ✓ ☒ Only if SNS configured
- ☐ No
- ☐ Yes
- ☐ Only if Cloudwatch configured


 The correct answer is Only if SNS configured.

To help you manage your Amazon EC2 instances, images, and other Amazon EC2 resources, you can assign your own metadata to each resource in the form of _____.

- ☐ special filters
- ☐ functions
-  ☒ tags
- ☐ wildcards

The correct answer is tags.

Can I detach the primary (eth0) network interface when the instance is running or stopped?

- ☐ Yes, You can.
-  ☒ No. You cannot
- ☐ Depends on the state of the interface at the time

The correct answer is No. You cannot.



If you want to launch Amazon Elastic Compute Cloud (EC2) instances and assign each instance a predetermined private IP address you should:

- ☐ Launch the instance from a private Amazon Machine Image (AMI).
- ☐ Assign a group of sequential Elastic IP address to the instances.
- ☒ Launch the instances in the Amazon Virtual Private Cloud (VPC).
- ☐ Launch the instances in a Placement Group.
- ☐ Use standard EC2 instances since each instance gets a private Domain Name Service (DNS) already.

The correct answer is Launch the instances in the Amazon Virtual Private Cloud (VPC)..

Will I be charged if the DB instance is idle?

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



The correct answer is Yes.

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

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

The correct answer is You will need to delete the Read Replica and create a new one to replace it..

You are working with a customer who has 10 TB of archival data that they want to migrate to Amazon Glacier. The customer has a 1-Mbps connection to the Internet. Which service or feature provides the fastest method of getting the data into Amazon Glacier?

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

 The correct answer is AWS Import/Export.

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

- ☐ 1
- ☐ 7
- ☒ 35
- ☐ 25
- ☐ 45

The correct answer is 35.

When an EC2 instance that is backed by an S3-based AMI is terminated, what happens to the data on the root volume?

- ☐ Data is automatically saved as an EBS snapshot.
- ☐ Data is automatically saved as an EBS volume.
- ☐ Data is unavailable until the instance is restarted.
- ☒ Data is automatically deleted.



The correct answer is Data is automatically deleted..

Per the AWS Acceptable Use Policy, penetration testing of EC2 instances:

- ☐ May be performed by AWS, and will be performed by AWS upon customer request.
- ☐ May be performed by AWS, and is periodically performed by AWS.
- ☐ Are expressly prohibited under all circumstances.
- ✓ ☒ May be performed by the customer on their own instances with prior authorization from AWS.
- ☐ May be performed by the customer on their own instances, only if performed from EC2 instances

The correct answer is May be performed by the customer on their own instances with prior authorization from AWS..

To request permission, you must be logged into the AWS portal using the ____ credentials associated with the instances you wish to test

- ✓ ☒ root (for which the penetration testing is to be performed)
- ☐ user (for which the instance has to be tested)
- ☐ region (in which the instance has to be tested)
- ☐ Aws will allocate a new global user id for penetration testing



The correct answer is root (for which the penetration testing is to be performed).

Which of the following can be tested as a part of penetration testing?

✓ ☒ EC2

✓ ☒ RDS

☐ S3

☐ VPC

The correct answer is EC2, RDS.

At this time, our policy does not permit penetration testing _____ RDS instance types.

☐ small , medium, large

✓ ☒ small, micro, nano

☐ small, medium, nano

☐ large, medium

The correct answer is small, micro, nano.



When you put objects in Amazon S3, what is the indication that an object was successfully stored?

- ✓ ☒ A HTTP 200 result code and MD5 checksum, taken together, indicate that the operation was successful.
- ☐ Amazon S3 is engineered for 99.999999999% durability. Therefore, there is no need to confirm that data was inserted.
- ☐ A success code is inserted into the S3 object metadata.
- ☐ Each S3 account has a special bucket named _s3_logs. Success codes are written to this bucket with a timestamp and checksum.

The correct answer is A HTTP 200 result code and MD5 checksum, taken together, indicate that the operation was successful..

Can I delete a snapshot of the root device of an EBS volume used by a registered AMI?

- ☐ Only via API
- ☐ Only via Console
- ☐ Yes
- ✓ ☒ No



The correct answer is No.

By default what are ENIs that are automatically created and attached to instances using the EC2 console set to do when the attached instance terminates?

- ☐ Remain as is
- ✓ ☒ Terminate
- ☐ Hibernate
- ☐ Pause

The correct answer is Terminate.

A company is storing data on Amazon Simple Storage Service (S3). The company's security policy mandates that data is encrypted at rest. Which of the following methods can achieve this? Choose 3 answers

- ✓ ☒ Use Amazon S3 server-side encryption with AWS Key Management Service managed keys.
- ✓ ☒ Use Amazon S3 server-side encryption with customer-provided keys.
- ☐ Use Amazon S3 server-side encryption with EC2 key pair.
- ☐ Use Amazon S3 bucket policies to restrict access to the data at rest.
- ✓ ☒ Encrypt the data on the client-side before ingesting to Amazon S3 using their own master key.
- ☐ Use SSL to encrypt the data while in transit to Amazon S3.



The correct answer is Use Amazon S3 server-side encryption with AWS Key Management Service managed keys., Use Amazon S3 server-side encryption with customer-provided keys., Encrypt the data on the client-side before ingesting to Amazon S3 using their own master key..


In the Amazon RDS which uses the SQL Server engine, what is the maximum size for a Microsoft SQL Server DB Instance with SQL Server Express edition?

- ✓ ☒ 10 GB per DB
- ☐ 100 GB per DB
- ☐ 2 TB per DB
- ☐ 1TB per DB

The correct answer is 10 GB per DB.

Please note that SQL Express limits storage to 10GB per database, which limits the overall usable database storage for SQL Express to 300GB per DB Instance. Any additional storage you provision may be unusable until you upgrade to a different SQL Server Edition..

Amazon RDS creates an SSL certificate and installs the certificate on the DB Instance when Amazon RDS provisions the instance. These certificates are signed by a certificate authority. The_____ is stored at <https://rds.amazonaws.com/doc/rds-ssl-ca-cert.pem>.

- 
- ☐ private
 - ☐ foreign key
 - ✓ ☒ public key
 - ☐ protected key

The correct answer is public key.

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?

- ☐ Deploy a NAT instance into the public subnet.
- ✓ ☒ Assign an Elastic IP address to the fourth instance.
- ☐ Configure a publically routable IP Address in the host OS of the fourth instance.
- ☐ Modify the routing table for the public subnet.

The correct answer is Assign an Elastic IP address to the fourth instance..



Which of the following are valid statements about Amazon S3? Choose 2 answers

- ☐ S3 provides read-after-write consistency for any type of PUT or DELETE.
- ☐ Consistency is not guaranteed for any type of PUT or DELETE.
- ✓ ☒ A successful response to a PUT request only occurs when a complete object is saved.
- ☐ Partially saved objects are immediately readable with a GET after an overwrite PUT.
- ✓ ☒ S3 provides eventual consistency for overwrite PUTS and DELETES.

The correct answer is A successful response to a PUT request only occurs when a complete object is saved., S3 provides eventual consistency for overwrite PUTS and DELETES..

A customer is leveraging Amazon Simple Storage Service in eu-west-1 to store static content for web-based property. The customer is storing objects using the Standard Storage class. Where are the customers' objects replicated?

- ☐ Single facility in eu-west-1 and a single facility in eu-central-1
- ☐ Single facility in eu-west-1 and a single facility in us-east-1
- ✓ ☒ Multiple facilities in eu-west-1
- ☐ A single facility in eu-west-1



The correct answer is Multiple facilities in eu-west-1.

What is one key difference between an Amazon EBS-backed and an instance-store backed instance?

- ✓ ☒ Amazon EBS-backed instances can be stopped and restarted.
- ☐ Instance-store backed instances can be stopped and restarted.
- ☐ Auto scaling requires using Amazon EBS-backed instances.
- ☐ Virtual Private Cloud requires EBS backed instances.

The correct answer is Amazon EBS-backed instances can be stopped and restarted..

An organization has setup multiple IAM users. The organization wants that each IAM user accesses the IAM console only within the organization and not from outside. How can it achieve this?

- ☐ Create an IAM policy with the security group and use that security group for AWS console login
- ✓ ☒ Create an IAM policy with a condition which denies access when the IP address range is not from the organization
- ☐ Configure the EC2 instance security group which allows traffic only from the organization's IP range
- ☐ Create an IAM policy with VPC and allow a secure gateway between the organization and AWS Console



The correct answer is Create an IAM policy with a condition which denies access when the IP address range is not from the organization.

An organization has created 10 IAM users. The organization wants each of the IAM users to have access to a separate DynamoDB table. All the users are added to the same group and the organization wants to setup a group level policy for this. How can the organization achieve this?

- ☐ Define the group policy and add a condition which allows the access based on the IAM name
- ✓ ☒ Create a DynamoDB table with the same name as the IAM user name and define the policy rule which grants access based on the DynamoDB ARN using a variable
- ☐ Create a separate DynamoDB database for each user and configure a policy in the group based on the DB variable
- ☐ It is not possible to have a group level policy which allows different IAM users to different DynamoDB Tables

The correct answer is Create a DynamoDB table with the same name as the IAM user name and define the policy rule which grants access based on the DynamoDB ARN using a variable.

A _____ is the concept of allowing (or disallowing) an entity such as a user, group, or role some type of access to one or more resources.


- ☐ user
- ☐ aws account
- ☐ resource
- ✓ ☒ permission

The correct answer is permission.

Fill in the blanks: A _____ is a storage device that moves data in sequences of bytes or bits (blocks). Hint: These devices support random access and generally use buffered I/O.

- ☐ block map
- ☐ storage block
- ☐ mapping device
- ✓ ☒ block device

The correct answer is block device.

 A customer needs to capture all client connection information from their load balancer every five minutes. The company wants to use this data for analyzing traffic patterns and troubleshooting their applications. Which of the following options meets the customer requirements?

- ☐ Enable AWS CloudTrail for the load balancer.
- ☒ Enable access logs on the load balancer.
- ☐ Install the Amazon CloudWatch Logs agent on the load balancer.
- ☐ Enable Amazon CloudWatch metrics on the load balancer.

The correct answer is Enable access logs on the load balancer..

An organization has established an Internet-based VPN connection between their on-premises data center and AWS. They are considering migrating from VPN to AWS Direct Connect. Which operational concern should drive an organization to consider switching from an Internet-based VPN connection to AWS Direct Connect?

- ☐ AWS Direct Connect provides greater redundancy than an Internet-based VPN connection
- ☐ AWS Direct Connect provides greater resiliency than an Internet-based VPN connection.
- ☐ AWS Direct Connect provides greater control of network provider selection than an Internet-based VPN connection.
- ☒ AWS Direct Connect provides greater bandwidth than an Internet-based VPN connection.



The correct answer is AWS Direct Connect provides greater bandwidth than an Internet-based VPN connection..

Does AWS Direct Connect allow you access to all Availabilities Zones within a Region?


- ☐ Depends on the type of connection
- ☐ No
- ☒ Yes
- ☐ Only when there's just one availability zone in a region. If there are more than one, only one availability zone can be accessed directly.

The correct answer is Yes.

A customer has established an AWS Direct Connect connection to AWS. The link is up and routes are being advertised from the customer's end, however the customer is unable to connect from EC2 instances inside its VPC to servers residing in its datacenter. Which of the following options provide a viable solution to remedy this situation? (Choose 2 answers)

- ☐ Add a route to the route table with an IPsec VPN connection as the target
- ☒ Enable route propagation to the Virtual Private Gateway (VGW)
- ☐ Enable route propagation to the customer gateway (CGW)
- ☐ Modify the route table of all Instances using the 'route' command.



-  ☒ Modify the Instances VPC subnet route table by adding a route back to the customer's on-premises environment.

The correct answer is Enable route propagation to the Virtual Private Gateway (VGW), Modify the Instances VPC subnet route table by adding a route back to the customer's on-premises environment..

A - deals with VPN C - route propagation is enabled on VGW D - no route command available .

A company has configured and peered two VPCs: VPC-1 and VPC-2. VPC-1 contains only private subnets, and VPC-2 contains only public subnets. The company uses a single AWS Direct Connect connection and private virtual interface to connect their on-premises network with VPC-1. Which two methods increase the fault tolerance of the connection to VPC-1? Choose 2 answers


- ☐ Establish a hardware VPN over the internet between VPC-2 and the on-premises network.
- ✓ ☒ Establish a hardware VPN over the internet between VPC-1 and the on-premises network
- ☐ Establish a new AWS Direct Connect connection and private virtual interface in the same region as VPC-2
- ☐ Establish a new AWS Direct Connect connection and private virtual interface in a different AWS region than VPC-1
- ✓ ☒ Establish a new AWS Direct Connect connection and private virtual interface in the same AWS region as VPC-1



The correct answer is Establish a hardware VPN over the internet between VPC-1 and the on-premises network, Establish a new AWS Direct Connect connection and private virtual interface in the same AWS region as VPC-1.

A - Peered VPC does not support Edge to Edge Routing C - Peered VPC does not support Edge to Edge Routing D - need to be in the same region as VPC-1.

Your company previously configured a heavily used, dynamically routed VPN connection between your on premises data center and AWS. You recently provisioned a Direct Connect connection and would like to start using the new connection. After configuring Direct Connect settings in the AWS Console, which of the following options will provide the most seamless transition for your users?

- ☐ Delete your existing VPN connection to avoid routing loops configure your Direct Connect router with the appropriate settings and verify network traffic is leveraging Direct Connect.
- ☐ Configure your Direct Connect router with a higher BGP priority than your VPN router, verify network traffic is leveraging Direct Connect and then delete your existing VPN connection.
- ☒  Update your VPC route tables to point to the Direct Connect connection configure your Direct Connect router with the appropriate settings verify network traffic is leveraging Direct Connect and then delete the VPN connection.
- ☐ Configure your Direct Connect router, update your VPC route tables to point to the Direct Connect connection, configure your VPN connection with a higher BGP priority. And verify network traffic is leveraging the Direct Connect connection

The correct answer is Update your VPC route tables to point to the Direct Connect connection configure your Direct Connect router with the appropriate settings verify network traffic is leveraging Direct Connect and then delete the VPN connection..



You are building a solution for a customer to extend their on-premises data center to AWS. The customer requires a 50-Mbps dedicated and private connection to their VPC. Which AWS product or feature satisfies this requirement?

- ☐ Amazon VPC peering
- ☐ Elastic IP Addresses
- ☐ Amazon VPC virtual private gateway
- ✓ ☒ Amazon Direct Connect

The correct answer is Amazon Direct Connect.

What does Amazon SES stand for?

- ☐ Simple Elastic Server
- ✓ ☒ Simple Email Service
- ☐ Software Email Solution
- ☐ Software Enabled Server

The correct answer is Simple Email Service.



When you resize the Amazon RDS DB instance, Amazon RDS will perform the upgrade during the next maintenance window. If you want the upgrade to be performed now, rather than waiting for the maintenance window, specify the_____ option.

- ☐ ApplyNow
- ☐ ApplySoon
- ☐ ApplyThis
- ✓ ☒ ApplyImmediately

The correct answer is ApplyImmediately.

If an Amazon EBS volume is the root device of an instance, can I detach it without stopping the instance?

- ☐ Yes but only if Windows instance
- ☐ Yes
- ☐ Yes but only if a Linux instance
- ✓ ☒ No



The correct answer is No.

A_____ is a document that provides a formal statement of one or more permissions.

- ✓ ☒ policy
- ☐ permission
- ☐ role
- ☐ resource

The correct answer is policy.

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?

- ✓ ☒ Disabling the Source/Destination Check attribute on the NAT instance
- ☐ Attaching an Elastic IP address to the instance in the private subnet
- ☐ Attaching a second Elastic Network Interface (ENI) to the NAT instance, and placing it in the private subnet
- ☐ Attaching a second Elastic Network Interface (ENI) to the instance in the private subnet, and placing it in the public subnet



The correct answer is Disabling the Source/Destination Check attribute on the NAT instance.

An Auto-Scaling group spans 3 AZs and currently has 4 running EC2 instances. When Auto Scaling needs to terminate an EC2 instance by default, AutoScaling will: Choose 2 answers


- ☐ Allow at least five minutes for Windows/Linux shutdown scripts to complete, before terminating the instance.
- ☐ Terminate the instance with the least active network connections. If multiple instances meet this criterion, one will be randomly selected.
- ✓ ☒ Send an SNS notification, if configured to do so.
- ✓ ☒ Terminate an instance in the AZ which currently has 2 running EC2 instances.
- ☐ Randomly select one of the 3 AZs, and then terminate an instance in that AZ.

The correct answer is Send an SNS notification, if configured to do so., Terminate an instance in the AZ which currently has 2 running EC2 instances..

<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html#default-termination-policy> Auto Scaling determines whether there are instances in multiple Availability Zones. If so, it selects the Availability Zone with the most instances and at least one instance that is not protected from scale in. If there is more than one Availability Zone with this number of instances, Auto Scaling selects the Availability Zone with the instances that use the oldest launch configuration..

Which of the following requires a custom CloudWatch metric to monitor?

- ✓ ☒ Memory Utilization of an EC2 instance

- 
- ☐ CPU Utilization of an EC2 instance
 - ☐ Disk usage activity of an EC2 instance
 - ☐ Data transfer of an EC2 instance

The correct answer is Memory Utilization of an EC2 instance.

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)

- ☒ ☐ Create an IAM Role that allows write access to the DynamoDB table
- ☐ Add an IAM Role to a running EC2 instance using console
- ☐ Create an IAM User that allows write access to the DynamoDB table
- ☐ Add an IAM User to a running EC2 instance
- ☒ ☒ Launch an EC2 Instance with the IAM Role included in the launch configuration

The correct answer is Create an IAM Role that allows write access to the DynamoDB table, Launch an EC2 Instance with the IAM Role included in the launch configuration.

Which of the following features ensures even distribution of traffic to Amazon EC2 instances in multiple Availability Zones registered with a load balancer? A. Elastic Load Balancing request routing B. An Amazon Route 53 weighted routing policy C. Elastic Load Balancing cross-zone load balancing D. An Amazon Route 53 latency routing policy

- ☐ An Amazon Route 53 weighted routing policy
- ☐ Elastic Load Balancing request routing
- ✓ ☒ Elastic Load Balancing cross-zone load balancing
- ☐ An Amazon Route 53 latency routing policy

The correct answer is Elastic Load Balancing cross-zone load balancing.

Cross-zone load balancing is always enabled for an Application Load Balancer and is disabled by default for a Classic Load Balancer. If cross-zone load balancing is enabled, the load balancer distributes traffic evenly across all registered instances in all enabled Availability Zones. If cross-zone load balancing is disabled, the load balancer distributes traffic evenly across all enabled Availability Zones. For example, suppose that you have 10 instances in Availability Zone us-west-2a and 2 instances in us-west-2b. If cross-zone load balancing is disabled, the requests are distributed evenly between us-west-2a and us-west-2b. As a result, the 2 instances in us-west-2b serve the same amount of traffic as the 10 instances in us-west-2a. However, if cross-zone load balancing is enabled, the load balancer distributes incoming requests evenly across all 12 instances..

An instance is launched into a VPC subnet with the network ACL configured to allow all inbound traffic and deny all outbound traffic. The instance's security group is configured to allow SSH from any IP address and deny all outbound traffic. What changes need to be made to allow SSH access to the instance?

- ☐ The outbound security group needs to be modified to allow outbound traffic.
- ✓ ☒ The outbound network ACL needs to be modified to allow outbound traffic.



- ☐ Not to be accessed from any IP address using SSH.
- ☐ Both the outbound security group and outbound network ACL need to be modified to allow outbound traffic.

The correct answer is The outbound network ACL needs to be modified to allow outbound traffic..

NACL Stateless (Both inbound and outbound rules should be in allow state) Security group (stateful, if inbound is allowed no need of outbound).

True or False: When you add a rule to a DB security group, you do not need to specify port number or protocol.

- ☐ Depends on the RDMS used
- ☒ TRUE
- ☐ FALSE

The correct answer is TRUE.

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.RDSSecurityGroups.html>
DB Security Groups Each DB security group rule enables a specific source to access a DB instance that is associated with that DB security group. The source can be a range of addresses (e.g., 203.0.113.0/24), or an EC2 security group. When you specify an EC2 security group as the source, you allow incoming traffic from all EC2 instances that use that EC2 security group. Note that DB security group rules apply to inbound traffic only; outbound traffic is not currently permitted for DB instances. You do not need to specify a destination port number when you create DB security group rules; the port number



defined for the DB instance is used as the destination port number for all rules defined for the DB security group. DB security groups can be created using the Amazon RDS APIs or the Amazon RDS page of the AWS Management Console..

Amazon RDS supports SOAP only through

- ☐ HTTP or HTTPS
- ☐ TCP/IP
- ☐ HTTP
- ✓ ☒ HTTPS

The correct answer is HTTPS.

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

- ☐ Virtual Private Network connection. AWS Directory Services, and ClassicLink
- ✓ ☒ Virtual Private Network connection. AWS Directory Services, and Amazon Workspaces
- ☐ AWS Directory Service, Amazon Workspaces, and AWS Identity and Access Management
- ☐ Amazon Elastic Compute Cloud, and AWS Identity and Access Management



The correct answer is Virtual Private Network connection. AWS Directory Services, and Amazon Workspaces.


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

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

The correct answer is There is no charge for using the public data sets.

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

- ☐ Detach EBS volumes, 2. Start EBS snapshot of volumes, 3. Re-attach EBS volumes
- ✓ ☒ Stop the EC2 Instance. 2. Snapshot the EBS volumes
- ☐ Suspend disk I/O, 2. Create an image of the EC2 Instance, 3. Resume disk I/O
- ☐ Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Resume disk I/O

 ☐ Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Wait for snapshots to complete, 4. Resume disk I/O

The correct answer is Stop the EC2 Instance. 2. Snapshot the EBS volumes.


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

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

The correct answer is No.

What is the charge for the data transfer incurred in replicating data between your primary and standby?

- ☐ Same as the standard data transfer charge
- ☐ Double the standard data transfer charge
- ☒ No charge. It is free

 ☐ Half of the standard data transfer charge

The correct answer is No charge. It is free.

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

- ✓ ☒ Basic
- ☐ Primary
- ☐ Detailed
- ☐ Local

The correct answer is Basic.

Can I initiate a "forced failover" for my Oracle Multi-AZ DB Instance deployment?

- ✓ ☒ Yes
- ☐ Only in certain regions
- ☐ Only in VPC
- ☐ No



The correct answer is Yes.

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Regarding the attaching of ENI to an instance, what does 'warm attach' refer to?

- ✓ ☒ Attaching an ENI to an instance when it is stopped.
- ☐ This question doesn't make sense.
- ☐ Attaching an ENI to an instance when it is running.
- ☐ Attaching an ENI to an instance during the launch process

The correct answer is Attaching an ENI to an instance when it is stopped..

cold attach - during the launch process warm attach - when it is stopped hot attach - when it is running.

You can use_____ and_____ to help secure the instances in your VPC.

- ☐ security groups and multi-factor authentication
- ☐ security groups and 2-Factor authentication
- ☐ security groups and biometric authentication
- ✓ ☒ security groups and network ACLs



The correct answer is security groups and network ACLs.

What does the "Server Side Encryption" option on Amazon S3 provide?

- ☐ It provides an encrypted virtual disk in the Cloud.
- ☐ It doesn't exist for Amazon S3, but only for Amazon EC2.
- ☒ It encrypts the files that you send to Amazon S3, on the server side.
- ☐ It allows to upload files using an SSL endpoint, for a secure transfer.

The correct answer is It encrypts the files that you send to Amazon S3, on the server side..

A company is building a two-tier web application to serve dynamic transaction based content. The data tier is leveraging an Online Transactional Processing (OLTP) database. What services should you leverage to enable an elastic and scalable web tier?

- ☒ Elastic Load Balancing, Amazon EC2, and Auto Scaling
- ☐ Elastic Load Balancing, Amazon RDS with Multi-AZ, and Amazon S3
- ☐ Amazon RDS with Multi-AZ and Auto Scaling
- ☐ Amazon EC2, Amazon DynamoDB, and Amazon S3



The correct answer is Elastic Load Balancing, Amazon EC2, and Auto Scaling.

Which services allow the customer to retain full administrative privileges of the underlying EC2 instances? Choose 2 answers

- ☐ Amazon Relational Database Service
- ✓ ☒ Amazon Elastic Map Reduce
- ☐ Amazon ElastiCache
- ☐ Amazon DynamoDB
- ✓ ☒ AWS Elastic Beanstalk

The correct answer is Amazon Elastic Map Reduce, AWS Elastic Beanstalk.

You need to configure an Amazon S3 bucket to serve static assets for your public facing web application. Which methods ensure that all objects uploaded to the bucket are set to public read? Choose 2 answers

- ✓ ☒ Set permissions on the object to public read during upload.
- ☐ Configure the bucket ACL to set all objects to public read.
- ✓ ☒ Configure the bucket policy to set all objects to public read.
- ☐ Use AWS Identity and Access Management roles to set the bucket to public read
- ☐ Amazon S3 objects default to public read, so no action is needed



**The correct answer is Set permissions on the object to public read during upload.,
Configure the bucket policy to set all objects to public read..**


Does Dynamo DB support in-place atomic updates?

- ☐ It is not defined
- ☐ No
- ☒ Yes
- ☐ It does support in-place non-atomic updates

The correct answer is Yes.

You have an EC2 Security Group with several running EC2 instances. You change the Security Group rules to allow inbound traffic on a new port and protocol, and launch several new instances in the same Security Group. The new rules apply:

- ☒ Immediately to all instances in the security group.
- ☐ Immediately to the new instances only.
- ☐ Immediately to the new instances, but old instances must be stopped and restarted before the new rules apply.

 To all instances, but it may take several minutes for old instances to see the changes.


The correct answer is Immediately to all instances in the security group..

You are configuring your company's application to use Auto Scaling and need to move user state information. Which of the following AWS services provides a shared data store with durability and low latency?

- ☐ AWS ElastiCache Memcached
- ☐ Amazon Simple Storage Service
- ☐ Amazon EC2 instance storage
- ✓ ☒ Amazon DynamoDB

The correct answer is Amazon DynamoDB.

Q: When should I use Amazon DynamoDB vs Amazon S3? Amazon DynamoDB stores structured data, indexed by primary key, and allows low latency read and write access to items ranging from 1 byte up to 400KB. Amazon S3 stores unstructured blobs and suited for storing large objects up to 5 TB. In order to optimize your costs across AWS services, large objects or infrequently accessed data sets should be stored in Amazon S3, while smaller data elements or file pointers (possibly to Amazon S3 objects) are best saved in Amazon DynamoDB..

 A company wants to implement their website in a virtual private cloud tier will use an Auto Scaling group across multiple Availability Zones (AZs). The database will use Multi-AZ RDS MySQL and should not be publicly accessible. What is the minimum number of subnets that need to be configured in the VPC?

- ☐ 1
- ☐ 2
- ☐ 3
- ☒ 4

The correct answer is 4.

2 is possible however amazon recommends private and public subnets should be separated .

A Provisioned IOPS volume must be at least GB in size

- ☐ 1
- ☐ 50
- ☐ 20
- ☒ 10

The correct answer is 10.



Your application provides data transformation services. Files containing data to be transformed are first uploaded to Amazon S3 and then transformed by a fleet of spot EC2 instances. Files submitted by your premium customers must be transformed with the highest priority. How should you implement such a system?

- ☐ Use a DynamoDB table with an attribute defining the priority level. Transformation instances will scan the table for tasks, sorting the results by priority level.
- ☐ Use Route 53 latency based-routing to send high priority tasks to the closest transformation instances.
- ☒ Use two SQS queues, one for high priority messages, the other for default priority. Transformation instances first poll the high priority queue; if there is no message, they poll the default priority queue.
- ☐ Use a single SQS queue. Each message contains the priority level. Transformation instances poll high-priority messages first.

The correct answer is Use two SQS queues, one for high priority messages, the other for default priority. Transformation instances first poll the high priority queue; if there is no message, they poll the default priority queue..

The Amazon EC2 web service can be accessed using the web services messaging protocol. This interface is described by a Web Services Description Language (WSDL) document

- ☒ SOAP
- ☐ DCOM



The correct answer is SOAP.

What is a placement group?

- ☐ A collection of Auto Scaling groups in the same region
- ✓ ☒ A feature that enables EC2 instances to interact with each other via high bandwidth, low latency connections
- ☐ A collection of authorized CloudFront edge locations for a distribution
- ☐ A collection of Elastic Load Balancers in the same Region or Availability Zone

The correct answer is A feature that enables EC2 instances to interact with each other via high bandwidth, low latency connections.

Are you able to integrate a multi-factor token service with the AWS Platform?

- ☐ No, you cannot integrate multi-factor token devices with the AWS platform.
- ☐ Yes, you can integrate private multi-factor token devices to authenticate users to the AWS platform.



- ☒ Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform.

The correct answer is Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform..

When using consolidated billing there are two account types. What are they?

- ☒ ☒ Paying account and Linked account
- ☐ Parent account and Child account
- ☐ Main account and Sub account.
- ☐ Main account and Secondary account.

The correct answer is Paying account and Linked account.

You are working with a customer who is using Chef configuration management in their data center. Which service is designed to let the customer leverage existing Chef recipes in AWS?

- ☐ Amazon Simple Workflow Service
- ☐ AWS Elastic Beanstalk

-  ☐ AWS CloudFormation
- ☒ AWS OpsWorks

The correct answer is AWS OpsWorks.

How can an EBS volume that is currently attached to an EC2 instance be migrated from one Availability Zone to another?

- ☐ Detach the volume and attach it to another EC2 instance in the other AZ.
- ☐ Simply create a new volume in the other AZ and specify the original volume as the source.
- ☒ Create a snapshot of the volume, and create a new volume from the snapshot in the other AZ.
- ☐ Detach the volume, then use the `ec2-migrate-volume` command to move it to another AZ.

The correct answer is Create a snapshot of the volume, and create a new volume from the snapshot in the other AZ..

What happens when you create a topic on Amazon SNS?

- ☐ The topic is created, and it has the name you specified for it.



- ☒ Amazon Resource Name) is created.
- ☐ You can create a topic on Amazon SQS, not on Amazon SNS.
- ☐ This question doesn't make sense.

(Amazon Resource Name) is created..


B is most suitable, however if multiple choice A can be right as well.

A client application requires operating system privileges on a relational database server. What is an appropriate configuration for a highly available database architecture?

- ☐ A standalone Amazon EC2 instance
- ☐ Amazon RDS in a Multi-AZ configuration
- ☐ Amazon EC2 instances in a replication configuration utilizing a single Availability Zone
- ☒ Amazon EC2 instances in a replication configuration utilizing two different Availability Zones

The correct answer is Amazon EC2 instances in a replication configuration utilizing two different Availability Zones.

Which of the following are characteristics of Amazon VPC subnets? Choose 2 answers

 ☐ Each subnet spans at least 2 Availability Zones to provide a high-availability environment.

✓ ☒ Each subnet maps to a single Availability Zone.

☐ CIDR block mask of/25 is the smallest range supported.

✓ ☒ By default, all subnets can route between each other, whether they are private or public.

☐ Instances in a private subnet can communicate with the Internet only if they have an Elastic IP.


The correct answer is Each subnet maps to a single Availability Zone., By default, all subnets can route between each other, whether they are private or public..

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

☐ Deploy 6 EC2 instances in one availability zone and use Amazon Elastic Load Balancer.

☐ Deploy 3 EC2 instances in one region and 3 in another region and use Amazon Elastic Load Balancer.

✓ ☒ Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer.

 ☐ Deploy 2 EC2 instances in three regions and use Amazon Elastic Load Balancer.

The correct answer is Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer..


Within the IAM service a GROUP is regarded as a

- ☐ A collection of AWS accounts
- ☐ It's the group of EC2 machines that gain the permissions specified in the GROUP.
- ☐ There's no GROUP in IAM, but only USERS and RESOURCES.
- ✓ ☒ A collection of users.

The correct answer is A collection of users..

Please select the most correct answer regarding the persistence of the Amazon Instance Store

- ✓ ☒ The data on an instance store volume persists only during the life of the associated Amazon EC2 instance

 The data on an instance store volume is lost when the security group rule of the associated instance is changed.

☐ The data on an instance store volume persists even after associated Amazon EC2 instance is deleted

The correct answer is The data on an instance store volume persists only during the life of the associated Amazon EC2 instance.

Amazon RDS automated backups and DB Snapshots are currently supported for only the _____ storage engine

☐ MyISAM

 ☒ InnoDB

The correct answer is InnoDB.

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?

 ☒ Remove public read access and use signed URLs with expiry dates.

☐ Use Cloud Front distributions for static content.



- ☐ Block the IPs of the offending websites in Security Groups.
- ☐ Store photos on an EBS volume of the web server.

The correct answer is Remove public read access and use signed URLs with expiry dates..

Without _____, you must either create multiple AWS accounts-each with its own billing and subscriptions to AWS products-or your employees must share the security credentials of a single AWS account.

- ☐ Amazon RDS
- ☐ Amazon Glacier
- ☐ Amazon EMR
- ☒ Amazon IAM

The correct answer is Amazon IAM.

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

- ☐ No



☒ Yes


The correct answer is Yes.

You are tasked with setting up a Linux bastion host for access to Amazon EC2 instances running in your VPC. Only clients connecting from the corporate external public IP address 72.34.51.100 should have SSH access to the host. Which option will meet the customer requirement?

- ✓ ☒ Security Group Inbound Rule: Protocol - TCP, Port Range - 22, Source 72.34.51.100/32
- ☐ Security Group Inbound Rule: Protocol - UDP, Port Range - 22, Source 72.34.51.100/32
- ☐ Network ACL Inbound Rule: Protocol - UDP, Port Range - 22, Source 72.34.51.100/32
- ☐ Network ACL Inbound Rule: Protocol - TCP, Port Range-22, Source 72.34.51.100/0

The correct answer is Security Group Inbound Rule: Protocol - TCP. Port Range - 22, Source 72.34.51.100/32.

/32 is single IP.

 You have decided to change the Instance type for instances running in your application tier that are using Auto Scaling. In which area below would you change the instance type definition?

- ✓ ☒ Auto Scaling launch configuration
- ☐ Auto Scaling group
- ☐ Auto Scaling policy
- ☐ Auto Scaling tags

The correct answer is Auto Scaling launch configuration.

A user is trying to delete an Auto Scaling group from CLI. Which of the below mentioned steps are to be performed by the user?

- ☐ Terminate the instances with the ec2-terminate-instance command
- ☐ Terminate the Auto Scaling instances with the as-terminate-instance command
- ✓ ☒ Set the minimum size and desired capacity to 0
- ☐ There is no need to change the capacity. Run the as-delete-group command and it will reset all values to 0

The correct answer is Set the minimum size and desired capacity to 0.



A user has created a web application with Auto Scaling. The user is regularly monitoring the application and he observed that the traffic is highest on Thursday and Friday between 8 AM to 6 PM. What is the best solution to handle scaling in this case?

- ☐ Add a new instance manually by 8 AM Thursday and terminate the same by 6 PM Friday
- ☒ Schedule Auto Scaling to scale up by 8 AM Thursday and scale down after 6 PM on Friday
- ☐ Schedule a policy which may scale up every day at 8 AM and scales down by 6 PM
- ☐ Configure a batch process to add a instance by 8 AM and remove it by Friday 6 PM


The correct answer is Schedule Auto Scaling to scale up by 8 AM Thursday and scale down after 6 PM on Friday.

Fill in the blanks: "To ensure failover capabilities, consider using a for incoming traffic on a network interface".

- ☐ primary public IP
- ☒ secondary private IP
- ☐ secondary public IP
- ☐ add on secondary IP



 The correct answer is secondary private IP.

Which technique can be used to integrate AWS IAM (Identity and Access Management) with an on-premise LDAP (Lightweight Directory Access Protocol) directory service?

- ☐ Use an IAM policy that references the LDAP account identifiers and the AWS credentials.
- ☐ Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP.
-  ☒ Use AWS Security Token Service from an identity broker to issue short-lived AWS credentials.
- ☐ Use IAM roles to automatically rotate the IAM credentials when LDAP credentials are updated.
- ☐ Use the LDAP credentials to restrict a group of users from launching specific EC2 instance types.

The correct answer is Use AWS Security Token Service from an identity broker to issue short-lived AWS credentials..

Which of the following are characteristics of a reserved instance? Choose 3 answers

- ☐ It can be copied to another region
- ☐ It is specific to an Amazon Machine Image (AMI)
-  ☒ It can be applied to instances launched by Auto Scaling
-  ☒ It is specific to an instance Type



☒ It can be used to lower Total Cost of Ownership (TCO) of a system

The correct answer is It can be applied to instances launched by Auto Scaling, It is specific to an instance Type, It can be used to lower Total Cost of Ownership (TCO) of a system.

What is an isolated database environment running in the cloud (Amazon RDS) called?

- ☒ DB Instance
- ☐ DB Unit
- ☐ DB Server
- ☐ DB Volume

The correct answer is DB Instance.

In regards to IAM you can edit user properties later, but you cannot use the console to change the_____

- ☒ user name
- ☐ password
- ☐ default group



The correct answer is user name.

Can I attach more than one policy to a particular entity?

- ✓ ☒ Yes always
- ☐ Only if within GovCloud
- ☐ No
- ☐ Only if within VPC

The correct answer is Yes always.

In AWS, which security aspects are the customer's responsibility? Choose 4 answers

- ✓ ☒ Security Group and ACL (Access Control List) settings
- ☐ Decommissioning storage devices
- ✓ ☒ Patch management on the EC2 instance's operating system
- ✓ ☒ Life-cycle management of IAM credentials
- ☐ Controlling physical access to compute resources



☒ Encryption of EBS (Elastic Block Storage) volumes

The correct answer is Security Group and ACL (Access Control List) settings, Patch management on the EC2 instance's operating system, Life-cycle management of IAM credentials, Encryption of EBS (Elastic Block Storage) volumes.

http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf.

Which Amazon service can I use to define a virtual network that closely resembles a traditional data center?

- ☒ Amazon VPC
- ☐ Amazon ServiceBus
- ☐ Amazon EMR
- ☐ Amazon RDS

The correct answer is Amazon VPC.

It is advised that you watch the Amazon CloudWatch "_____" metric (available via the AWS Management Console or Amazon Cloud Watch APIs) carefully and recreate the Read Replica should it fall behind due to replication errors.

- ☐ Write Lag
- ☐ Read Replica



☒ Replica Lag

☐ Single Replica

The correct answer is Replica Lag.

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

- ☐ Amazon DynamoDB
- ☒ Amazon Elastic Compute Cloud (EC2)
- ☒ Amazon Elastic Load Balancing
- ☐ Amazon Simple Notification Service (SNS)
- ☐ Amazon Simple Storage Service (S3)

The correct answer is Amazon Elastic Compute Cloud (EC2), Amazon Elastic Load Balancing.

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



- ☐ Amazon Simple Email Service
- ☒ Amazon CloudWatch
- ☐ Amazon Simple Queue Service
- ☐ Amazon Route 53
- ☒ Amazon Simple Notification Service

The correct answer is Amazon CloudWatch, Amazon Simple Notification Service.

A user is running a batch process on EBS backed EC2 instances. The batch process starts a few instances to process Hadoop Map reduce jobs, which can run between 50 – 600 minutes or sometimes for more time. The user wants to configure that the instance gets terminated only when the process is completed. How can the user configure this with CloudWatch?

- ☒ ☒ Setup the CloudWatch action to terminate the instance when the CPU utilization is less than 5%
- ☐ Setup the CloudWatch with Auto Scaling to terminate all the instances
- ☐ Setup a job which terminates all instances after 600 minutes
- ☐ It is not possible to terminate instances automatically



The correct answer is Setup the CloudWatch action to terminate the instance when the CPU utilization is less than 5%.

Your web application front end consists of multiple EC2 instances behind an Elastic Load Balancer. You configured ELB to perform health checks on these EC2 instances, if an instance fails to pass health checks, which statement will be true?

- ☐ The instance gets terminated automatically by the ELB.
- ☐ The instance gets quarantined by the ELB for root cause analysis.
- ☐ The instance is replaced automatically by the ELB.
- ☒ The ELB stops sending traffic to the instance that failed its health check.

The correct answer is The ELB stops sending traffic to the instance that failed its health check..

For which of the following use cases are Simple Workflow Service (SWF) and Amazon EC2 an appropriate solution? Choose 2 answers

- ☐ Using as an endpoint to collect thousands of data points per hour from a distributed fleet of sensors
- ☒ Managing a multi-step and multi-decision checkout process of an e-commerce website
- ☒ Orchestrating the execution of distributed and auditable business processes
- ☐ Using as an SNS (Simple Notification Service) endpoint to trigger execution of video transcoding jobs



☐ Using a distributed session store for your web application

The correct answer is Manage the lifecycle of an e-commerce website, Orchestrating the execution of distributed and auditable business processes.

.

You launch an Amazon EC2 instance without an assigned AWS identity and Access Management (IAM) role. Later, you decide that the instance should be running with an IAM role. Which action must you take in order to have a running Amazon EC2 instance with an IAM role assigned to it via console?

- ☐ Create an image of the instance, and register the image with an IAM role assigned and an Amazon EBS volume mapping.
- ☐ Create a new IAM role with the same permissions as an existing IAM role, and assign it to the running instance.
- ☒ ☒ Create an image of the instance, add a new IAM role with the same permissions as the desired IAM role, and deregister the image with the new role assigned.
- ☒ ☒ Create an image of the instance, and use this image to launch a new instance with the desired IAM role assigned.

The correct answer is Create an image of the instance, and use this image to launch a new instance with the desired IAM role assigned..

.



- What's an ECU?
- ☐ Extended Cluster User.
 - ☐ Elastic Computer Usage.
 - ✓ ☒ Elastic Compute Unit.
 - ☐ None

The correct answer is Elastic Compute Unit..

In order to optimize performance for a compute cluster that requires low inter-node latency, which of the following feature should you use?

- ☐ Multiple Availability Zones
- ☐ AWS Direct Connect
- ☐ EC2 Dedicated Instances
- ✓ ☒ Placement Groups
- ☐ VPC private subnets

The correct answer is Placement Groups.



What is the default maximum number of MFA devices in use per AWS account (at the root account level)?


- ✓ ☒ 1
- ☐ 5
- ☐ 15
- ☐ 10

The correct answer is 1.

Please select the Amazon EC2 resource which can be tagged.

- ☐ key pairs
- ☐ Elastic IP addresses
- ☐ placement groups
- ✓ ☒ Amazon EBS snapshots

The correct answer is Amazon EBS snapshots.

 You are using an m1.small EC2 Instance with one 300 GB EBS volume to host a relational database. You determined that write throughput to the database needs to be increased. Which of the following approaches can help achieve this? Choose 2 answers

- ✓ ☒ Use an array of EBS volumes.
- ☐ Enable Multi-AZ mode.
- ☐ Place the instance in an Auto Scaling Groups
- ☐ Add an EBS volume and place into RAID 5
- ✓ ☒ Increase the size of the EC2 Instance
- ☐ Put the database behind an Elastic Load Balancer.

The correct answer is Use an array of EBS volumes., Increase the size of the EC2 Instance.

What does Amazon Route53 provide?

- ☐ A global Content Delivery Network.
- ✓ ☒ A scalable Domain Name System
- ☐ An SSH endpoint for Amazon EC2
- ☐ None of these



The correct answer is A scalable Domain Name System.

Does Route 53 support MX Records?



☒ Yes

☐ It supports CNAME records, but not MX records.

☐ No

☐ Only Primary MX records. Secondary MX records are not supported.

The correct answer is Yes.

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



☒ dedicated

☐ isolated

☐ one

☐ reserved



The correct answer is dedicated.

What are characteristics of Amazon S3? Choose 2 answers

- ☐ S3 allows you to store objects of virtually unlimited size
- ☐ S3 offers Provisioned IOPS
- ✓ ☒ S3 allows you to store unlimited amounts of data
- ☐ S3 should be used to host a relational database
- ✓ ☒ Objects are directly accessible via a URL

The correct answer is S3 allows you to store unlimited amounts of data, Objects are directly accessible via a URL.

What is the name of licensing model in which I can use your existing Oracle Database licenses to run Oracle deployments on Amazon RDS?

- ✓ ☒ Bring Your Own License
- ☐ Role Bases License
- ☐ Enterprise License
- ☐ License Included

 The correct answer is **Bring Your Own License.**

How can you secure data at rest on an EBS volume?

- ☐ Attach the volume to an instance using EC2's SSL interface
- ☐ Write the data randomly instead of sequentially
- ☐ Encrypt the volume using the S3 server-side encryption service
- ☐ Create an IAM policy that restricts read and write access to the volume
- ✓ ☒ Use an encrypted file system on top of the EBS volume

The correct answer is Use an encrypted file system on top of the EBS volume.

<https://aws.amazon.com/blogs/aws/protect-your-data-with-new-efs-encryption/>.

Which Amazon Elastic Compute Cloud feature can you query from within the instance to access instance properties?

- ☐ Instance user data
- ☐ Resource tags
- ✓ ☒ Instance metadata
- ☐ Amazon Machine Image

 The correct answer is Instance metadata.

Does Amazon Route 53 support NS Records?

- ☐ Yes, it supports Name Service records
- ☐ No
- ☐ It supports only MX records.
- ✓ ☒ Yes, it supports Name Server records.

The correct answer is Yes, it supports Name Server records..

When creation of an EBS snapshot is initiated, but not completed, the EBS volume

- ✓ ☒ Can be used while the snapshot is in progress
- ☐ Cannot be detached or attached to an EC2 instance until the snapshot completes
- ☐ Can be used in read-only mode while the snapshot is in progress.
- ☐ Cannot be used until the snapshot completes

The correct answer is Can be used while the snapshot is in progress.



What does Amazon EBS stand for?

- ☐ Elastic Block Storage
- ☐ Elastic Business Server
- ☐ Elastic Blade Server
- ✓ ☒ Elastic Block Store

The correct answer is Elastic Block Store.


EBS = Elastic Block Storage However Amazon EBS = Amazon Elastic Block Store.

After creating a new IAM user which of the following must be done before they can successfully make API calls?

- ☐ Add a password to the user
- ☐ Enable Multi-Factor Authentication for the user.
- ☐ Assign a Password Policy to the user
- ✓ ☒ Create a set of Access Keys for the user

The correct answer is Create a set of Access Keys for the user.

http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_SettingUpUser.html.

 A customer wants to leverage Amazon Simple Storage Service (S3) and Amazon Glacier as part of their backup and archive infrastructure. The customer plans to use third-party software to support this integration. Which approach will limit the access of the third party software to only the Amazon S3 bucket named "company backup"?

- ☐ A custom bucket policy limited to the Amazon S3 API in the Amazon Glacier archive "company-backup"
- ✓ ☒ A custom bucket policy limited to the Amazon S3 API in "company-backup"
- ☐ A custom IAM user policy limited to the Amazon S3 API for the Amazon Glacier archive "company-backup".
- ☐ A custom IAM user policy limited to the Amazon S3 API in "company-backup"

The correct answer is A custom bucket policy limited to the Amazon S3 API in "company-backup".

Location of Instances are

- ☐ Regional
- ✓ ☒ based on Availability Zone
- ☐ Global



The correct answer is based on Availability Zone.

A company has a workflow that sends video files from their on-premise system to AWS for transcoding. They use EC2 worker instances that pull transcoding jobs from SQS. Why is SQS an appropriate service for this scenario?

- ☐ SQS guarantees the order of the messages.
- ☐ SQS synchronously provides transcoding output.
- ☐ SQS checks the health of the worker instances.
- ✓ ☒ SQS helps to facilitate horizontal scaling of encoding tasks.

The correct answer is SQS helps to facilitate horizontal scaling of encoding tasks..

The service is targeted at organizations with multiple users or systems that use AWS products such as Amazon EC2, Amazon SimpleDB, and the AWS Management Console.

- ☐ Amazon RDS
- ☐ AWS Integrity Management
- ✓ ☒ AWS Identity and Access Management
- ☐ Amazon EMR



The correct answer is AWS Identity and Access Management.

Is there any way to own a direct connection to Amazon Web Services?

- ☐ You can create an encrypted tunnel to VPC, but you don't own the connection
- ☐ Yes, it's called Amazon Dedicated Connection
- ☐ No, AWS only allows access from the public Internet.
- ☒ Yes, it's called Direct Connect

The correct answer is Yes, it's called Direct Connect.

What is the command line instruction for running the remote desktop client in Windows?

- ☐ desk.cpl
- ☒ mstsc
- ☐ rdp

The correct answer is mstsc.




Which of the following services natively encrypts data at rest within an AWS region?
Choose 2 answers

- ✓ ☒ AWS Storage Gateway
- ☐ Amazon DynamoDB
- ☐ Amazon CloudFront
- ✓ ☒ Amazon Glacier
- ☐ Amazon Simple Queue Service

The correct answer is AWS Storage Gateway, Amazon Glacier.

A customer implemented AWS Storage Gateway with a gateway-cached volume at their main office. An event takes the link between the main and branch office offline. Which methods will enable the branch office to access their data? Choose 3 answers



- ☐ Use a HTTPS GET to the Amazon S3 bucket where the files are located
- ☐ Restore by implementing a lifecycle policy on the Amazon S3 bucket
- ☐ Make an Amazon Glacier Restore API call to load the files into another Amazon S3 bucket within four to six hours.
- ✓ ☒ Launch a new AWS Storage Gateway instance AMI in Amazon EC2, and restore from a gateway snapshot.
- ✓ ☒ Create an Amazon EBS volume from a gateway snapshot, and mount it to an Amazon EC2 instance.

-  ☒ Launch an AWS Storage Gateway virtual iSCSI device at the branch office, and restore from a gateway snapshot.

The correct answer is Launch a new AWS Storage Gateway instance AMI in Amazon EC2, and restore from a gateway snapshot., Create an Amazon EBS volume from a gateway snapshot, and mount it to an Amazon EC2 instance., Launch an AWS Storage Gateway virtual iSCSI device at the branch office, and restore from a gateway snapshot..

Option A is not possible as gateway volumes are only accessible from the AWS Storage Gateway and cannot be directly accessed using Amazon S3 APIs.

A company is preparing to give AWS Management Console access to developers. Company policy mandates identity federation and role-based access control. Roles are currently assigned using groups in the corporate Active Directory. What combination of the following will give developers access to the AWS console? (Select 2) Choose 2 answers

-  ☒ AWS Directory Service AD Connector
- ☐ AWS Directory Service Simple AD
- ☐ AWS Identity and Access Management groups
-  ☒ AWS identity and Access Management roles
- ☐ AWS identity and Access Management users



The correct answer is AWS Directory Service AD Connector, AWS identity and Access Management roles.


A company needs to deploy services to an AWS region which they have not previously used. The company currently has an AWS identity and Access Management (IAM) role for the Amazon EC2 instances, which permits the instance to have access to Amazon DynamoDB. The company wants their EC2 instances in the new region to have the same privileges. How should the company achieve this?

- ☐ Create a new IAM role and associated policies within the new region
- ✓ ☒ Assign the existing IAM role to the Amazon EC2 instances in the new region
- ☐ Copy the IAM role and associated policies to the new region and attach it to the instances
- ☐ Create an Amazon Machine Image (AMI) of the instance and copy it to the desired region using the AMI Copy feature

The correct answer is Assign the existing IAM role to the Amazon EC2 instances in the new region.

A customer is hosting their company website on a cluster of web servers that are behind a public-facing load balancer. The customer also uses Amazon Route 53 to manage their public DNS. How should the customer configure the DNS zone apex record to point to the load balancer?

- ☐ Create an A record pointing to the IP address of the load balancer
- ☐ Create a CNAME record pointing to the load balancer DNS name.


-  ☐ Create a CNAME record aliased to the load balancer DNS name.
- ☒ Create an A record aliased to the load balancer DNS name

The correct answer is Create an A record aliased to the load balancer DNS name.

An existing application stores sensitive information on a non-boot Amazon EBS data volume attached to an Amazon Elastic Compute Cloud instance. Which of the following approaches would protect the sensitive data on an Amazon EBS volume?

- ☐ Upload your customer keys to AWS CloudHSM. Associate the Amazon EBS volume with AWS CloudHSM. Re-mount the Amazon EBS volume.
- ☒ Create and mount a new, encrypted Amazon EBS volume. Move the data to the new volume. Delete the old Amazon EBS volume.
- ☐ Unmount the EBS volume. Toggle the encryption attribute to True. Re-mount the Amazon EBS volume.
- ☐ Snapshot the current Amazon EBS volume. Restore the snapshot to a new, encrypted Amazon EBS volume. Mount the Amazon EBS volume

The correct answer is Create and mount a new, encrypted Amazon EBS volume. Move the data to the new volume. Delete the old Amazon EBS volume..

 A customer has a single 3-TB volume on-premises that is used to hold a large repository of images and print layout files. This repository is growing at 500 GB a year and must be presented as a single logical volume. The customer is becoming increasingly constrained with their local storage capacity and wants an off-site backup of this data, while maintaining low-latency access to their frequently accessed data. Which AWS Storage Gateway configuration meets the customer requirements?

- ✓ ☒ Gateway-Cached volumes with snapshots scheduled to Amazon S3
- ☐ Gateway-Stored volumes with snapshots scheduled to Amazon S3
- ☐ Gateway-Virtual Tape Library with snapshots to Amazon S3
- ☐ Gateway-Virtual Tape Library with snapshots to Amazon Glacier

The correct answer is Gateway-Cached volumes with snapshots scheduled to Amazon S3.

You try to connect via SSH to a newly created Amazon EC2 instance and get one of the following error messages: "Network error: Connection timed out" or "Error connecting to [instance], reason: - > Connection timed out: connect," You have confirmed that the network and security group rules are configured correctly and the instance is passing status checks. What steps should you take to identify the source of the behavior? Choose 2 answers

- ✓ ☒ Verify that the private key file corresponds to the Amazon EC2 key pair assigned at launch.
- ☐ Verify that your IAM user policy has permission to launch Amazon EC2 instances.
- ✓ ☒ Verify that you are connecting with the appropriate user name for your AMI.



- ☐ Verify that the Amazon EC2 Instance was launched with the proper IAM role.
- ☐ Verify that your federation trust to AWS has been established.

The correct answer is Verify that the private key file corresponds to the Amazon EC2 key pair assigned at launch., Verify that you are connecting with the appropriate user name for your AMI..

You are deploying an application to track GPS coordinates of delivery trucks in the United States. Coordinates are transmitted from each delivery truck once every three seconds. You need to design an architecture that will enable real-time processing of these coordinates from multiple consumers. Which service should you use to implement data ingestion?

- ✓ ☒ Amazon Kinesis
- ☐ AWS Data Pipeline
- ☐ Amazon AppStream
- ☐ Amazon Simple Queue Service

The correct answer is Amazon Kinesis.

A photo-sharing service stores pictures in Amazon Simple Storage Service (S3) and allows application sign-in using an OpenID Connect-compatible identity provider.

Which AWS Security Token Service approach to temporary access should you use for the Amazon S3 operations?

- ☐ SAML-based Identity Federation
- ☐ Cross-Account Access
- ☐ AWS Identity and Access Management roles
- ✓ ☒ Web Identity Federation

The correct answer is Web Identity Federation.

You have an application running on an Amazon Elastic Compute Cloud instance, that uploads 5 GB video objects to Amazon Simple Storage Service (S3). Video uploads are taking longer than expected, resulting in poor application performance. Which method will help improve performance of your application?

- ☐ Enable enhanced networking
- ✓ ☒ Use Amazon S3 multipart upload
- ☐ Leveraging Amazon CloudFront, use the HTTP POST method to reduce latency
- ☐ Use Amazon Elastic Block Store Provisioned IOPs and use an Amazon EBSoptimized Instance



The correct answer is Use Amazon S3 multipart upload.

You are deploying an application to collect votes for a very popular television show. Millions of users will submit votes using mobile devices. The votes must be collected into a durable, scalable, and highly available data store for real-time public tabulation. Which service should you use?

- ☐ Amazon DynamoDB
- ☐ Amazon Redshift
- ☒ Amazon Kinesis
- ☐ Amazon Simple Queue Service

The correct answer is Amazon Kinesis.

Amazon Kinesis Streams enables you to build custom applications that process or analyze streaming data for specialized needs. Amazon Kinesis Streams can continuously capture and store terabytes of data per hour from hundreds of thousands of sources such as website clickstreams, financial transactions, social media feeds, IT logs, and location-tracking events. With Amazon Kinesis Client Library (KCL), you can build Amazon Kinesis Applications and use streaming data to power real-time dashboards, generate alerts, implement dynamic pricing and advertising, and more.

What happens, by default, when one of the resources in a CloudFormation stack cannot be created?

- ☐ Previously-created resources are kept but the stack creation terminates.
- ☐ CloudFormation templates are parsed in advance so stack creation is guaranteed to succeed.
- ☒ Previously-created resources are deleted and the stack creation terminates.

 The final results to indicate which steps failed.

Treated resources are deleted and the stack creation terminates..

By default, the “automatic rollback on error” feature is enabled. This will cause all AWS resources that AWS CloudFormation created successfully for a stack up to the point where an error occurred to be deleted. This is useful when, for example, you accidentally exceed your default limit of Elastic IP addresses, or you don’t have access to an EC2 AMI you’re trying to run. This feature enables you to rely on the fact that stacks are either fully created, or not at all, which simplifies system administration and layered solutions built on top of AWS CloudFormation..

Which of the following statements about SQS is true?

- ☐ Messages will be delivered exactly once and messages will be delivered in First in, First out order
- ☐ Messages will be delivered exactly once and messages will be delivered in Last in, First out order
- ☐ Messages will be delivered exactly once and message delivery order is indeterminate
- ✓ ☒ Messages will be delivered one or more times and message delivery order is indeterminate

The correct answer is Messages will be delivered one or more times and message delivery order is indeterminate.



Amazon SQS ensures delivery of each message at least once. Amazon SQS is engineered to always be available and deliver messages. One of the resulting trade-offs is that SQS does not guarantee first in, first out delivery of messages.

Which of the following statements about SWF are true? Choose 3 answers

- ☐ SWF triggers SNS notifications on task assignment
- ☐ SWF requires at least 1 EC2 instance per domain
- ✓ ☒ SWF uses deciders and workers to complete tasks
- ✓ ☒ SWF tasks are assigned once and never duplicated
- ☐ SWF requires an S3 bucket for workflow storage
- ✓ ☒ SWF workflow executions can last up to a year

The correct answer is SWF uses deciders and workers to complete tasks, SWF tasks are assigned once and never duplicated, SWF workflow executions can last up to a year.

Amazon SWF 1. By implementing workers and deciders, you focus on your differentiated application logic as it pertains to performing the actual processing steps and coordinating them. Amazon SWF handles the underlying details such as storing tasks until they can be assigned, monitoring assigned tasks, and providing consistent information on their completion. 2. Amazon SWF stores tasks, assigns them to workers when they are ready, and monitors their progress. It ensures that a task is assigned only once and is never duplicated 3. Maximum workflow execution time – 1 year.

Which of the following are valid SNS delivery transports? Choose 3 answers

- ☐ UDP
- ✓ ☒ Email

- 
- ☒ SQS
 - ☐ SOAP
 - ☒ SMS

The correct answer is Email, SQS, SMS.

Amazon SNS supports notifications over multiple transport protocols. Customers can select one the following transports as part of the subscription requests: •"HTTP", "HTTPS" – Subscribers specify a URL as part of the subscription registration; notifications will be delivered through an HTTP POST to the specified URL. •"Email", "Email-JSON" – Messages are sent to registered addresses as email. Email-JSON sends notifications as a JSON object, while Email sends text-based email. •"SQS" – Users can specify an SQS queue as the endpoint; Amazon SNS will enqueue a notification message to the specified queue (which subscribers can then process using SQS APIs such as ReceiveMessage, DeleteMessage, etc.) •"SMS" – Messages are sent to registered phone numbers as SMS text messages..

Which of the following services are included at no additional cost with the use of the AWS platform? Choose 2 answers

- ☐ Elastic Compute Cloud
- ☐ Elastic Load Balancing
- ☐ Simple Storage Service
- ☐ Simple Workflow Service
- ☒ CloudFormation
- ☒ Auto Scaling



The correct answer is CloudFormation, Auto Scaling.

Which of the following are correct statements with policy evaluation logic in AWS Identity and Access Management? Choose 2 answers

- ☐ An explicit allow overrides an explicit deny Load Balancer
- ✓ ☒ By default, all requests are denied
- ✓ ☒ An explicit allow overrides default deny.
- ☐ An explicit deny does not override an explicit allow
- ☐ By default, all request are allowed

The correct answer is By default, all requests are denied, An explicit allow overrides default deny..

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 overrides this default. • An explicit deny overrides any allows..

Company A has a 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?

- ☐ Apply a bucket policy that grants anonymous users to download the content from the S3 bucket



- ☒ Generate a pre-signed object URL for the premier content file when a paid subscriber requests a download
- ☐ Enable server side encryption on the S3 bucket for data protection against the non-paying website visitors
- ☐ Add a bucket policy that requires Multi-Factor Authentication for requests to access the S3 bucket objects

The correct answer is Generate a pre-signed object URL for the premier content file when a paid subscriber requests a download.

All objects by default are private. Only the object owner has permission to access these objects. However, the object owner can optionally share objects with others by creating a pre-signed URL, using their own security credentials, to grant time-limited permission to download the objects. When you create a pre-signed URL for your object, you must provide your security credentials, specify a bucket name, an object key, specify the HTTP method (GET to download the object) and expiration date and time. The pre-signed URLs are valid only for the specified duration. Anyone who receives the pre-signed URL can then access the object. For example, if you have a video in your bucket and both the bucket and the object are private, you can share the video with others by generating a pre-signed URL..

A user has enabled termination protection on an EC2 instance. The user has also set Instance initiated shutdown behaviour to terminate. When the user shuts down the instance from the OS, what will happen?

- ☐ The OS will shutdown but the instance will not be terminated due to protection
- ☒ It will terminate the instance
- ☐ It is not possible to set the termination protection when an Instance initiated shutdown is set to Terminate
- ☐ It will not allow the user to shutdown the instance from the OS



The correct answer is It will terminate the instance.

Enabling Termination Protection for an Instance By default, you can terminate your instance using the Amazon EC2 console, command line interface, or API. If you want to prevent your instance from being accidentally terminated using Amazon EC2, you can enable termination protection for the instance. The `DisableApiTermination` attribute controls whether the instance can be terminated using the console, CLI, or API. By default, termination protection is disabled for your instance. You can set the value of this attribute when you launch the instance, while the instance is running, or while the instance is stopped (for Amazon EBS-backed instances). The `DisableApiTermination` attribute does not prevent you from terminating an instance by initiating shutdown from the instance (using an operating system command for system shutdown) when the `InstanceInitiatedShutdownBehavior` attribute is set.

Which of the following statements are true about Amazon Route 53 resource records?

Choose 2 answers

- ☐ A CNAME record can be created for your zone apex.
- ✓ ☒ An Amazon Route 53 CNAME record can point to any DNS record hosted anywhere.
- ✓ ☒ An Alias record can map one DNS name to another Amazon Route 53 DNS name.
- ☐ TTL can be set for an Alias record in Amazon Route 53.
- ☐ An Amazon Route 53 Alias record can point to any DNS record hosted anywhere.
- ☐ Use SSL to encrypt the data while in transit to Amazon S3.



The correct answer is An Amazon Route 53 CNAME record can point to any DNS record hosted anywhere., An Alias record can map one DNS name to another Amazon Route 53 DNS name..

Amazon Route 53 offers 'Alias' records (an Amazon Route 53-specific virtual record). Alias records are used to map resource record sets in your hosted zone to Amazon Elastic Load Balancing load balancers, Amazon CloudFront distributions, AWS Elastic Beanstalk environments, or Amazon S3 buckets that are configured as websites. Alias records work like a CNAME record in that you can map one DNS name (example.com) to another 'target' DNS name (elb1234.elb.amazonaws.com). They differ from a CNAME record in that they are not visible to resolvers. Resolvers only see the A record and the resulting IP address of the target record..


When will you incur costs with an Elastic IP address (EIP)?

- ☐ Costs are incurred regardless of whether the EIP is associated with a running instance
- ☐ When an EIP is allocated
- ☐ When it is allocated and associated with a running instance
- ☒ When it is allocated and associated with a stopped instance

The correct answer is When it is allocated and associated with a stopped instance.

To ensure efficient use of Elastic IP addresses, we impose a small hourly charge if an Elastic IP address is not associated with a running instance, or if it is associated with a stopped instance or an unattached network interface. While your instance is running, you are not charged for one Elastic IP address associated with the instance, but you are charged for any additional Elastic IP addresses associated with the instance..

What is RDS Automatic Host Replacement?

 Multi-AZ deployments provide enhanced availability and durability for database instances, making them a natural fit for production database workloads

- ☐ Synchronously replicates your data to a standby instance in a different Availability Zone (AZ).
- ☐ Backup your database and transaction logs and store both for a user-specified retention period
- ✓ ☒ Automatically replace the compute instance powering your deployment in the event of a hardware failure.

The correct answer is Automatically replace the compute instance powering your deployment in the event of a hardware failure..

Automatic Host Replacement – Amazon RDS will automatically replace the compute instance powering your deployment in the event of a hardware failure. Refer: <https://aws.amazon.com/rds/sqlserver/>.

Which of the following instance types are available as Amazon EBS-backed only?
Choose 2 answers

- ✓ ☒ General purpose T2
- ☐ General purpose M3
- ✓ ☒ Compute-optimized C4
- ☐ Compute-optimized C3
- ☐ Storage-optimized 12



The correct answer is General purpose T2, Compute-optimized C4.

Which of the following notification endpoints or clients are supported by Amazon Simple Notification Service? Choose 2 answers

- ✓ ☒ Email
- ☐ CloudFront distribution
- ☐ File Transfer Protocol
- ✓ ☒ Short Message Service
- ☐ Simple Network Management Protocol

The correct answer is Email, Short Message Service.

A company is building software on AWS that requires access to various AWS services. Which configuration should be used to ensure mat AWS credentials (i.e., Access Key ID/Secret Access Key combination) are not compromised?

- ☐ Enable Multi-Factor Authentication for your AWS root account.
- ✓ ☒ Assign an IAM role to the Amazon EC2 instance.
- ☐ Store the AWS Access Key ID/Secret Access Key combination in software comments.
- ☐ Assign an IAM user to the Amazon EC2 Instance.



The correct answer is Assign an IAM role to the Amazon EC2 instance..

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

You manually launch a NAT AMI in a public subnet. The network is properly configured. Security groups and network access control lists are property configured. Instances in a private subnet can access the NAT. The NAT can access the Internet. However, private instances cannot access the Internet. What additional step is required to allow access from the private instances?

- ☐ Enable Source/Destination Check on the private Instances.
- ☐ Enable Source/Destination Check on the NAT instance.
- ☐ Disable Source/Destination Check on the private instances.
- ✓ ☒ Disable Source/Destination Check on the NAT instance.

The correct answer is Disable Source/Destination Check on the NAT instance..

.

A company is deploying a two-tier, highly available web application to AWS. Which service provides durable storage for static content while utilizing lower Overall CPU resources for the web tier?

- ☐ Amazon EBS volume
- ✓ ☒ Amazon S3
- ☐ Amazon EC2 instance store
- ☐ Amazon RDS instance

 The correct answer is Amazon S3.

The Trusted Advisor service provides insight regarding which four categories of an AWS account?

- ☐ Security, fault tolerance, high availability, and connectivity
- ☐ Security, access control, high availability, and performance
- ☒ Performance, cost optimization, security, and fault tolerance
- ☐ Performance, cost optimization, access control, and connectivity

The correct answer is Performance, cost optimization, security, and fault tolerance.

<https://aws.amazon.com/blogs/aws/category/aws-trusted-advisor/>.

Which of the following are true regarding encrypted Amazon Elastic Block Store (EBS) volumes? Choose 2 answers

- ☒ Supported on all Amazon EBS volume types
- ☒ Snapshots are automatically encrypted
- ☐ Available to all instance types
- ☐ Existing volumes can be encrypted
- ☐ shared volumes can be encrypted



The correct answer is Supported on all Amazon EBS volume types, Snapshots are automatically encrypted.

This feature is supported on all Amazon EBS volume types (General Purpose (SSD), Provisioned IOPS (SSD), and Magnetic). You can access encrypted Amazon EBS volumes the same way you access existing volumes; encryption and decryption are handled transparently and they require no additional action from you, your Amazon EC2 instance, or your application. Snapshots of encrypted Amazon EBS volumes are automatically encrypted, and volumes that are created from encrypted Amazon EBS snapshots are also automatically encrypted.


<http://docs.aws.amazon.com/kms/latest/developerguide/services-ebs.html>.

You have a load balancer configured for VPC, and all back-end Amazon EC2 instances are in service. However, your web browser times out when connecting to the load balancer's DNS name. Which options are probable causes of this behavior? Choose 2 answers

- ✓ ☒ The load balancer was not configured to use a public subnet with an Internet gateway configured
- ☐ The Amazon EC2 instances do not have a dynamically allocated private IP address
- ✓ ☒ The security groups or network ACLs are not property configured for web traffic
- ☐ The load balancer is not configured in a private subnet with a NAT instance.
- ☐ The VPC does not have a VGW configured.

The correct answer is The load balancer was not configured to use a public subnet with an Internet gateway configured, The security groups or network ACLs are not property configured for web traffic.

.

 You need to pass a custom script to new Amazon Linux instances created in your Auto Scaling group. Which feature allows you to accomplish this?

- ✓ ☒ User data
- ☐ EC2Config service
- ☐ IAM roles
- ☐ AWS Config

The correct answer is User data.

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

- ✓ ☒ Spot Instances
- ☐ Reserved instances
- ☐ Dedicated instances
- ☐ On-Demand instances

The correct answer is Spot Instances.



What is the minimum time Interval for the data that Amazon CloudWatch receives and aggregates?


- ☐ One second
- ☐ Five seconds
- ✓ ☒ One minute
- ☐ Three minutes
- ☐ Five minutes


The correct answer is One minute.

Many metrics are received and aggregated at 1-minute intervals. Some are at 3-minute or 5-minute intervals.

A customer is running a multi-tier web application farm in a virtual private cloud (VPC) that is not connected to their corporate network. They are connecting to the VPC over the Internet to manage all of their Amazon EC2 instances running in both the public and private subnets. They have only authorized the bastion-security group with Microsoft Remote Desktop Protocol (RDP) access to the application instance security groups, but the company wants to further limit administrative access to all of the instances in the VPC. Which of the following Bastion deployment scenarios will meet this requirement?


- ☐ Deploy a Windows Bastion host on the corporate network that has RDP access to all instances in the VPC
- ☐ Deploy a Windows Bastion host with an Elastic IP address in the public subnet and allow SSH access to the bastion from anywhere

 ☐ Deploy a Windows Bastion host with an Elastic IP address in the private subnet, and restrict RDP access to the bastion from only the corporate public IP addresses

 ☒ Deploy a Windows Bastion host with an auto-assigned Public IP address in the public subnet, and allow RDP access to the bastion from only the corporate public IP addresses

The correct answer is Deploy a Windows Bastion host with an auto-assigned Public IP address in the public subnet, and allow RDP access to the bastion from only the corporate public IP addresses.

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

- ☐ Multiple Amazon EBS volume with snapshots
- ☐ A single Amazon Glacier vault
-  ☒ A single Amazon S3 bucket
- ☐ Multiple instance stores

The correct answer is A single Amazon S3 bucket.




Which of the following are true regarding AWS CloudTrail? Choose 3 answers

- ✓ ☒ CloudTrail is enabled globally
- ☐ CloudTrail is enabled by default
- ✓ ☒ CloudTrail is enabled on a per-region basis
- ☐ CloudTrail is enabled on a per-service basis
- ✓ ☒ Logs can be delivered to a single Amazon S3 bucket for aggregation
- ☐ CloudTrail is enabled for all available services within a region
- ☐ Logs can only be processed and delivered to the region in which they are generated

The correct answer is CloudTrail is enabled globally, CloudTrail is enabled on a per region basis, Logs can be delivered to a single Amazon S3 bucket for aggregation.

You have a content management system running on an Amazon EC2 instance that is approaching 100% CPU utilization. Which option will reduce load on the Amazon EC2 instance?

- ☐ Create a load balancer, and register the Amazon EC2 instance with it
- ☐ Create a CloudFront distribution, and configure the Amazon EC2 instance as the origin
- ✓ ☒ Create an Auto Scaling group from the instance using the CreateAutoScalingGroup action

 Create a launch configuration from the instance using the CreateLaunchConfiguration action



The correct answer is Create an Auto Scaling group from the instance using the CreateAutoScalingGroup action.

A t2.medium EC2 instance type must be launched with what type of Amazon Machine Image (AMI)?

- ☐ An Instance store Hardware Virtual Machine AMI
- ☐ An Instance store Paravirtual AMI
- ☒ An Amazon EBS-backed Hardware Virtual Machine AMI
- ☐ An Amazon EBS-backed Paravirtual AMI


The correct answer is An Amazon EBS-backed Hardware Virtual Machine AMI.

A US-based company is expanding their web presence into Europe. The company wants to extend their AWS infrastructure from Northern Virginia (us-east-1) into the Dublin (eu-west-1) region. Which of the following options would enable an equivalent experience for users on both continents?

-  ☐ Use a public-facing load balancer per region to load-balance web traffic, and enable HTTP health checks.
- ☐ Use a public-facing load balancer per region to load-balance web traffic, and enable sticky sessions.
-  ☒ Use Amazon Route 53, and apply a geolocation routing policy to distribute traffic across both regions.
- ☐ Use Amazon Route 53, and apply a weighted routing policy to distribute traffic across both regions.

The correct answer is Use Amazon Route 53, and apply a geolocation routing policy to distribute traffic across both regions..

A customer wants to track access to their Amazon Simple Storage Service (S3) buckets and also use this information for their internal security and access audits. Which of the following will meet the Customer requirement?

- ☐ Enable AWS CloudTrail to audit all Amazon S3 bucket access.
-  ☒ Enable server access logging for all required Amazon S3 buckets
- ☐ Enable the Requester Pays option to track access via AWS Billing
- ☐ Enable Amazon S3 event notifications for Put and Post.



The correct answer is Enable server access logging for all required Amazon S3 buckets.

A company has an AWS account that contains three VPCs (Dev, Test, and Prod) in the same region. Test is peered to both Prod and Dev. All VPCs have non overlapping CIDR blocks. The company wants to push minor code releases from Dev to Prod to speed up time to market. Which of the following options helps the company accomplish this?

- ✓ ☒ Create a new peering connection Between Prod and Dev along with appropriate routes.
- ☐ Create a new entry to Prod in the Dev route table using the peering connection as the target.
- ☐ Attach a second gateway to Dev. Add a new entry in the Prod route table identifying the gateway as the target
- ☐ The VPCs have non-overlapping CIDR blocks in the same account. The route tables contain local routes for all VPCs

The correct answer is Create a new peering connection Between Prod and Dev along with appropriate routes..

Which of the following are use cases for Amazon DynamoDB? Choose 3 answers

- ☐ Storing BLOB data.
- ✓ ☒ Managing web sessions
- ✓ ☒ Storing JSON documents.
- ✓ ☒ Storing metadata for Amazon S3 objects.



- ☐ Running relational joins and complex updates.
- ☐ Storing large amounts of infrequently accessed data

The correct answer is Managing web sessions, Storing JSON documents., Storing metadata for Amazon S3 objects..

You are designing a web application that stores static assets in an Amazon Simple Storage Service (S3) bucket. You expect this bucket to immediately receive over 150 PUT requests per second. What should you do to ensure optimal performance?

- ☐ Use multi-part upload.
- ✓ ☒ Add a random prefix to the key names
- ☐ Amazon S3 will automatically manage performance at this scale.
- ☐ Use a predictable naming scheme, such as sequential numbers or date time sequences, in the key names

The correct answer is Add a random prefix to the key names.

Amazon SWF is designed to help users

- ☐ Design graphical user interface interactions



☐ Manage user identification and authorization

☐ Store Web content

✓ ☒ Coordinate synchronous and asynchronous tasks which are distributed and fault tolerant

The correct answer is Coordinate synchronous and asynchronous tasks which are distributed and fault tolerant.

True or False: When using IAM to control access to your RDS resources, the key names that can be used are case sensitive. For example, aws:CurrentTime is NOT equivalent to AWS:currenttime

✓ ☒ TRUE

☐ FALSE

The correct answer is TRUE.

What will be the status of the snapshot until the snapshot is complete.

☐ Running

☐ Working



The correct answer is Pending.

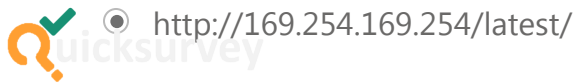
What does the AWS Storage Gateway provide?

- ✓ ☒ It allows to integrate on-premises IT environments with Cloud Storage.
- ☐ A direct encrypted connection to Amazon S3.
- ☐ It's a backup solution that provides an on-premises Cloud storage.
- ☐ It provides an encrypted SSL endpoint for backups in the Cloud.

The correct answer is It allows to integrate on-premises IT environments with Cloud Storage..

Fill in the blanks: The base URI for all requests for instance metadata is_____

- ☐ http://254.169.169.254/latest/
- ☐ http://169.169.254.254/latest/
- ☐ http://127.0.0.1/latest/



The correct answer is `http://169.254.169.254/latest/`.

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

- ☐ `ec2-deploy-snapshot`
- ☐ `ec2-fresh-snapshot`
- ☒ `ec2-create-snapshot`
- ☐ `ec2-new-snapshot`

The correct answer is `ec2-create-snapshot`.

Typically, you want your application to check whether a request generated an error before you spend any time processing results. The easiest way to find out if an error occurred is to look for an _____ node in the response from the Amazon RDS API.

- ☐ Incorrect
- ☒ Error
- ☐ False



The correct answer is Error.

.

What does the following command do with respect to the Amazon EC2 security groups?
`ec2-revoke RevokeSecurityGroupIngress`

- ☐ Removes one or more security groups from a rule.
- ☐ Removes one or more security groups from an Amazon EC2 instance.
- ☒ Removes one or more rules from a security group
- ☐ Removes a security group from our account.

The correct answer is Removes one or more rules from a security group.

.

As the AWS platform is PCI DSS 1.0 compliant, I can immediately deploy a website to it that can take and store credit card details. I do not need to get any kind of delta accreditation from a QSA.

- ☐ TRUE
- ☒ FALSE



The correct answer is FALSE.

What is the underlying Hypervisor for EC2?

- ☐ Hyper-V
- ☐ ESX
- ☒ Xen
- ☐ OVM

The correct answer is Xen.

The AWS platform consists of how many regions currently?

- ☐ 5
- ☐ 10
- ☐ 11
- ☒ 12



The correct answer is 12.

How many copies of my data does RDS - Aurora store by default?

- ☐ 1
- ☐ 3
- ☒ 6
- ☐ 4

The correct answer is 6.

When trying to grant an amazon account access to S3 using access control lists what method of identification should you use to identify that account with?

- ☒ The email address of the account or the canonical user ID
- ☐ An email address with a 2FA token
- ☐ The ARN
- ☐ The AWS account number



The correct answer is The email address of the account or the canonical user ID.


You are a solutions architect working for a large oil and gas company. Your company runs their production environment on AWS and has a custom VPC. The VPC contains 3 subnets, 1 of which is public and the other 2 are private. Inside the public subnet is a fleet of EC2 instances which are the result of an autoscaling group. All EC2 instances are in the same security group. Your company has created a new custom application which connects to mobile devices using a custom port. This application has been rolled out to production and you need to open this port globally to the internet. What steps should you take to do this, and how quickly will the change occur?

- ☐ Open the port on the existing network Access Control List. Your EC2 instances will be able to communicate on this port after a reboot.
- ☐ Open the port on the existing network Access Control List. Your EC2 instances will be able to communicate over this port immediately.
- ✓ ☒ Open the port on the existing security group. Your EC2 instances will be able to communicate over this port immediately.
- ☐ Open the port on the existing security group. Your EC2 instances will be able to communicate over this port as soon as the relevant Time To Live (TTL) expires.

The correct answer is Open the port on the existing security group. Your EC2 instances will be able to communicate over this port immediately..

Which of the following is not supported by AWS Import/Export?

- ☐ Import to Amazon S3
- ☐ Export from Amazon S3

-  ☐ Import to Amazon EBS
- ☐ Import to Amazon Glacier
- ✓ ☒ Export from Amazon Glacier

The correct answer is Export from Amazon Glacier.

Which of the following is not a service of the security category of the AWS trusted advisor service?

- ☐ Security Groups - Specific Ports Unrestricted
- ☐ MFA on Root Account
- ☐ IAM Use
- ✓ ☒ Vulnerabilities scans on existing VPCs

The correct answer is Vulnerabilities scans on existing VPCs .

Which of the following is NOT a valid SNS subscribers?

- ☐ SQS
- ☐ SMS



☐ HTTPS

☒ SWF

☐ EMAIL

☐ LAMBDA

The correct answer is SWF.

What are the different types of virtualization available on EC2?

☐ Psudeo-Virtual (PV) & Hardware Virtual Module (HSM)

☒ Para-Virtual (PV) & Hardware Virtual Machine (HVM)


☐ Psudeo-Virtual (PV) & Hardware Virtual Machine (HVM)

☐ Para-Virtual (PV) & Hardware Virtual Module (HSM)

The correct answer is Para-Virtual (PV) & Hardware Virtual Machine (HVM).

What happens to the I/O operations while you take a database snapshot?

☒ I/O operations to the database are suspended for a few minutes while the backup is in progress

 ☐ I/O operations to the database are sent to a Replica (if available) for a few minutes while the backup is in progress.

☐ I/O operations will be functioning normally

☐ I/O operations to the database are suspended for an hour while the backup is in progress

The correct answer is I/O operations to the database are suspended for a few minutes while the backup is in progress.

Read Replicas can be created for non-transactional storage engine and are supported for the _____ storage engine

☐ MSSQLDB

☐ InnoDB

✓ ☒ MyISAM

☐ Read Replica cannot be created for non-transactional storage

The correct answer is MyISAM.

Amazon RDS for MySQL Read Replicas require a transactional storage engine and are only supported for the InnoDB storage engine. Non-transactional MySQL storage engines such as MyISAM might prevent Read Replicas from working as intended. However, if you still choose to use MyISAM with Read Replicas, we advise you to watch the Amazon CloudWatch "Replica Lag" metric (available via the AWS Management



Console or Amazon CloudWatch APIs) carefully and recreate the Read Replica should it fall behind due to replication errors. The same considerations apply to the use of temporary tables and any other non-transactional engines..

Accessing platforms are Windows, MacOS, iOS and Android. Separate sticky session and SSL certificate setups are required for different platform types which of the following describes the most cost effective and performance efficient architecture setup?

- ☐ Setup a hybrid architecture to handle session state and SSL certificates on-prem and separate EC2 Instance groups running web applications for different platform types running in a VPC.
- ☐ Set up one ELB for all platforms to distribute load among multiple instances under it. Each EC2 instance implements all functionality for a particular platform.
- ☐ Set up two ELBs. The first ELB handles SSL certificates for all platforms and the second ELB handles session stickiness for all platforms. For each ELB, run separate EC2 instance groups to handle the web application for each platform.
- ☒ Assign multiple ELBs to an EC2 instance or group of EC2 instances running the common components of the web application, one ELB for each platform type. Session stickiness and SSL termination are done at the ELBs.

The correct answer is Assign multiple ELBs to an EC2 instance or group of EC2 instances running the common components of the web application, one ELB for each platform type. Session stickiness and SSL termination are done at the ELBs..

To serve Web traffic for a popular product, your chief financial officer and IT director have purchased 10 m1 large heavy utilization Reserved Instances (RIs) evenly spread across two availability zones. Route 53 is used to deliver the traffic to an Elastic Load Balancer (ELB). After several months, the product grows even more popular and you need additional capacity. As a result, your company purchases two C3.2xlarge medium utilization RIs. You register the two c3 2xlarge instances with your ELB and quickly find

that the m1 large instances are at 100% of capacity and the c3 2xlarge instances have significant capacity that's unused Which option is the most cost effective and uses EC2 capacity most effectively?

- ✓ ☒ Use a separate ELB for each instance type and distribute load to ELBs with Route 53 weighted round robin
- ☐ Configure Autoscaling group and Launch Configuration with ELB to add up to 10 more on-demand m1 large instances when triggered by Cloudwatch shut off c3 2xlarge instances
- ☐ Route traffic to EC2 m1 large and c3 2xlarge instances directly using Route 53 latency based routing and health checks shut off ELB
- ☐ Configure ELB with two c3 2xlarge Instances and use on-demand Autoscaling group for up to two additional c3.2xlarge instances Shut on m1 .large instances.

The correct answer is Use a separate ELB for each instance type and distribute load to ELBs with Route 53 weighted round robin.

Your company has recently extended its datacenter into a VPC on AWS to add burst computing capacity as needed Members of your Network Operations Center need to be able to go to the AWS Management Console and administer Amazon EC2 instances as necessary You don't want to create new IAM users for each NOC member and make those users sign in again to the AWS Management Console Which option below will meet the needs for your NOC members?

- ☐ Use OAuth 2.0 to retrieve temporary AWS security credentials to enable your NOC members to sign in to the AWS Management Console.
- ☐ Use web Identity Federation to retrieve AWS temporary security credentials to enable your NOC members to sign in to the AWS Management Console.




- ☒ Use your on-premises SAML2.0-compliant identity provider (IDP) to grant the NOC members federated access to the AWS Management Console via the AWS single sign-on (SSO) endpoint.
- ☐ Use your on-premises SAML2.0-compliant identity provider (IDP) to retrieve temporary security credentials to enable NOC members to sign in to the AWS Management Console.

The correct answer is Use your on-premises SAML2.0-compliant identity provider (IDP) to grant the NOC members federated access to the AWS Management Console via the AWS single sign-on (SSO) endpoint..

When assessing an organization AWS use of AWS API access credentials which of the following three credentials should be evaluated? Choose 3 answers

- ☐ Key pairs
- ✓ ☒ Console passwords
- ✓ ☒ Access keys
- ✓ ☒ Signing certificates
- ☐ Security Group memberships

The correct answer is Console passwords, Access keys, Signing certificates.


 You deployed your company website using Elastic Beanstalk and you enabled log file rotation to S3. An Elastic Map Reduce job is periodically analyzing the logs on S3 to build a usage dashboard that you share with your CIO. You recently improved overall performance of the website using Cloud Front for dynamic content delivery and your website as the origin. After this architectural change, the usage dashboard shows that the traffic on your website dropped by an order of magnitude. How do you fix your usage dashboard'?

- ✓ ☒ Enable CloudFront to deliver access logs to S3 and use them as input of the Elastic Map Reduce job
- ☐ Turn on Cloud Trail and use trail log tiles on S3 as input of the Elastic Map Reduce job
- ☐ Change your log collection process to use Cloud Watch ELB metrics as input of the Elastic Map Reduce job
- ☐ Use Elastic Beanstalk "Rebuild Environment" option to update log delivery to the Elastic Map Reduce job.
- ☐ Use Elastic Beanstalk 'Restart App server(s)' option to update log delivery to the Elastic Map Reduce job.

The correct answer is Enable CloudFront to deliver access logs to S3 and use them as input of the Elastic Map Reduce job.

Your company Is moving towards tracking web page users with a small tracking Image loaded on each page Currently you are serving this image out of US-East, but are starting to get concerned about the time It takes to load the image for users on the west coast. What are the two best ways to speed up serving this image? Choose 2 answers



 ☒ Use Route 53's Latency Based Routing and serve the image out of US-West-2 as well as US-East-1


 ☒ Serve the image out through CloudFront

☐ Serve the image out of S3 so that it isn't being served out of your web application tier

☐ Use EBS PIOPs to serve the image faster out of your EC2 instances

The correct answer is Use Route 53's Latency Based Routing and serve the image out of US-West-2 as well as US-East-1, Serve the image out through CloudFront.

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

 ☒ Create a new CloudTrail trail with one new S3 bucket to store the logs and with the global services option selected. Use IAM roles, S3 bucket policies and Multi Factor Authentication (MFA) Delete on the S3 bucket that stores your logs.

☐ Create a new CloudTrail with one new S3 bucket to store the logs. Configure SNS to send log file delivery notifications to your management system. Use IAM roles and S3 bucket policies on the S3 bucket that stores your logs.

☐ Create a new CloudTrail trail with an existing S3 bucket to store the logs and with the global services option selected Use S3 ACLs and Multi Factor Authentication (MFA) Delete on the S3 bucket that stores your logs.

☐ Create three new CloudTrail trails with three new S3 buckets to store the logs one for the AWS Management console, one for AWS SDKs and one for command



Bucket policies on the S3 buckets that store your logs.

The correct answer is Create a new CloudTrail trail with one new S3 bucket to store the logs and with the global services option selected. Use IAM roles, S3 bucket policies and Multi Factor Authentication (MFA) Delete on the S3 bucket that stores your logs..

A - Single New bucket with global services option for IAM and MFA delete for confidentiality
B - Missing Global Services for IAM
C - Existing bucket prevents confidentiality
D - 3 buckets not needed, Missing Global services options.

You are designing a connectivity solution between on-premises infrastructure and Amazon VPC Your server's on-premises will be communicating with your VPC instances You will be establishing IPsec tunnels over the internet You will be using VPN gateways and terminating the IPsec tunnels on AWS-supported customer gateways. Which of the following objectives would you achieve by implementing an IPsec tunnel as outlined above? (Choose 4 answers)

- ☐ End-to-end protection of data in transit
- ☐ End-to-end Identity authentication
- ✓ ☒ Data encryption across the Internet
- ✓ ☒ Protection of data in transit over the Internet
- ✓ ☒ Peer identity authentication between VPN gateway and customer gateway
- ✓ ☒ Data integrity protection across the Internet



The correct answer is Data encryption across the Internet, Protection of data in transit over the Internet, Peer identity authentication between VPN gateway and customer gateway, Data integrity protection across the Internet.

A read only news reporting site with a combined web and application tier and a database tier that receives large and unpredictable traffic demands must be able to respond to these traffic fluctuations automatically. What AWS services should be used meet these requirements?

- ✓ ☒ Stateless instances for the web and application tier synchronized using ElastiCache Memcached in an autoscaling group monitored with CloudWatch. And RDS with read replicas.
- ☐ Stateful instances for the web and application tier in an autoscaling group monitored with CloudWatch and RDS with read replicas
- ☐ Stateful instances for the web and application tier in an autoscaling group monitored with CloudWatch. And multi-AZ RDS
- ☐ Stateless instances for the web and application tier synchronized using ElastiCache Memcached in an autoscaling group monitored with CloudWatch and multi-AZ RDS

The correct answer is Stateless instances for the web and application tier synchronized using ElastiCache Memcached in an autoscaling group monitored with CloudWatch. And RDS with read replicas..

Your company plans to host a large donation website on Amazon Web Services (AWS). You anticipate a large and undetermined amount of traffic that will create many database writes. To be certain that you do not drop any writes to a database hosted on AWS. Which service should you use?



- ☐ Amazon RDS with provisioned IOPS up to the anticipated peak write throughput.
- ✓ ☒ Amazon Simple Queue Service (SQS) for capturing the writes and draining the queue to write to the database
- ☐ Amazon ElastiCache to store the writes until the writes are committed to the database.
- ☐ Amazon DynamoDB with provisioned write throughput up to the anticipated peak write throughput.

The correct answer is Amazon Simple Queue Service (SQS) for capturing the writes and draining the queue to write to the database.

An ERP application is deployed across multiple AZs in a single region. In the event of failure, the Recovery Time Objective (RTO) must be less than 3 hours, and the Recovery Point Objective (RPO) must be 15 minutes. The customer realizes that data corruption occurred roughly 1.5 hours ago. What DR strategy could be used to achieve this RTO and RPO in the event of this kind of failure?

- ✓ ☒ Take hourly DB backups to S3, with transaction logs stored in S3 every 5 minutes
- ☐ Use synchronous database master-slave replication between two availability zones.
- ☐ Take hourly DB backups to EC2 Instance store volumes with transaction logs stored in S3 every 5 minutes.
- ☐ Take 15 minute DB backups stored in Glacier with transaction logs stored in S3 every 5 minutes.



The correct answer is Take hourly DB backups to S3, with transaction logs stored in S3 every 5 minutes.

B - Replication won't help to backtrack and would be sync always C - Instance store not a preferred storage D - Glacier does not meet the RTO.

You have a periodic Image analysis application that gets some files In Input analyzes them and for each file writes some data in output to a ten file the number of files in input per day is high and concentrated in a few hours of the day. Currently you have a server on EC2 with a large EBS volume that hosts the input data and the results it takes almost 20 hours per day to complete the process What services could be used to reduce the elaboration time and improve the availability of

- ✓ ☒ S3 to store I/O files. SQS to distribute elaboration commands to a group of hosts working in parallel. Auto scaling to dynamically size the group of hosts depending on the length of the SQS queue
- ☐ EBS with Provisioned IOPS (PIOPS) to store I/O files. SNS to distribute elaboration commands to a group of hosts working in parallel Auto Scaling to dynamically size the group of hosts depending on the number of SNS notifications
- ☐ S3 to store I/O files, SNS to distribute evaporation commands to a group of hosts working in parallel. Auto scaling to dynamically size the group of hosts depending on the number of SNS notifications
- ☐ EBS with Provisioned IOPS (PIOPS) to store I/O files SOS to distribute elaboration commands to a group of hosts working in parallel Auto Scaling to dynamically size the group ot hosts depending on the length of the SQS queue.



The correct answer is S3 to store I/O files. SQS to distribute elaboration commands to a group of hosts working in parallel. Auto scaling to dynamically size the group of hosts depending on the length of the SQS queue.

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

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

The correct answer is You should deploy two Memcached ElastiCache Clusters in different AZs because the RDS Instance will not be able to handle the load if the cache node fails..

B - does not provide high availability, as data is lost if the node is lost C - Single AZ affects availability as DB is Multi AZ and would be overloaded if the AZ goes down D - Will overload the database affecting availability.



Your system recently experienced down time during the troubleshooting process. You found that a new administrator mistakenly terminated several production EC2 instances. Which of the following strategies will help prevent a similar situation in the future? The administrator still must be able to:- launch, start stop, and terminate development resources. – launch and start production instances.

- ☐ Create an IAM user, which is not allowed to terminate instances by leveraging production EC2 termination protection.
- ✓ ☒ Leverage resource based tagging along with an IAM user, which can prevent specific users from terminating production EC2 resources
- ☐ Leverage EC2 termination protection and multi-factor authentication, which together require users to authenticate before terminating EC2 instances.
- ☐ Create an IAM user and apply an IAM role, which prevents users from terminating production EC2 instances.

The correct answer is Leverage resource based tagging along with an IAM user, which can prevent specific users from terminating production EC2 resources.

A - EC2 termination protection is enabled on EC2 instance B - Identify production resources using tags and add explicit deny C - Does not still prevent user from terminating instance D - Role is not applied to User but assumed by the User also need a way to identify production EC2 instances.

Is there a method in the IAM system to allow or deny access to a specific instance?

- ☐ Only for VPC based instances
- ☐ Yes
- ✓ ☒ No



The correct answer is No.

_____ embodies the "share-nothing" architecture and essentially involves breaking a large database into several smaller databases. Common ways to split a database include 1) splitting tables that are not joined in the same query onto different hosts or 2) duplicating a table across multiple hosts and then using a hashing algorithm to determine which host receives a given update.

- ✓ ☒ Sharding
- ☐ Failure recovery
- ☐ Federation
- ☐ DDL operations

The correct answer is Sharding.

If I scale the storage capacity provisioned to my DB Instance by mid of a billing month, how will I be charged?

- ☐ You will be charged for the highest storage capacity you have used
- ✓ ☒ On a pro-rated basis
- ☐ You will be charged for the lowest storage capacity you have used



The correct answer is On a pro-rated basis.

Storage (per GB per month) – Storage capacity you have provisioned to your DB instance. If you scale your provisioned storage capacity within the month, your bill will be pro-rated. <https://aws.amazon.com/rds/faqs/>.


You are setting up a blog on AWS. In which of the following scenarios will you need AWS credentials? (Choose 3)

- ✓ ☒ Sign in to the AWS management console to launch an Amazon EC2 instance
- ☐ Sign in to the running instance to install some software
- ✓ ☒ Launch an Amazon RDS instance
- ☐ Log into your blog's content management system to write a blog post
- ✓ ☒ Post pictures to your blog on Amazon S3

The correct answer is Sign in to the AWS management console to launch an Amazon EC2 instance, Launch an Amazon RDS instance, Post pictures to your blog on Amazon S3.

B - needs ssh keys D - need to authenticate using blog authentication.

An organization is using AWS since a few months. The finance team wants to visualize the pattern of AWS spending. Which of the below AWS tool will help for this requirement?

- 
- ☐ AWS Cost Manager
 - ☒ AWS Cost Explorer
 - ☐ AWS CloudWatch
 - ☐ AWS Consolidated Billing

The correct answer is AWS Cost Explorer.

D -will not help in visualization.

You have set up Individual AWS accounts for each project. You have been asked to make sure your AWS Infrastructure costs do not exceed the budget set per project for each month. Which of the following approaches can help ensure that you do not exceed the budget each month?

- ☐ Consolidate your accounts so you have a single bill for all accounts and projects
- ☐ Set up auto scaling with CloudWatch alarms using SNS to notify you when you are running too many Instances in a given account
- ☐ Set up CloudWatch billing alerts for all AWS resources used by each project, with a notification occurring when the amount for each resource tagged to a particular project matches the budget allocated to the project.
- ☒ Set up CloudWatch billing alerts for all AWS resources used by each account, with email notifications when it hits 50%. 80% and 90% of its budgeted monthly spend.



The correct answer is Set up CloudWatch billing alerts for all AWS resources used by each account, with email notifications when it hits 50%. 80% and 90% of its budgeted monthly spend..

#A as Consolidation will provide single bill and no alerts configured for this. #B No. of instances do not relate to cost as many small instances can still cost less than fewer large instances. #C, as the project has an account already no need for tagging..

You are responsible for a web application that consists of an Elastic Load Balancing (ELB) load balancer in front of an Auto Scaling group of Amazon Elastic Compute Cloud (EC2) instances. For a recent deployment of a new version of the application, a new Amazon Machine Image (AMI) was created, and the Auto Scaling group was updated with a new launch configuration that refers to this new AMI. During the deployment, you received complaints from users that the website was responding with errors. All instances passed the ELB health checks. What should you do in order to avoid errors for future deployments? (Choose 2 answer)

- ☐ Add an Elastic Load Balancing health check to the Auto Scaling group. Set a short period for the health checks to operate as soon as possible in order to prevent premature registration of the instance to the load balancer.
- ☐ Enable EC2 instance CloudWatch alerts to change the launch configuration's AMI to the previous one. Gradually terminate instances that are using the new AMI.
- ✓ ☒ Set the Elastic Load Balancing health check configuration to target a part of the application that fully tests application health and returns an error if the tests fail.
- ✓ ☒ Create a new launch configuration that refers to the new AMI, and associate it with the group. Double the size of the group, wait for the new instances to become healthy, and reduce back to the original size. If new instances do not become healthy, associate the previous launch configuration.
- ☐ Increase the Elastic Load Balancing Unhealthy Threshold to a higher value to prevent an unhealthy instance from going into service behind the load balancer.



The correct answer is Set the Elastic Load Balancing health check configuration to target a part of the application that fully tests application health and returns an error if the tests fail., Create a new launch configuration that refers to the new AMI, and associate it with the group. Double the size of the group, wait for the new instances to become healthy, and reduce back to the original size. If new instances do not become healthy, associate the previous launch configuration..

An organization's security policy requires multiple copies of all critical data to be replicated across at least a primary and backup data center. The organization has decided to store some critical data on Amazon S3. Which option should you implement to ensure this requirement is met?

- ☐ Use the S3 copy API to replicate data between two S3 buckets in different regions
- ☐ You do not need to implement anything since S3 data is automatically replicated between regions
- ☐ Use the S3 copy API to replicate data between two S3 buckets in different facilities within an AWS Region
- ✓ ☒ You do not need to implement anything since S3 data is automatically replicated between multiple facilities within an AWS Region

The correct answer is You do not need to implement anything since S3 data is automatically replicated between multiple facilities within an AWS Region.

You would like to create a mirror image of your production environment in another region for disaster recovery purposes. Which of the following AWS resources do not need to be recreated in the second region? (Choose 2 answers)



☒ Route 53 Record Sets

☒ IM Roles

☐ Elastic IP Addresses (EIP)

☐ EC2 Key Pairs

☐ Launch configurations

☐ Security Groups

The correct answer is Route 53 Record Sets, IM Roles.

You require the ability to analyze a large amount of data, which is stored on Amazon S3 using Amazon Elastic Map Reduce. You are using the cc2 8x large Instance type, whose CPUs are mostly idle during processing. Which of the below would be the most cost efficient way to reduce the runtime of the job?

- ☐ Create more smaller files on Amazon S3.
- ☐ Add additional cc2 8x large instances by introducing a task group.
- ☒ Use smaller instances that have higher aggregate I/O performance.
- ☐ Create fewer, larger files on Amazon S3.



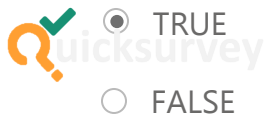
The correct answer is Use smaller instances that have higher aggregate I/O performance..

You are designing a social media site and are considering how to mitigate distributed denial-of-service (DDoS) attacks. Which of the below are viable mitigation techniques? (Choose 3 answers)

- ☐ Add multiple elastic network interfaces (ENIs) to each EC2 instance to increase the network bandwidth.
- ☐ Use dedicated instances to ensure that each instance has the maximum performance possible.
- ✓ ☒ Use an Amazon CloudFront distribution for both static and dynamic content.
- ✓ ☒ Use an Elastic Load Balancer with auto scaling groups at the web app and Amazon Relational Database Service (RDS) tiers
- ✓ ☒ Add alert Amazon CloudWatch to look for high Network in and CPU utilization.
- ☐ Create processes and capabilities to quickly add and remove rules to the instance OS firewall.

The correct answer is Use an Amazon CloudFront distribution for both static and dynamic content., Use an Elastic Load Balancer with auto scaling groups at the web app and Amazon Relational Database Service (RDS) tiers, Add alert Amazon CloudWatch to look for high Network in and CPU utilization..

True or False: When you perform a restore operation to a point in time or from a DB Snapshot, a new DB Instance is created with a new endpoint.



The correct answer is TRUE.


What is the size and format of SQS messages?

- ☐ 128 KB, all secured protocol format
- ☒ 256 KB, any format
- ☐ 256 KB, all secured protocol format
- ☐ 128 KB, any format

The correct answer is 256 KB, any format.

A user has configured ELB with Auto Scaling. The user suspended the Auto Scaling AddToLoadBalancer, which adds instances to the load balancer. process for a while. What will happen to the instances launched during the suspension period?

- ☒ The instances will not be registered with ELB and the user has to manually register when the process is resumed
- ☐ The instances will be registered with ELB only once the process has resumed


-  ☐ Auto Scaling will not launch the instance during this period due to process suspension
- ☐ It is not possible to suspend only the AddToLoadBalancer process


The correct answer is The instances will not be registered with ELB and the user has to manually register when the process is resumed.

You have an Auto Scaling group associated with an Elastic Load Balancer (ELB). You have noticed that instances launched via the Auto Scaling group are being marked unhealthy due to an ELB health check, but these unhealthy instances are not being terminated. What do you need to do to ensure that instances marked unhealthy by the ELB will be terminated and replaced?

- ☐ Change the thresholds set on the Auto Scaling group health check
- ✓ ☒ Add an Elastic Load Balancing health check to your Auto Scaling group
- ☐ Increase the value for the Health check interval set on the Elastic Load Balancer
- ☐ Change the health check set on the Elastic Load Balancer to use TCP rather than HTTP checks


The correct answer is Add an Elastic Load Balancing health check to your Auto Scaling group.

 An organization has configured Auto Scaling with ELB. There is a memory issue in the application which is causing CPU utilization to go above 90%. The higher CPU usage triggers an event for Auto Scaling as per the scaling policy. If the user wants to find the root cause inside the application without triggering a scaling activity, how can he achieve this?

- ☐ Stop the scaling process until research is completed
- ☐ It is not possible to find the root cause from that instance without triggering scaling
- ☐ Delete Auto Scaling until research is completed
- ☒  Suspend the scaling process until research is completed

The correct answer is Suspend the scaling process until research is completed.

An organization has configured the custom metric upload with CloudWatch. The organization has given permission to its employees to upload data using CLI as well SDK. How can the user track the calls made to CloudWatch?

- ☐ The user can enable logging with CloudWatch which logs all the activities
- ☒  Use CloudTrail to monitor the API calls
- ☐ Create an IAM user and allow each user to log the data using the S3 bucket
- ☐ Enable detailed monitoring with CloudWatch



The correct answer is Use CloudTrail to monitor the API calls.

Which of the following can access ECU cpu utilization? Choose 2 Answers

- ☐ AWS Cost Explorer
- ☐ AWS Truster Advisor
- ✓ ☒ AWS EC2 Usage Report
- ☐ AWS Cloud Trail
- ✓ ☒ AWS Cloud Watch

The correct answer is AWS EC2 Usage Report, AWS Cloud Watch.

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