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# Whizlabs Learning Center

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Started on	Wednesday, 5 July 2017, 3:30 AM
State	Finished
Completed on	Wednesday, 5 July 2017, 3:30 AM
Time taken	13 secs
Grade	<b>0.00</b> out of 60.00 ( <b>0</b> %)

Result FAIL

# Question **1**

Not answered

Mark for Review

Regarding the attaching of ENI to an instance, what does 'warm attach' refer to?

Please select:

- A. Attaching an ENI to an instance when it is stopped.
- B. This question doesn't make sense.
- C. Attaching an ENI to an instance when it is running
- D. Attaching an ENI to an instance during the launch process

Your answer is incorrect.

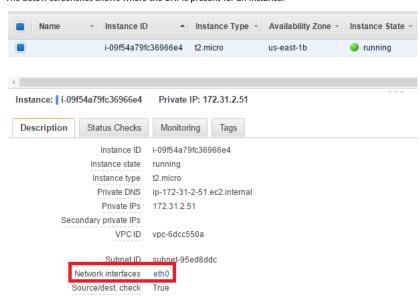
Answer - A

You can attach an elastic network interface to an instance when it's running (hot attach), when it's stopped (warm attach), or when the instance is being launched (cold attach).

An elastic network interface (ENI) is a virtual network interface that you can attach to an instance in a VPC. An Elastic network interface can have the following

- A primary private IP address.
- One or more secondary private IP addresses.
- One Elastic IP address per private IP address.
- One public IP address, which can be auto-assigned to the elastic network interface for eth0 when you launch an instance. For more information, see Public IP Addresses for Network Interfaces.
- One or more security groups.
- A MAC address.
- A source/destination check flag.
- A description.

The below screenshot shows where the ENI is present for an instance.



When you click on eth0, you will get more details on the network interface

Attachment Time Thu Nov 17 01:01:32 GMT-800 2016

Delete on Terminate true
Private IP Address 172.31.2.51

Private DNS Name ip-172-31-2-51.ec2.internal

Elastic IP Address Source/Dest. Check true

Description Primary network interface Security Groups launch-wizard-4

For more information on Elastic Network interfaces, please visit the url - http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-eni.html#attach eni launch

The correct answer is: Attaching an ENI to an instance when it is stopped.

### Feedback about this question and answer

## Question 2

Not answered

Mark for Review

What can be used to monitor your EC2 instances and warn the Operational Department in case there are any issues?

### Please select :

- A. AWS Cloudtrail
- B. AWS Cloudwatch
- C. Configure scheduled jobs on the EC2 instance to notify the Ops department in case of any CPU utilization hikes.
- D. AWS SOS

Your answer is incorrect.

Answer - B

A Cloudwatch alarm is used to monitor any Amazon Cloudwatch metric in your account. For example, you can create alarms on an Amazon EC2 instance CPU utilization, Amazon ELB request latency, Amazon Dynamo DB table throughput, Amazon SQS queue length, or even the charges on your AWS bill.

Option A is wrong because Cloudtrail is used for logging purposes and not monitoring purposes

Option C is partially correct and you can implement this policy, but since you have the option to use an AWS service, you need to opt for this Option B instead. Option A is wrong because SQS is used as a Queuing service.

For more information on Cloudwatch, please visit the link - https://aws.amazon.com/cloudwatch/faqs/

The correct answer is: AWS Cloudwatch

# Feedback about this question and answer

## Question **3**

Not answered

Mark for Review

A company wants to store their primary data in S3 but at the same time they want to store frequently access data locally. This is because they are not having the option to extend their on-premise storage, hence they are looking at aws for an option. What is the best solution that can be provided?

# Please select :

- A. an EC2 instance with EBS volumes to store the commonly used data.
- B. A Redis cache for frequently accessed data and S3 for frequently accessed data
- C. Use the Gateway Cached Volumes
- D. There is no option available

Your answer is incorrect.

Answer – C

Gateway-Cached Volumes provides a durable and inexpensively way to store your primary data in Amazon S3, and retain your frequently accessed data locally. Gateway-Cached Volumes provide substantial cost savings on primary storage, minimize the need to scale your storage on-premises, and provide low-latency access to your frequently accessed data. In addition to storing your primary data in Amazon S3 using Gateway-Cached Volumes, you can also take point-intime snapshots of your Gateway-Cached volume data in Amazon S3, enabling you to make space-efficient versioned copies of your volumes for data protection and various data reuse needs.

Option A and B are invalid because the burden of trying to sync the most recently used data on either EBS volumes or S3 would be a burden for the IT Department.

https://aws.amazon.com/storagegatewa	ıy/faqs/
The correct answer is: Use the Gateway	Cached Volumes
Feedback about this question and answ	ver er
,	transfer stale data from their S3 location to a low cost storage system. If there is a possibility to automate this, they Solution Architect, what is the best solution you can provide to them?
Please select :	
A. Use an EC2 instance and a sched	duled job to transfer the stale data from their S3 location to Amazon Glacier.
B. Use Life-Cycle Policies	
C. Use AWS SQS	
D. There is no option, the users will	l have to download the data and then transfer the data to aws manually.
Your answer is incorrect.	
Answer – B	
With Amazon lifecycle policies you can	create transition actions in which you define when objects transition to another Amazon S3 storage class. For example,
you may choose to transition objects to	the STANDARD_IA (IA, for infrequent access) storage class 30 days after creation, or archive objects to the GLACIER
storage class one year after creation.	
Follow the below steps to get this in pla	ace
Step 1) Go the Lifecycle section of the S	33 bucket and click on Add Rule
→ Lifecycle	
objects to the Standard - Infrequent Acc	by using Lifecycle rules. Lifecycle rules enable you to automatically transition cess Storage Class, and/or archive objects to the Glacier Storage Class, time period. Rules are applied to all the objects that share the specified prefix.
Versioning is currently enabled on t	
	all versions of your objects. This includes both the Current version and
Add rule	
	Save Cancel
Step 2) Choose what you want to export	t
Step 1: Choose Rule Target	Apply the Rule to:   Whole Bucket: devtoolslogging
Step 2: Configure Rule	A Prefix e.g. MyFolder/ or MyFolder/MyObject
Step 3: Review and Name	
Step 3) Choose the Action to perform ar	nd then confirm on the Rule creation in the next screen.
Action on Current Version	
■ Transition to the Standard - Infrequ	uent Access Storage Class Days after the object's creation date
Standard - Infrequent Access has a 30-day m	ninimum retention period and a 128KB minimum object size. Lifecycle policy will not transition objects that are less than 128KB. Refer here to learn more
about Standard - Infrequent Access.  Expire	Days after the object's creation date
For versioning-enabled buckets, an expire wil	Il retain the current version as a previous version and place a delete marker as the current version. If you wish to permanently delete previous versions, manently Delete previous versions action below.
Action on Previous Versions	
■ Transition to the Standard - Infrequ	uent Access Storage Class Days after becoming a previous version
·	minimum retention period and a 128KB minimum object size. Lifecycle policy will not transition objects that are less than 128KB. Refer here to learn more
□ Permanently Delete	Days after becoming a previous version
This rule will permanently delete a previous v	version of an object as the version becomes eligible for expiration. You cannot recover permanently deleted versions of objects.
Action on Incomplete Multiper	† Unioade
Action on Incomplete Multipar  End and Clean up Incomplete Multipar	

This rule will end and clean up multipart uploads that are not completed within a predefined number of days after initiation. Learn more.

For more information on Gateway-Cached Volumes, please visit the link  $\,$ 

Question 4

Not answered

Mark for Review

For more information on Lifecycle management, click on the link - http://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html
The correct answer is: Use Life-Cycle Policies

Feedback about this question and answer

For which of the following use cases are Simple Workflow Service (SWF) and Amazon EC2 an appropriate solution? Choose 2 answers

## Question **5**

Not answered

Mark for Review

### Please select:

- A. Using as an endpoint to collect thousands of data points per hour from a distributed fleet of sensors
- B. Managing a multi-step and multi-decision checkout process of an e-commerce website
- C. Orchestrating the execution of distributed and auditable business processes
- D. Using as an SNS (Simple Notification Service) endpoint to trigger execution of video transcoding jobs
- E. Using as a distributed session store for your web application

Your answer is incorrect.

Answer - B and C

Amazon Simple Workflow Service (SWF) is a web service that makes it easy to coordinate work across distributed application components. Amazon SWF enables applications for a range of use cases, including media processing, web application back-ends, business process workflows, and analytics pipelines, to be designed as a coordination of tasks.

For collection of data points, this is normally done via Amazon Kinesis, so Option A is wrong.

In SWF, you can create multi-step and decision processes for managing approvals during the workflow process, hence Option B is correct.

Since business processed can be orchestrated in AWF, Option C is correct.

Video transcoding videos generally don't need SWF and rely more on SQS, hence Option D is wrong.

Option E is wrong because you need to use a caching solution for this and now SWF.

For more information on aws SWF - Please visit the URL - https://aws.amazon.com/swf/faqs/

The correct answer is: Managing a multi-step and multi-decision checkout process of an e-commerce website, Orchestrating the execution of distributed and auditable business processes

## Feedback about this question and answer

# Question **6**

Not answered

Mark for Review

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?

## Please select:

- A. SQS guarantees the order of the messages.
- B. SQS synchronously provides transcoding output.
- C. SQS checks the health of the worker instances.
- D. SQS helps to facilitate horizontal scaling of encoding tasks.

Your answer is incorrect.

Answer - D

Now even though SQS does guarantees the order of the messages for FIFO queues, this is still not the reason as to why this is the appropriate reason. The normal reason for using SQS, is for decoupling of systems and helps in horizontal scaling of aws resources.

SQS does not either do transcoding output or checks the health of the worker instances. The health of the worker instances can be done via ELB or Cloudwatch.

For more information on SQS, please visit the link - https://aws.amazon.com/sqs/faqs/  $\,$ 

The correct answer is: SQS helps to facilitate horizontal scaling of encoding tasks.

Feedback about this question and answer

# Question **7**

Not answered

Mark for Review

When creation of an EBS snapshot is initiated, but not completed, the EBS volume:

Please select :

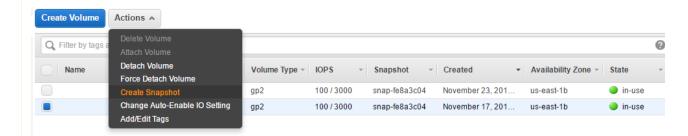
A. Can be used while the snapshot is in progress.
B. Cannot be detached or attached to an EC2 instance until the snapshot completes
C. Can be used in read-only mode while the snapshot is in progress.
D. Cannot be used until the snapshot completes.

### Your answer is incorrect.

#### Answer - A

Snapshots occur asynchronously; the point-in-time snapshot is created immediately, but the status of the snapshot is pending until the snapshot is complete (when all of the modified blocks have been transferred to Amazon S3), which can take several hours for large initial snapshots or subsequent snapshots where many blocks have changed. While it is completing, an in-progress snapshot is not affected by ongoing reads and writes to the volume.

You can easily create a snapshot from a volume while the instance is running and the volume is in use. You can do this from the EC2 dashboard.



For more information on EBS snapshots, please visit the link - http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSSnapshots.html

The correct answer is: Can be used while the snapshot is in progress.

## Feedback about this question and answer

# Question **8**Not answered

Mark for Review

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?

## Please select :

- A. Enable AWS CloudTrail for the load balancer.
- B. Enable access logs on the load balancer.
- C. Install the Amazon CloudWatch Logs agent on the load balancer.
- D. Enable Amazon CloudWatch metrics on the load balancer.

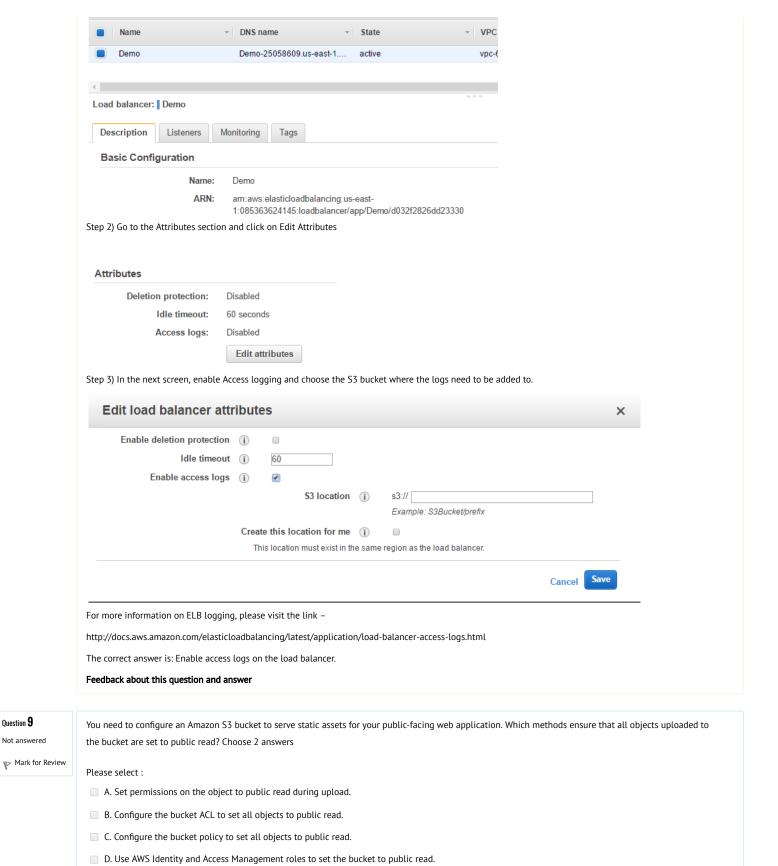
## Your answer is incorrect.

## Answer - B

Elastic Load Balancing provides access logs that capture detailed information about requests or connections sent to your load balancer. Each log contains information such as the time it was received, the client's IP address, latencies, request paths, and server responses. You can use these access logs to analyze traffic patterns and to troubleshoot issues.

Perform the following steps to enable load balancing

Step 1) Go to the Description tab for your load balancer



Your answer is incorrect.

■ E. Amazon S3 objects default to public read, so no action is needed.

Ouestion 9

To set permissions on buckets and objects, you can give permissions to the bucket beforehand or you can set the permissions to the bucket when an object is uploaded to S3.

Option B is incorrect, you cannot configure ACL for all objects to a public read.

Even though you can use AWS to create identities, you cannot use it to give public read to a bucket

Option E is incorrect, because public read is not set by default.

To implement public read, just go to bucket and Permissions section. Click on Add more permissions, choose the Grantee as Everyone, ensure all permissions are given and then click on the Save button.

Grantee: Everyone

List Upload/Delete View Permissions

Add more permissions

Add bucket policy

Add CORS Configuration

Save Cancel

For more information on access control, please visit the link 
http://docs.aws.amazon.com/AmazonS3/latest/dev/s3-access-control.html

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.

Feedback about this question and answer

# Question 10 Not answered

Mark for Review

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

Please select:

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

Your answer is incorrect.

Answer - C and E

By default the documentation provides a clear description on the read and write consistency for objects on S3. Based on this information Option C and E are the right options.

Q: What data consistency model does Amazon S3 employ?

Amazon S3 buckets in all Regions provide read-after-write consistency for PUTS of new objects and eventual consistency for overwrite PUTS and DELETES.

For more information on S3, please visit the link -

https://aws.amazon.com/s3/faqs/

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.

Feedback about this question and answer

# Question 11

Not answered

Mark for Review

Which of the following are characteristics of a reserved instance? Choose 3 answers

Please select :

- A. It can be migrated across Availability Zones
- B. It is specific to an Amazon Machine Image (AMI)
- C. It can be applied to instances launched by Auto Scaling
- D. It is specific to an instance Type
- E. It can be used to lower Total Cost of Ownership (TCO) of a system

Your answer is incorrect.

Answer - A, D, E

Option is correct, because you can migrate instances between AZ's. Please refer to the link for the confirmation on this case -

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ri-modifying.html

Option D is correct, since the FAQ's of reserved instances does mention that reserved instances are tagged to an instance type

No. A Standard Reserved Instance is associated with a specific instance type for the duration of its term; however, you can change from one instance size (e.g., c3.large) to another (e.g., c3.xlarge) in the same type, if it is a Linux/UNIX Reserved Instance. If you'd like to have flexibility among instance types, we recommend purchasing a Convertible Reserved Instance. Please refer to the Convertible Reserved Instances section of the FAQ for additional information.

Also when you create a reserved instance, you can see the Instance Type as an option.

	Platform Linux/UN	IIX Y	Tenancy	Default	<ul> <li>Offering C</li> </ul>	lass Any	•		
	Instance Type t2.micro	•	Term	Any	▼ Payment Op	tion Any	•	Search	
Seller	→ Term	Effective Rate	Upfront Price -	Hourly Rate	Payment Option	Offering Class -	Quantity Available	Desired Quantity	
AWS	36 months	\$0.008	\$0.00	\$0.008	No Upfront	convertible	Unlimited	1	Add to Cart
AWS	12 months	\$0.009	\$0.00	\$0.009	No Upfront	standard	Unlimited	1	Add to Cart
AWS	12 months	\$0.009	\$51.00	\$0.003	Partial Upfront	standard	Unlimited	1	Add to Cart
AWS	12 months	\$0.009	\$75.00	\$0.000	All Upfront	standard	Unlimited	1	Add to Cart

Option E is correct, because reserved instances can be used to lower costs. Reserved Instances provide you with a discount on usage of EC2 instances, and a capacity reservation when they are applied to a specific Availability Zone, giving you additional confidence that you will be able to launch the instances you have reserved when you need them.

Option C is not correct, because the AWS documentation http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts-on-demand-reserved-instances.html clearly mentioned that AutoScaling can be used to launch On-Demand instances that use Reserved Instance benefits and not necessarily be used to launch Reserved Instances.

For more information on reserved instances, please visit the link -

https://aws.amazon.com/ec2/pricing/reserved-instances/

The correct answer is: It can be migrated across Availability Zones, It is specific to an instance Type, It can be used to lower Total Cost of Ownership (TCO) of a system

## Feedback about this question and answer

# Question 12

Not answered

Mark for Review

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?

## Please select:

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

Your answer is incorrect.

Answer – D

A security group acts as a virtual firewall that controls the traffic for one or more instances. When you launch an instance, you associate one or more security groups with the instance. You add rules to each security group that allow traffic to or from its associated instances.

For connecting via SSH on EC2, you need to ensure that port 22 is open on the security group for the EC2 instance.

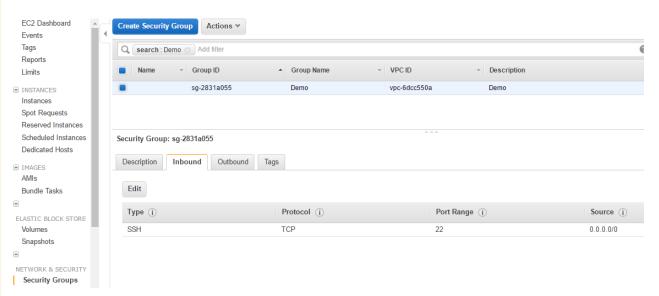
Option A is wrong, because port 443 is for HTTPS and not for SSL.

Option B is wrong because IAM role is not pertinent to security groups

Option C is wrong because this is relevant to SSH and not ICMP

Option E is wrong because it does not matter what patches are there on the system

So in your EC2 Dashboard, go to Security groups, choose the relevant security group. Then click on Inbound rules and ensure there is a rule for TCP on port 22.



For more information on EC2 Security groups, please visit the url - http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html

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

## Feedback about this question and answer

# Question 13

Not answered

Mark for Review

Which Amazon Elastic Compute Cloud feature can you query from within the instance to access instance properties?

### Please select:

- A. Instance user data
- B. Resource tags
- C. Instance metadata
- D. Amazon Machine Image

Your answer is incorrect.

Answer - C

Instance metadata is data about your instance that you can use to configure or manage the running instance.

Option A is incorrect because, user data is what you enter when you launch an instance. This can be accessed by the instance later on.

▼ Advanced Details

User data 

As text As file Input is already base64 encoded

| As text As file Input is already base64 encoded

| As text As file Input is already base64 encoded

| As text As file Input is already base64 encoded

| As text As file Input is already base64 encoded

| As text As file Input is already base64 encoded

Option B is incorrect, because you use this feature to tag your resources to help you manage your instances, images, and other Amazon EC2 resources, you can optionally assign your own metadata to each resource in the form of *tags*.

For more information on metadata, please visit the link -

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-metadata.html

The correct answer is: Instance metadata

Feedback about this question and answer

# Question **14**

Not answered

Mark for Review

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?

## Please select:

- A. Security Group Inbound Rule: Protocol TCP. Port Range 22, Source 72.34.51.100/32
- B. Security Group Inbound Rule: Protocol UDP, Port Range 22, Source 72.34.51.100/32

- C. Network ACL Inbound Rule: Protocol UDP, Port Range 22, Source 72.34.51.100/32
- D. Network ACL Inbound Rule: Protocol TCP, Port Range-22, Source 72.34.51.100/0

Your answer is incorrect.

Answer - A

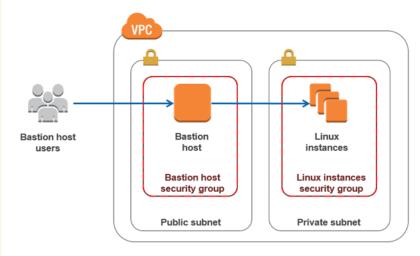
For SSH access, the protocol has to be TCP, so Option B and C are wrong.

For Bastion host, only the IP of the client should be put and not the entire network of 72.34.51.100/0 as given in option D. So this option is also wrong.

A bastion host is a special purpose computer on a network specifically designed and configured to withstand attacks. The computer generally hosts a single application, for example a proxy server, and all other services are removed or limited to reduce the threat to the computer.

In AWS, A bastion host is kept on a public subnet. Users log on to the bastion host via SSH or RDP and then use that session to manage other hosts in the private subnets.

This is a security practice adopted by many organization to secure the assets in their private subnets.



The correct answer is: Security Group Inbound Rule: Protocol – TCP. Port Range – 22, Source 72.34.51.100/32

## Feedback about this question and answer

# Question 15 Not answered

Mark for Review

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?

# Please select :

- A. Remove public read access and use signed URLs with expiry dates.
- B. Use Cloud Front distributions for static content.
- C. Block the IPs of the offending websites in Security Groups.
- $\hfill \bigcirc$  D. Store photos on an EBS volume of the web server.

Your answer is incorrect.

## Answer – A

Cloud front is only used for distribution of content across edge or region locations. It is not used for restricting access to content, so Option B is wrong. Blocking IP's is challenging because they are dynamic in nature and you will not know which sites are accessing your main site, so Option C is also not feasible.

Storing photos on EBS volume is not a good practice or architecture approach for an AWS Solution Architect.

The correct answer is: Remove public read access and use signed URLs with expiry dates.

## Feedback about this question and answer

# Question 16

Not answered

Mark for Review

What are the use case scenarios when you need Enhanced Networking? Choose 2 answers from the options given below

Please select :

A. high packet-per-second performance

	■ B. low packet-per-second performance
	C. high latency networking
	D. low latency networking
	Your answer is incorrect.
	Answer – A and D
	Enhanced networking uses single root I/O virtualization (SR-IOV) to provide high-performance networking capabilities on supported instance types. SR-IOV is
	a method of device virtualization that provides higher I/O performance and lower CPU utilization when compared to traditional virtualized network interfaces. Enhanced networking provides higher bandwidth, higher packet per second (PPS) performance, and consistently lower inter-instance latencies
	For more information on EBS volumes, please visit the link - http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/enhanced-networking.html
	The correct answer is: high packet-per-second performance, low latency networking
	Feedback about this question and answer
Question 17 Not answered	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?
Mark for Review	
,	Please select:
	A. Amazon Simple Workflow Service
	B. AWS Elastic Beanstalk
	C. AWS CloudFormation
	D. AWS OpsWorks
	Your answer is incorrect.
	Answer – D
	AWS OpsWorks is a configuration management service that helps you configure and operate applications of all shapes and sizes using Chef. You can define the application's architecture and the specification of each component including package installation, software configuration and resources such as storage. Start
	from templates for common technologies like application servers and databases or build your own to perform any task that can be scripted. AWS OpsWorks
	includes automation to scale your application based on time or load and dynamic configuration to orchestrate changes as your environment scales.
	For more information on Opswork, please visit the link –
	https://aws.amazon.com/opsworks/
	The correct answer is: AWS OpsWorks
	Feedback about this question and answer
40	
Question 18  Not answered	A company wants to create standard templates for deployment of their Infrastructure. Which AWS service can be used in this regard? Please choose one
Mark for Review	option.
V Tell Tol Neview	Please select :
	A. Amazon Simple Workflow Service
	B. AWS Elastic Beanstalk
	C. AWS CloudFormation
	D. AWS OpsWorks
	Your answer is incorrect.
	Answer – C
	AWS CloudFormation gives developers and systems administrators an easy way to create and manage a collection of related AWS resources, provisioning and
	updating them in an orderly and predictable fashion.

You can use AWS Cloud Formation's sample templates or create your own templates to describe the AWS resources, and any associated dependencies or runtime parameters, required to run your application. You don't need to figure out the order for provisioning AWS services or the subtleties of making those dependencies work. CloudFormation takes care of this for you. After the AWS resources are deployed, you can modify and update them in a controlled and predictable way, in effect applying version control to your AWS infrastructure the same way you do with your software. You can also visualize your templates as diagrams and edit them using a drag-and-drop interface with the AWS CloudFormation Designer.

For more information on Cloudformation, please visit the link -

https://aws.amazon.com/cloudformation/

The correct answer is: AWS CloudFormation

#### Feedback about this question and answer

## Question 19

Not answered

Mark for Review

A company wants to create standard templates for deployment of their Infrastructure. They have heard that aws provides a service call CloudFormation which can meet their needs? But they are worried about the cost. As an AWS Architect what advise can you give them with regards to the cost. Please choose one option.

#### Please select:

- A. You can tell them the cost is minimal and that they should not worry on that aspect.
- B. Tell them that 'yes', they have to bear the cost if they want Automation
- C. Cloudformation is a free service and you only charged for the underlying aws resources
- D. Tell them to buy a product and implement on their on-premise location.

Your answer is incorrect.

Answer - C

There is no additional charge for AWS CloudFormation. You only pay for the AWS resources that are created (e.g., Amazon EC2 instances, Elastic Load Balancing load balancers etc.)

For more information on Cloudformation, please visit the link -

https://aws.amazon.com/cloudformation/

The correct answer is: Cloudformation is a free service and you only charged for the underlying aws resources

# Feedback about this question and answer

## Question 20

Not answered

Mark for Review

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, Auto Scaling will: Choose 2 answers.

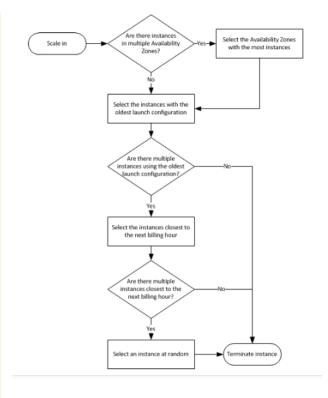
## Please select:

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

Your answer is incorrect.

Answer - C and D

In the above scenario, you would probably have 2 instances running in one AZ and one each running in the other AZ's. The below diagram shows how the instances will be terminated and the policy used by Auto scaling. So it will select the AZ with the most running instances as per the flow chart and hence Option D is correct and Option A, B and E are wrong. Also Auto scaling allows for notification via SNS, so if that is enabled, it will send out the notification accordingly.



For more information on Auto scaling Termination, please visit the link:

• http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html

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

## Feedback about this question and answer

# Question 21

Not answered

Mark for Review

In order to optimize performance for a compute cluster that requires low inter-node latency, which of the following feature should you use?

## Please select :

- A. Multiple Availability Zones
- B. AWS Direct Connect
- C. EC2 Dedicated Instances
- D. Placement Groups
- E. VPC private subnets

Your answer is incorrect

Answer – D

Option A is wrong because Multi AZ's are used to distribute your AWS resources and is not connected to clusters for low latency.

Option B is wrong because this is used to connect on-premise data centers to AWS

Option C is wrong because dedicated resources does not guarantee low latency.

Option E is wrong because VPC private subnets resources does not guarantee low latency.

A placement group is a logical grouping of instances within a single Availability Zone. Placement groups are recommended for applications that benefit from low network latency, high network throughput, or both. For more information on placement groups please visit

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html

The correct answer is: Placement Groups

## Feedback about this question and answer

# Question **22**

Not answered

Mark for Review

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?

Please select :

A. Deploy a NAT instance into the public subnet.
B. Assign an Elastic IP address to the fourth instance.
<ul> <li>C. Configure a publically routable IP Address in the host OS of the fourth instance.</li> </ul>
<ul> <li>D. Modify the routing table for the public subnet.</li> </ul>

Your answer is incorrect.

Answer - B

Option A is wrong because it already mentioned that your instances are in a public subnet. Only when your instances are in a private Subnet, then only you have to configure a NAT instance.

Option C is wrong because the public IP address has to be configured in AWS and not on the EC2 instance.

Option D is wrong because if the routing table was wrong then you would have an issue with the other 3 instances as well. And the question says that there is no issue with the other instances.

For more information on Elastic IP's, please visit the link:

• http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/elastic-ip-addresses-eip.html

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

Feedback about this question and answer

# Question **23**

Not answered

Mark for Review

You have a video transcoding application running on Amazon EC2. Each instance polls a queue to find out which video should be transcoded, and then runs a transcoding process. If this process is interrupted, the video will be transcoded by another instance based on the queuing system.

You have a large backlog of videos which need to be transcoded and would like to reduce this backlog by adding more instances. You will need these instances only until the backlog is reduced. Which type of Amazon EC2 instances should you use to reduce the backlog in the most cost efficient way?

### Please select:

- A. Reserved instances
- B. Spot instances
- C. Dedicated instances
- D. On-demand instances

Your answer is incorrect.

Answer – B

Since this is like a batch processing job, the best type of instance to use is a Spot instances. Spot instances are normally used in batch processing jobs. Since these jobs don't last for the entire duration of the year, they can bid upon and allocated and de-allocated as requested.

Reserved Instances/Dedicated instances cannot be used because this is not a 100% used application.

There is no mentioned on a continuous demand of work from the question so there is no need to use On-demand instances.

# Amazon EC2 Spot Instances

Amazon EC2 Spot instances allow you to bid on spare Amazon EC2 computing capacity. Since Spot instances are often available at a discount compared to On-Demand pricing, you can significantly reduce the cost of running your applications, grow your application's compute capacity and throughput for the same budget, and enable new types of cloud computing applications.

For more information on Spot Instances, please visit the URL -

- https://aws.amazon.com/ec2/spot/
- http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/how-spot-instances-work.html

What is Spot Instance? - These are spare unused Amazon EC2 instances that you can bid for. Once your bid exceeds the current spot price (which fluctuates in real time based on demand-and-supply) the instance is launched. The instance can go away anytime the spot price becomes greater than your bid price. Note that spot instance also a category of on-demand instance, but it is demanded based on the low cost bidding.

What is On-demand instance? - They let you pay for your computing capacity needs by the hour. There is not much planning required from the user's end and no one time cost that you need to pay upfront like in case of reserved instances.

Suitable for use cases where you do not want any long term commitment like testing and POCs, spiky, not to be interrupted workloads.

The correct answer is: Spot instances

Feedback about this question and answer

# Question **24**

Not answered

Mark for Review

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?

### Please select:

- A. Spot Instances
- B. Reserved instances
- C. Dedicated instances
- D. On-Demand instances

Your answer is incorrect.

Answer - A

When you think of cost effectiveness, you can either have to choose Spot or Reserved instances. Now when you have a regular processing job, the best is to use spot instances and since your application is designed recover gracefully from Amazon EC2 instance failures, then even if you lose the Spot instance, there is no issue because your application can recover.

For more information on spot instances, please visit the link

https://aws.amazon.com/ec2/spot/

The correct answer is: Spot Instances

Feedback about this question and answer

# Question 25

Not answered

Mark for Review

What are the possible Event Notifications available for S3 buckets? Please choose 3 answers from the options given below.

Please select:

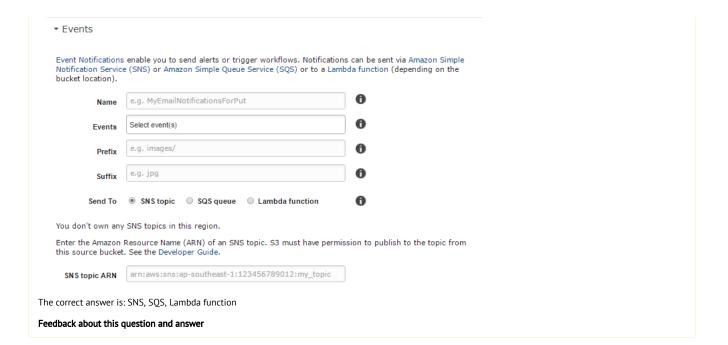
- A. SNS
- B. SES
- C. SQS
- D. Lambda function

Your answer is incorrect.

Answer - A, C and D.

Amazon S3 event notifications enable you to run workflows, send alerts, or perform other actions in response to changes in your objects stored in Amazon S3. You can use Amazon S3 event notifications to set up triggers to perform actions including transcoding media files when they are uploaded, processing data files when they become available, and synchronizing Amazon S3 objects with other data stores.

When you go to the Events section in S3, you can see the options present there for SNS, SQS and Lambda function.



# Question **26**Not answered

Mark for Review

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?

### Please select:

- A. Create a new IAM role and associated policies within the new region
- B. Assign the existing IAM role to the Amazon EC2 instances in the new region
- C. Copy the IAM role and associated policies to the new region and attach it to the instances
- D. Create an Amazon Machine Image (AMI) of the instance and copy it to the desired region using the AMI Copy feature

Your answer is incorrect.

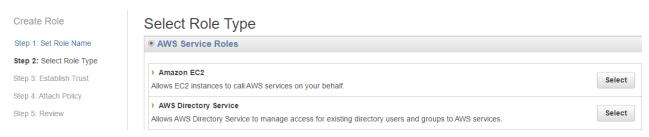
# Answer - B

Since you already have an existing role, you don't need to create a new one, so Option A is wrong.

Remember that roles are a global service that is available across all regions. So Option C is also wrong.

Option D is wrong because this has to do with roles and no need of creating an AMI image.

So when you create a role choose the Amazon EC2 option in the Select Role type.



In the next screen, you can select the Amazon DynamoDB type of access required.



Once the role is created, choose the role in the Configure Instance Details screen when creating the EC2 instance. Step 3: Configure Instance Details Purchasing option (i) Request Spot instances Network (i) vpc-6dcc550a (172.31.0.0/16) (default) ▼ C Create new VPC subnet-95ed8ddc(172.31.2.0/24) | 172.31.2.0/24 | L ▼ Subnet (i) Create new subnet 251 IP Addresses available Auto-assign Public IP (i) Use subnet setting (Disable) ₹ IAM role (i) ▼ C Create new IAM role DynamoDBRole The correct answer is: Assign the existing IAM role to the Amazon EC2 instances in the new region Feedback about this question and answer 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? Choose 2 answers Please select: A. AWS Directory Service AD Connector ■ B. AWS Directory Service Simple AD C. AWS Identity and Access Management groups D. AWS identity and Access Management roles ■ E. AWS identity and Access Management users Your answer is incorrect. Answer - A and C AWS Directory Service provides multiple ways to use Microsoft Active Directory with other AWS services. You can choose the directory service with the features you need at a cost that fits your budget. Use Simple AD if you need an inexpensive Active Directory-compatible service with the common directory features. Select AWS Directory Service for Microsoft Active Directory (Enterprise Edition) for a feature-rich managed Microsoft Active Directory hosted on the AWS cloud. The third option, AD Connector, lets you simply connect your existing on-premises Active Directory to AWS. For more information on the Ad Connector, please visit http://docs.aws.amazon.com/directoryservice/latest/admin-guide/what\_is.html The correct answer is: AWS Directory Service AD Connector, AWS Identity and Access Management groups Feedback about this question and answer 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? Please select : A. Amazon DynamoDB B. Amazon Redshift

Your answer is incorrect.

C. Amazon Kinesis

D. Amazon Simple Queue Service

Answer - A

Question 27

Not answered

Question 28

Mark for Review

Mark for Review

Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. Amazon DynamoDB enables customers to offload the administrative burdens of operating and scaling distributed databases to AWS, so they don't have to worry about hardware provisioning, setup and configuration, replication, software patching, or cluster scaling.

DynamoDB is durable, scalable, and highly available data store in aws and can be used for real time tabulation.

Option B is wrong because it is a petabyte storage engine and is used in cases where there is a requirement for an OLAP solution.

Option C is wrong because it is used for processing streams and not for storage.

Option D is wrong because it is a de-coupling solution.

For more information on Amazon DynamoDB, please visit https://aws.amazon.com/dynamodb/faqs/

Mark for Review

Question 29

Not answered

Which of the below aws services allows you to run code without the need to host an EC2 instances

Please select :

A. AWS Lambda

The correct answer is: Amazon DynamoDB

Feedback about this question and answer

- B. AWS IoT
- C. AWS SQS
- D. AWS SES

Your answer is incorrect.

Answer - A

AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume - there is no charge when your code is not running. With Lambda, you can run code for virtually any type of application or backend service - all with zero administration. Just upload your code and Lambda takes care of everything required to run and scale your code with high availability. You can set up your code to automatically trigger from other AWS services or call it directly from any web or mobile app

For more information on Amazon Lambda, please visit

 $https://aws.amazon.com/lambda/?nc2=h\_m1$ 

The correct answer is: AWS Lambda

Feedback about this question and answer

# Question **30**

Not answered

Mark for Review

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?

Please select :

- A. Amazon Kinesis
- B. AWS Data Pipeline
- C. Amazon AppStream
- D. Amazon Simple Queue Service

Your answer is incorrect.

Answer – A

Amazon

Use Amazon Kinesis Streams to collect and process large streams of data records in real time.

You'll create data-processing applications, known as *Amazon Kinesis Streams applications*. A typical Amazon Kinesis Streams application reads data from an *Amazon Kinesis stream* as data records. These applications can use the Amazon Kinesis Client Library, and they can run on Amazon EC2 instances. The processed records can be sent to dashboards, used to generate alerts, dynamically change pricing and advertising strategies, or send data to a variety of other AWS services

For more information on Amazon Kinesis, please visit

http://docs.aws.amazon.com/streams/latest/dev/introduction.html

The correct answer is: Amazon Kinesis

### Feedback about this question and answer

# Question 31

Not answered

Mark for Review

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?

#### Please select:

- A. Enable enhanced networking
- B. Use Amazon S3 multipart upload
- C. Leveraging Amazon CloudFront, use the HTTP POST method to reduce latency.
- D. Use Amazon Elastic Block Store Provisioned IOPs and use an Amazon EBS-optimized instance

Your answer is incorrect.

Answer - B

When uploading large videos it's always better to make use of aws multi part file upload.

So if you are using the Multi Upload option for S3, then you can resume on failure. Below are the advantage of Multi Part upload

- Improved throughput—you can upload parts in parallel to improve throughput.
- Quick recovery from any network issues—smaller part size minimizes the impact of restarting a failed upload due to a network error.
- Pause and resume object uploads—you can upload object parts over time. Once you initiate a multipart upload there is no expiry; you must explicitly
  complete or abort the multipart upload.
- Begin an upload before you know the final object size—you can upload an object as you are creating it.

For more information on Multi-part file upload for S3, please visit the URL - http://docs.aws.amazon.com/AmazonS3/latest/dev/qfacts.html

The correct answer is: Use Amazon S3 multipart upload

Feedback about this question and answer

## Ouestion 32

Not answered

Mark for Review

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?

# Please select :

- A. Enable AWS CloudTrail to audit all Amazon S3 bucket access.
- B. Enable server access logging for all required Amazon S3 buckets.
- C. Enable the Requester Pays option to track access via AWS Billing
- D. Enable Amazon S3 event notifications for Put and Post.

Your answer is incorrect.

Answer – E

Logging provides a way to get detailed access logs delivered to a bucket you choose. An access log record contains details about the request, such as the request type, the resources specified in the request worked, and the time and date the request was processed.

Since you don't want logging of every aws service, there is no need to Cloudtrail, hence you can neglect Option A.

Option C is not valid because that refers to billing.

Option D is invalid because event notifications is different from logging.

To enable logging just go to the Logging section in your S3 bucket

▶ Permissions
Static Website Hosting
→ Logging
You can enable logging to track requests for access to your bucket. Learn more.
Enabled:  Target Bucket:  Target Prefix: logs/
Save Cancel
For more information on S3 Logging, please visit the URL -
http://docs.aws.amazon.com/AmazonS3/latest/UG/ManagingBucketLogging.html
The correct answer is: Enable server access logging for all required Amazon S3 buckets.
Feedback about this question and answer

# Question **33**

Not answered

Mark for Review

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?

### Please select:

- A. Amazon EBS volume
- B. Amazon S3
- C. Amazon EC2 instance store
- D. Amazon RDS instance

Your answer is incorrect.

Answer - B

When you think of storage, the automatic choice should aws S3.

Amazon S3 is storage for the Internet. It's a simple storage service that offers software developers a highly-scalable, reliable, and low-latency data storage infrastructure at very low costs.

For more information on S3 Logging, please visit the URL -  $\,$ 

https://aws.amazon.com/s3/faqs/

The correct answer is: Amazon S3

Feedback about this question and answer

# Question **34**

Not answered

Mark for Review

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?

# Please select :

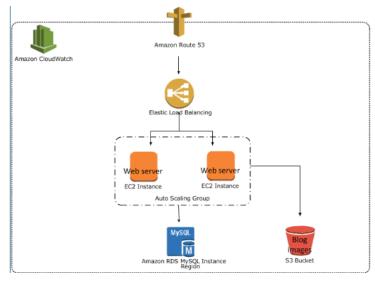
- A. Elastic Load Balancing, Amazon EC2, and Auto Scaling
- $\hfill \square$  B. Elastic Load Balancing, Amazon RDS with Multi-AZ, and Amazon S3
- C. Amazon RDS with Multi-AZ and Auto Scaling
- D. Amazon EC2, Amazon Dynamo DB, and Amazon S3

Your answer is incorrect.

Answer – A

The question mentioned a scalable web tier and not a database tier. So Option C, D and B are already automated eliminated, since we do not need a database option.

The below example shows an Elastic Load balancer connected to 2 EC2 instances connected via Auto Scaling. This is an example of an elastic and scalable web tier. By scalable we mean that the Auto scaling process will increase or decrease the number of EC2 instances as required.



The correct answer is: Elastic Load Balancing, Amazon EC2, and Auto Scaling

## Feedback about this question and answer

## Question 35

Not answered

Mark for Review

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?

#### Please select:

- A. Use multi-part upload.
- B. Add a random prefix to the key names.
- C. Amazon S3 will automatically manage performance at this scale.
- D. Use a predictable naming scheme, such as sequential numbers or date time sequences, in the key names

## Your answer is incorrect.

## Answer – B

If your workload in an Amazon S3 bucket routinely exceeds 100 PUT/LIST/DELETE requests per second or more than 300 GET requests per second then you need to perform some guidelines for your S3 bucket.

One way to add a hash prefix key to the key name - One way to introduce randomness to key names is to add a hash string as prefix to the key name. For example, you can compute an MD5 hash of the character sequence that you plan to assign as the key name.

For performance considerations, please visit the URL

 $http:\!/\!/docs.aws.amazon.com/AmazonS3/latest/dev/request-rate-perf-considerations.html$ 

The correct answer is: Add a random prefix to the key names.

# Feedback about this question and answer

## Question 36

Not answered

Mark for Review

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?

## Please select :

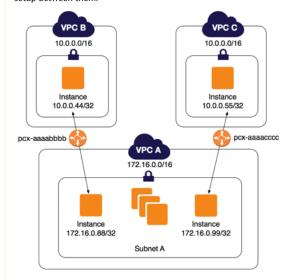
- A. Create a new peering connection Between Prod and Dev along with appropriate routes.
- $\hfill \bigcirc$  B. Create a new entry to Prod in the Dev route table using the peering connection as the target.
- C. Attach a second gateway to Dev. Add a new entry in the Prod route table identifying the gateway as the target.
- D. The VPCs have non-overlapping CIDR blocks in the same account. The route tables contain local routes for all VPCs.

Your answer is incorrect.

Answer - A

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them using private IP addresses. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, or with a VPC in another AWS account within a single region

The below diagram shows an example of VPC peering. Now please note that VPC B cannot communicate to VPC C because there is no peering between them. Hence in the same way the above question there is no peering between Prod and Dev., hence the only way for them to communicate is to have a VPC peering setup between them.



For more information on VPC peering, please visit the  $\ensuremath{\text{url}}$ 

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-peering.html

The correct answer is: Create a new peering connection Between Prod and Dev along with appropriate routes.

Feedback about this question and answer

# Question **37**

Not answered

Mark for Review

What is the service provided by aws that allows developers to easily deploy and manage applications on the cloud?

# Please select :

- A. CloudFormation
- B. Elastic Beanstalk
- C. Opswork
- D. Container service

Your answer is incorrect.

Answer - B

AWS Elastic Beanstalk makes it even easier for developers to quickly deploy and manage applications in the AWS Cloud. Developers simply upload their application, and Elastic Beanstalk automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

For more information on Elastic Beanstalk, please visit the URL

https://aws.amazon.com/elasticbeanstalk/faqs/

The correct answer is: Elastic Beanstalk

Feedback about this question and answer

# Question 38

Not answered

Mark for Review

What is the service provided by aws that allows developers to let connected devices interact with cloud based applications? Please choose on answer from the options below.

# Please select :

- A. CloudFormation
- B. Elastic Beanstalk
- C. AWS IoT
- D. Container service

Your answer is incorrect. Answer - C AWS IoT is a managed cloud platform that lets connected devices easily and securely interact with cloud applications and other devices. AWS IoT can support billions of devices and trillions of messages, and can process and route those messages to AWS endpoints and to other devices reliably and securely. With AWS IoT, your applications can keep track of and communicate with all your devices, all the time, even when they aren't connected. For more information on aws IoT, please visit the URL https://aws.amazon.com/iot/ The correct answer is: AWS IoT Feedback about this question and answer Ouestion 39 An Account has an ID of 085566624145. Which of the below mentioned URL's would you provide to the IAM user to log in to aws? Not answered Please select: Mark for Review A. https://085566624145.signin.aws.amazon.com/console B. https://signin.085566624145.aws.amazon.com/console C. https://signin.aws.amazon.com/console D. https://aws.amazon.com/console Your answer is incorrect. Answer - A After you create IAM users and passwords for each, users can sign in to the AWS Management Console for your AWS account with a special URL. By default, the sign-in URL for your account includes your account ID. You can create a unique sign-in URL for your account so that the URL includes a name instead of an account ID By default the URL will be of the format shown below https://AWS-account-ID-or-alias.signin.aws.amazon.com/console The correct answer is: https://085566624145.signin.aws.amazon.com/console Feedback about this question and answer Question 40 What are the different types of identities available AWS. Please choose 3 answers form the options given below. Not answered Please select: Mark for Review A. Roles B. Users C. EC2 Instances D. Groups Your answer is incorrect. Answer - A, B and D. An IAM user is an entity that you create in AWS. The IAM user represents the person or service who uses the IAM user to interact with AWS. An IAM group is a collection of IAM users. You can use groups to specify permissions for a collection of users, which can make those permissions easier to manage for those users An IAM role is very similar to a user, in that it is an identity with permission policies that determine what the identity can and cannot do in AWS For more information on Identities, please visit the URL http://docs.aws.amazon.com/IAM/latest/UserGuide/id.html The correct answer is: Roles, Users, Groups Feedback about this question and answer

ot answered	Please select :
Mark for Review	A. To analyze data in the Kinesis stream.
	B. To collect and send data into a Kinesis stream.
	C. To consume the processed Kinesis data.
	D. To store data for the Kinesis stream.
	Your answer is incorrect.
	Answer - B
	An Amazon Kinesis Streams producer is any application that puts user data records into an Amazon Kinesis stream (also called <i>data ingestion</i> ). The Amazon Kinesis Producer Library (KPL) simplifies producer application development, allowing developers to achieve high write throughput to a Amazon Kinesis stream.
	For more information on Kinesis producers, please refer to the below link
	http://docs.aws.amazon.com/streams/latest/dev/developing-producers-with-kpl.html
	The correct answer is: To collect and send data into a Kinesis stream.
	Feedback about this question and answer
estion <b>42</b>	If your Kinesis stream needs additional processing power, what component will you need to add more of? Choose the correct answer from the options below
ot answered	,,,,,,,,
Mark for Review	Please select :
	a. IOPS
	○ b. RAM
	c. EC2 Instances
	o d. Shards
	Your answer is incorrect.
	Answer – D
	A shard is a uniquely identified group of data records in a stream. A stream is composed of one or more shards, each of which provides a fixed unit of capacity.
	Each shard can support up to 5 transactions per second for reads, up to a maximum total data read rate of 2 MB per second and up to 1,000 records per
	second for writes, up to a maximum total data write rate of 1 MB per second (including partition keys). The data capacity of your stream is a function of the
	number of shards that you specify for the stream. The total capacity of the stream is the sum of the capacities of its shards.
	If your data rate increases, you can increase or decrease the number of shards allocated to your stream.
	For more information on Kinesis shards, please refer to the below link  http://docs.aws.amazon.com/streams/latest/dev/key-concepts.html
	The correct answer is: Shards
	Feedback about this question and answer
	reeuback about this question and answer
nestion <b>43</b>	If you want to process data in real-time, what AWS service should you use. Choose the correct answer from the options below
Mark for Review	Please select :
	A. Kinesis
	C. Elastic MapReduce
	D. Redshift

Your answer is incorrect.

Answer – A

Amazon Kinesis is a platform for streaming data on AWS, offering powerful services to make it easy to load and analyze streaming data, and also providing the ability for you to build custom streaming data applications for specialized needs. Web applications, mobile devices, wearables, industrial sensors, and many software applications and services can generate staggering amounts of streaming data – sometimes TBs per hour – that need to be collected, stored, and

processed continuously. Amazon Kinesis services enable you to do that simply and at a low cost.

For more information on Kinesis, please refer to the below link

https://aws.amazon.com/kinesis/

The correct answer is: Kinesis

### Feedback about this question and answer

# Question 44

Not answered

Mark for Review

After a Amazon Kinesis consumer consumes the records of a stream, which are the preferred data stores to where all can the consumer store the resulting records. Choose 3 answers from the options given below:

## Please select:

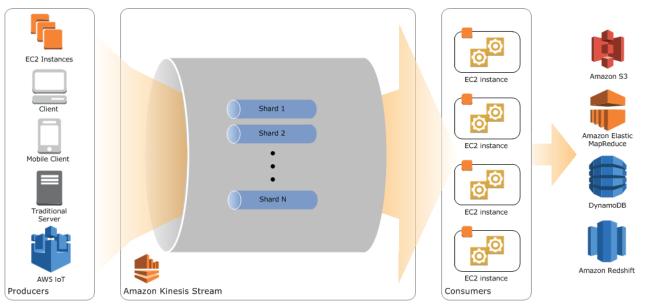
- A. Amazon S3
- B. DynamoDB
- C. Amazon Redshift
- D. SQS

Your answer is incorrect.

Answer - A, B and C

In Amazon Kinesis, the producers continually push data to Streams and the consumers process the data in real time. Consumers can store their results using an AWS service such as Amazon DynamoDB, Amazon Redshift, or Amazon S3.

Its better to put the records to a persistent data store for any further processing at a later point in time.



For more information on the key concepts of Amazon Kinesis, please refer to the below link:

• http://docs.aws.amazon.com/streams/latest/dev/key-concepts.html

The correct answer is: Amazon S3, DynamoDB, Amazon Redshift

# Feedback about this question and answer

# Ouestion 45

Not answered

Mark for Review

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

## Please select:

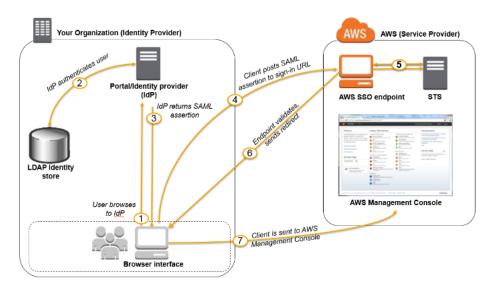
- B. Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP.
- D. Use IAM roles to automatically rotate the IAM credentials when LDAP credentials are updated.

■ E. Use the LDAP credentials to restrict a group of users from launching specific EC2 instance types.

Your answer is incorrect.

#### Answer - B.

The SAML protocol is used to integrate on-premise LDAP servers with AWS services. The below diagram show cases how the integration works. The SAML protocol uses the credentials which the user uses to login in to their on-premise location. Once done, the security tokens will be sent to the AWS console and the user will then be authenticated in AWS.



For more information on the SAML integration, please visit the URL:

• http://docs.aws.amazon.com/IAM/latest/UserGuide/id\_roles\_providers\_enable-console-saml.html

The correct answer is: Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP.

## Feedback about this question and answer

# Question 46

Not answered

Mark for Review

Your company is currently running EC2 instances in the Europe region. These instances are based on pre-built AMI's. They now want to implement disaster recovery. What are one of the steps they would need to implement for disaster recovery? Choose the correct answer from the options given below

# Please select :

- A. Copy the AMI from the current region to another region, modify any Auto Scaling groups if required in the backup region to use the new AMI ID in the backup region
- B. Modify the image permissions to share the AMI with another account, then set the default region to the backup region
- C. Nothing, because all AMI's are available in any region as long as it is created within the same account
- $\hfill \bigcirc$  D. Modify the image permissions to share to the designated backup region

Your answer is incorrect.

## Answer - A

In order to implement disaster recovery you need to copy the AMI to the desired region, since AMI's are different region wise.

For more information on AMI's, please visit the below url

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIs.html

The correct answer is: Copy the AMI from the current region to another region, modify any Auto Scaling groups if required in the backup region to use the new AMI ID in the backup region

Feedback about this question and answer

# Question 47

Not answered

Mark for Review

You are using IOT sensors to monitor all data by using Kinesis with the default settings. You then send the data to an S3 bucket after 2 days. When you go to interpret the data in S3 there is only data for the last day and nothing for the first day. Which of the following is the most probable cause of this? Choose the correct answer from the options below

Please select:

A. Temporary loss of IoT device
B. You cannot send Kinesis data to the same bucket on consecutive days.
C. Data records are only accessible for a default of 24 hours from the time they are added to a stream.
<ul> <li>D. The access to the S3 bucket is not given to the Kinesis stream</li> </ul>

Your answer is incorrect.

Answer - C

By default, Records of a stream are accessible for up to 24 hours from the time they are added to the stream. You can raise this limit to up to 7 days by enabling extended data retention.

So since the Kinesis stream is created with the default settings, the streams are not being added to S3 for one day.

## Q: What are the limits of Amazon Kinesis Streams?

The throughput of an Amazon Kinesis stream is designed to scale without limits via increasing the number of shards within a stream. However, there are certain limits you should keep in mind while using Amazon Kinesis Streams:

- By default, Records of a stream are accessible for up to 24 hours from the time they are added to the stream. You can raise this limit to up to 7 days by enabling extended data retention.
- The maximum size of a data blob (the data payload before Base64encoding) within one record is 1 megabyte (MB).
- · Each shard can support up to 1000 PUT records per second.

For more information about other API level limits, see Amazon Kinesis Streams Limits.

For more information on Kinesis streams, please visit the below url

https://aws.amazon.com/kinesis/streams/faqs/

The correct answer is: Data records are only accessible for a default of 24 hours from the time they are added to a stream.

Feedback about this question and answer

# Question 48 Not answered

Mark for Review

You are configuring EC2 instances in a subnet which currently is in a VPC with an Internet gateway attached. All of these instances are able to be accessed from the internet. You then launch another subnet and launch an EC2 instance in it, but you are not able to access the EC2 instance from the internet. What could be the possible two reasons for this?

## Please select :

- A. The EC2 instance does not have a public IP address associated with it
- B. The EC2 instance is not a member of the same Auto Scaling group/policy
- D. A proper route table configuration that sends traffic from the instance to the Internet through the internet gateway

Your answer is incorrect.

Answer – A and D

The subnet could have created as a private subnet and not either not have the Route table updated with the internet gateway and the public IP is not attached to the EC2 instance.

For more information on VPC and subnets, please visit the below url

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC\_Scenario2.html

The correct answer is: The EC2 instance does not have a public IP address associated with it, A proper route table configuration that sends traffic from the instance to the Internet through the internet gateway

Feedback about this question and answer

# Question 49 You are the system administrator for your company's AWS account of approximately 100 IAM users. A new company policy has just been introduced that will Not answered change the access of 20 of the IAM users to have a particular sort of access to S3 buckets. How can you implement this effectively so that there is no need to apply the policy at the individual user level? Choose the correct answer from the options below Mark for Review Please select: A. Use the IAM groups and add users, based upon their role, to different groups and apply the policy to group B. Create a policy and apply it to multiple users using a JSON script C. Create an S3 bucket policy with unlimited access which includes each user's AWS account ID D. Create a new role and add each user to the IAM role Your answer is incorrect. Answer - A The best option is to group the set of users in a group and then apply a policy with the required access to the group. For more information on IAM Groups, please visit the below url http://docs.aws.amazon.com/IAM/latest/UserGuide/id\_groups.html The correct answer is: Use the IAM groups and add users, based upon their role, to different groups and apply the policy to group Feedback about this question and answer Question **50** As a system administrator, you have been requested to implement the best practices for using Autoscaling, SQS and EC2. Which of the following items is not a Not answered best practice? Mark for Review Please select: A. Use the same AMI across all regions

Your answer is incorrect.

Answer A

The AMI's differ from the region to region, hence this is a not a required practice. You need to copy the AMI from region to region if you want to implement disaster recovery as a best practise.

For more information on AMI's, please visit the below url

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIs.html

The correct answer is: Use the same AMI across all regions

Feedback about this question and answer

# Question **51**

Not answered

Mark for Review

A company is currently using Autoscaling for their application. A new AMI now needs to be used for launching the Ec2 instances. Which of the following changes needs to be carried out. Choose an answer from the options below

# Please select :

B. Utilize AutoScaling to deploy new EC2 instances if the SQS queue grows too large

O. Utilize an IAM role to grant EC2 instances permission to modify the SQS queue

C. Utilize CloudWatch alarms to alert when the number of messages in the SQS queue grows too large

- B. Create a new launch configuration
- C. Create a new target group
- D. Create a new target group and launch configuration

Your answer is incorrect.

Answer – E

Since the AMI is changed, you need to create a new launch configuration that can be used by the Autoscaling group.

For more information on Launch configuration, please visit the below url http://docs.aws.amazon.com/autoscaling/latest/userquide/LaunchConfiguration.html The correct answer is: Create a new launch configuration Feedback about this question and answer In order to add current EC2 instances to an Autoscaling group, which of the following criteria must be met. Choose 3 options from the answers given below Please select: Mark for Review A. The instance is in the stopped state. B. The AMI used to launch the instance must still exist. C. The instance is not a member of another Auto Scaling group. D. The instance is in the same Availability Zone as the Auto Scaling group. Your answer is incorrect. Answer - B,C and D This is given in the aws documentation Auto Scaling provides you with an option to enable Auto Scaling for one or more EC2 instances by attaching them to your existing Auto Scaling group. After the instances are attached, they become a part of the Auto Scaling group. The instance that you want to attach must meet the following criteria: • The instance is in the running state. . The AMI used to launch the instance must still exist. • The instance is not a member of another Auto Scaling group. The instance is in the same Availability Zone as the Auto Scaling group. . If the Auto Scaling group has an attached load balancer, the instance and the load balancer must both be in EC2-Classic or the same VPC. If the Auto Scaling group has an attached target group, the instance and the Application Load Balancer must both be in the same VPC. For more information on adding instances to Autoscaling groups, please visit the below url http://docs.aws.amazon.com/autoscaling/latest/userquide/attach-instance-asg.html The correct answer is: The AMI used to launch the instance must still exist., The instance is not a member of another Auto Scaling group., The instance is in the same Availability Zone as the Auto Scaling group. Feedback about this question and answer When designing an application architecture utilizing EC2 instances and the ELB, to determine the instance size required for your application what questions might be important? Choose the 2 correct answers from the options below Please select: ■ A. Determine the required I/O operations

# Ouestion 53

Question **52** 

Not answered

Not answered

Mark for Review

- B. Determining the minimum memory requirements for an application
- C. Determining where the client intends to serve most of the traffic
- D. Determining the peak expected usage for a clients application

Your answer is incorrect.

Answer - A and B

When designing which EC2 instances to use, you need to know the I/O and memory requirements. These are some of the core components of an Ec2 instance

For more information on EC2 instance types, please visit the below url

https://aws.amazon.com/ec2/instance-types/

The correct answer is: Determine the required I/O operations, Determining the minimum memory requirements for an application

Feedback about this question and answer

Mark for Review	answer from the options given below
	Please select :
	A. Change the retention period of SQS
	B. Change the visibility timeout of SQS
	C. Change the system to use SWF
	D. Change the message size in SQS
	Your answer is incorrect.
	Answer – C
	Amazon SWF promotes a separation between the control flow of your background job's stepwise logic and the actual units of work that contain your unique business logic. This allows you to separately manage, maintain, and scale "state machinery" of your application from the core business logic that differentiates it. As your business requirements change, you can easily change application logic without having to worry about the underlying state machinery, task dispatch, and flow control.
	When you use SWF you are guaranteed that a message will be processed only once.
	For more information on SWF, please visit the below url
	https://aws.amazon.com/swf/
	The correct answer is: Change the system to use SWF
	Feedback about this question and answer
Question <b>55</b> Not answered	You have a couple of EC2 instances that have just been added to an ELB. You have verified that the right security groups are open for port 80 for HTTP. But the EC2 instances are still showing out of service. What could be one of the possible reasons for this? Choose an answer from the options given below
Mark for Review	Please select :
	A. The EC2 instances are using the wrong AMI
	B. The page used for the health check does not exist on the EC2 instance
	C. The wrong instance type was used for the EC2 instance
	D. The wrong subnet was used
	Your answer is incorrect.
	Answer – B
	When defining a health check, in addition to the port number and protocol, you have to also define the page which will be used for the health check. If you
	don't have the page defined on the web server then the health check will always fail.
	For more information on Health checks, please visit the below url
	http://docs.aws.amazon.com/elasticloadbalancing/latest/classic/elb-healthchecks.html
	The correct answer is: The page used for the health check does not exist on the EC2 instance
	Feedback about this question and answer
Question <b>56</b>	
Not answered	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?
Mark for Review	5
,	Please select :
	A. The instance gets terminated automatically by the ELB.
	B. The instance gets quarantined by the ELB for root cause analysis.
	C. The instance is replaced automatically by the ELB.
	D. The ELB stops sending traffic to the instance that failed its health check
	Your answer is incorrect.

You have an order processing system which is currently using SQS. It was noticed that an order was processed twice which had led to great customer

dissatisfaction. Your management has requested that this should happen in the future. What can you do to avoid this happening in the future? Choose an

Question **54** 

Not answered

#### Answer - D

To discover the availability of your EC2 instances, a load balancer periodically sends pings, attempts connections, or sends requests to test the EC2 instances. These tests are called health checks. The status of the instances that are healthy at the time of the health check is InService. The status of any instances that are unhealthy at the time of the health check is OutOfService. The load balancer performs health checks on all registered instances, whether the instance is in a healthy state or an unhealthy state.

The load balancer routes requests only to the healthy instances. When the load balancer determines that an instance is unhealthy, it stops routing requests to that instance. The load balancer resumes routing requests to the instance when it has been restored to a healthy state.

You can see the status of the instance in the Registered Instances section of the load balancer.

#### Registered instances

Instance ID	Name	Port	Availability Zone	Status
i-09f54a79fc36966e4		80	us-east-1b	unhealthy (j)
i-023260ed8c205079d		80	us-east-1b	unhealthy (i)

The correct answer is: The ELB stops sending traffic to the instance that failed its health check

#### Feedback about this question and answer

## Question **57**

Not answered

Mark for Review

A company is currently SWF for their order processing. Some of the orders seem to be stuck for 3 weeks. What could be the possible reason for this? Choose the correct answer from the options below

### Please select:

- A. SWF is awaiting human input from an activity task.
- B. The last task has exceeded SWF's 14-day maximum task execution time
- O. The workflow has exceeded SWF's 14-day maximum workflow execution time
- D. SWF is not the right service to be used

Your answer is incorrect.

## Answer - A

The issue is probably due to the fact they maybe a human interaction such as an approval is required for the orders to be further processed.

For more information on SWF, please visit the below url

https://aws.amazon.com/swf/

The correct answer is: SWF is awaiting human input from an activity task.

# Feedback about this question and answer

# Question **58**

Not answered

Mark for Review

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?

## Please select:

- B. Deploy 3 EC2 instances in one region and 3 in another region and use Amazon Elastic Load Balancer.
- C. Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer.
- D. Deploy 2 EC2 instances in three regions and use Amazon Elastic Load Balancer.

# Your answer is incorrect.

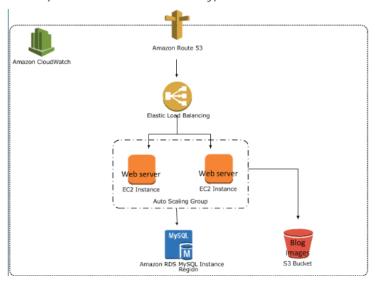
## Answer - C

Option A is automatically incorrect because remember that the question asks for high availability. For option A, if the AZ goes down then the entire application fails.

For Option B and D, the ELB is designed to only run in one region in aws and not across multiple regions. So these options are wrong.

The right option is C.

The below example shows an Elastic Loadbalancer connected to 2 EC2 instances connected via Auto Scaling. This is an example of an elastic and scalable web tier. By scalable we mean that the Auto scaling process will increase or decrease the number of EC2 instances as required.



The correct answer is: Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer.

### Feedback about this question and answer

# Question **59**

Not answered

Mark for Review

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

## Please select:

- A. HTTP 200 result code and MD5 checksum, taken together, indicate that the operation was successful.
- B. Amazon S3 is engineered for 99.999999999 durability. Therefore there is no need to confirm that data was inserted.
- C. A success code is inserted into the S3 object metadata.
- D. Each S3 account has a special bucket named \_s3\_logs. Success codes are written to this bucket with a timestamp and checksum.

Your answer is incorrect.

# Answer – A

When an object is placed in S3, it is done via HTTP via a POST or PUT object request. When a success occurs, you will get a 200 HTTP response. But since a 200 Response can also contain error information, a check of the MD5 checksum confirms on whether the request was a success or not.

For more information on the POST request for an object in S3, please visit the link:

• http://docs.aws.amazon.com/AmazonS3/latest/API/RESTObjectPOST.html

For more information on the PUT request for an object in S3, please visit the link:

• http://docs.aws.amazon.com/AmazonS3/latest/API/RESTObjectCOPY.html

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

# Feedback about this question and answer

# Question **60**

Not answered

Mark for Review

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?

# Please select:

- A. The outbound security group needs to be modified to allow outbound traffic.
- B. The outbound network ACL needs to be modified to allow outbound traffic.
- $\hfill \bigcirc$  C. Nothing, it can be accessed from any IP address using SSH.
- D. Both the outbound security group and outbound network ACL need to be modified to allow outbound traffic.

Your answer is incorrect.

Answer - B

For an EC2 instance to allow SSH, you can have the below configuration for the Security and Network ACL for Inbound and Outbound Traffic.

	Inbound	Outbound
Security Group – SSH	Allow	Deny
Network ACL -SSH	Allow	Allow

The reason why Network ACL has to have both an Allow for Inbound and Outbound is because network ACL's are stateless. Responses to allowed inbound traffic are subject to the rules for outbound traffic (and vice versa). Whereas for Security groups, responses are stateful. So if an incoming request is granted, by default and outgoing request will also be granted.

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

Feedback about this question and answer

Finish review

