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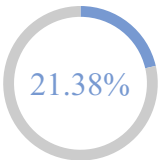
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Expectations

Score

1. Demonstrate an understanding of the design principles and best practices of the Operation Excellence Pillar

30.77 %

2. Demonstrate understanding of the Design Principles and Best Practices of the Reliability pillar

15.38 %

3. Demonstrate an understanding of the Design Principles and Best Practices of the Security pillar

30.77 %

4. Demonstrate an understanding of the Design Principles and Best Practices of the Performance Efficiency pillar

23.08 %

5. Demonstrate an understanding of the Design Principles and Best Practices of the Cost Optimization Pillar

7.69 %

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High Availability, Fault Tolerance, and Scalability

View Challenge

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Exam Breakdown

Demonstrate an understanding of the design principles and best practices of the Operation Excellence Pillar

❏

1.

You've been asked to host a docker container within your AWS environment. What is the most appropriate product to use for this task?

A. EC2

B. Lambda

C. ECS
done **Correct**

D. Opsworks

thumb up thumb do

2.

You business has two EC2 instances, one is located in `us-east`, the other in `us-west`. You need to allow both machines to communicate with an application integration project you are consulting for. What solution would you recommend?

A. Communication between VPCs in different regions is not possible with AWS.

B. Ensure that each VPC has a IGW attached and each machine has a public IP address. Configure communications between those public IP addresses.

C. Configure an inter-region VPC peer between the VPCs and allow communications using the private IP addresses of the instances.
done **Correct**
forum
Why is this correct?
This is the recommended solution in this case.

D. Configure a Hardware VPC VPN between the VPC in `us-east-1` and the VPC in `us-west-1`. Configure the application to communicate using the private IP addresses of the instances.
close **Your Answer**
forum
Why is this incorrect?
It's not possible to configure hardware VPC VPN between two VPCs. Use VPC peering instead.

thumb up thumb do

3.

You are designing a VPC for a small application. It will operate in a private subnet and needs internet access to software updates and other communications with internet IPs. Your security team is happy that there are no restrictions in the application server's internet access. Which AWS products are needed to allow this solution. The priority is using the least amount of services. Assume the EC2 instance and any NACL's, routes, and Security groups are included implicitly.

❑

A. VPC, Subnets, Route Table(s), Nat Gateway, and Internet Gateway.

done Correct

forum

Why is this correct?

Correct. These are the minimum required services to provide internet access to a private EC2 instance.

B. VPC, Subnets, Route Tables, VPC Peering, and Virtual Private Gateway

C. VPC, Subnets, Route Table(s), and NAT Gateway

D. VPC, Subnets, Route Table(s), and Internet Gateway

close Your Answer

forum

Why is this incorrect?

Incorrect. The scenario explains that the EC2 instance is in a private subnet. An internet gateway alone isn't enough to provide internet access.

thumb up thumb do

4.

Your business generates a large amount of financial data within its SQL-backed financial application. You have been asked to suggest an AWS product which will allow storage of that data to be used for long term reporting, querying, forecasting, and business intelligence. Which AWS product should you suggest?

❑

A. Athena

B. Glacier

C. EMR

D. Redshift

thumb urthumb dc

5.

You are consulting for a finance company that has specific backup and archiving policies. Financial documents for the past six months may need to be accessed frequently. You need to configure a setup that automatically sends any documents that are older than six months to a lower-cost, but highly durable, environment for archiving. Given that the company is using a Storage Gateway in File Gateway configuration, which of the following would be the best setup to reach the objectives?

❏

A. Enable versioning on the S3 connected bucket to the Gateway Storage configuration.

B. Enable an S3 lifecycle policy to send all objects added to the bucket immediately to Glacier

C. Enable an S3 lifecycle policy to integrate into Amazon EBS for a good backup solution.

D. Enable S3 versioning with a lifecycle policy that sends objects older than six months to Amazon Glacier

thumb urthumb dc

6.

What steps are required to allow an EC2 instance to access the internet while being as secure as possible? Assume all security rules/ACL's and subnets are in place already. (Choose all that apply)

❏

A. Create a default route from the EC2 instance's subnet to the NAT Gateway.

forum

Why is this correct?

This directs traffic from the EC2 instance to the NAT gateway to be translated.

B. Add a NAT gateway

forum

Why is this correct?

This is required to allow a private instance to have internet access.

C. Attach an internet gateway to the VPC.

forum

Why is this correct?

This is required either to provide incoming and outgoing access to the instance, or to provide only outgoing access via a NAT gateway.

D. Create a default route from the NAT gateway's subnet to the Internet Gateway.

forum

Why is this correct?

This is required in order to allow the NAT gateway to have internet access.

E. Provide the instance with a Public or Elastic IP address.

F. Create a default route from the EC2 instance's subnet to the internet gateway.

forum

Why is this incorrect?

This is only needed if incoming access is required.

thumb up thumb do

7.

You business operates in a very security sensitive industry. You are looking at how to secure a small VPC. Your environment consists of a single S3 bucket, and an EC2 instance running in a internet connected VPC. What is the best way to lock down the environment, allowing access to S3 but keeping the environment as secure as possible?

□

A. Create an S3 VPC endpoint. Apply a policy restricting access to the S3 bucket from the VPC endpoint.

B. Provision a private VPC based S3 bucket. Migrate the contents of the public bucket and update the application. Remove the internet gateway to isolate the VPC.

C. Create an S3 VPC endpoint. Apply a policy restricting access to the S3 bucket from the VPC endpoint, and remove the internet gateway.

forum

Why is this correct?

This is ideal. A VPC endpoint doesn't require an internet gateway. It allows access to S3 which is a public service

from a VPC.

thumb up thumb do

8.

A solution you are working on within AWS requires the use of a hadoop cluster for big data analysis. What AWS service is an appropriate selection?

❑

A. Athena

B. Redshift

C. Elasticache

D. EMR

done Correct

thumb up thumb do

9.

You are designing a VPC to host a small application. The VPC will be connected back to your on-premises network using a VPN. An EC2 instance runs the application, and will *only* need to connect to the internet for software updates. You have a list of the software update DNS names. How can you restrict this within the AWS VPC?

❑

A. Place the EC2 instance in a public subnet and add an internet gateway.

B. This restriction isn't possible using an AWS VPC.

C. Add an internet gateway to the VPC, and a proxy service running on a EC2 instance in a public subnet with an elastic IP.

forum

Why is this correct?

A proxy, managed by you, would allow the flexibility needed. The proxy would gain internet access via the internet gateway, and could be used by your application to get its updates. It would *not* access anything else on the internet.

D. Use the DNS filtering option on a NAT gateway to restrict internet access to just the software updates.

close Your Answer

forum

Why is this incorrect?

This isn't a feature available using NAT gateways

thumb up thumb dc

10.

CloudTrail is enabled in `us-east-1` and you have a number of trails created for different teams. You notice duplicate events for IAM. How can you resolve this issue?

❑

A. Disable logging global service events on all but one trail.

done Correct

forum
Why is this correct?

Global service events are from global services such as IAM. Having this option enabled on more than one trail can cause duplicates. Disabling this option on all but one fixes this issue.

B. Apply all Trails globally.

C. Apply a cloudtrail folder using the CLoudTrail JSON editor.

D. Use SQS + Lambda to remove duplicates.

close Your Answer

forum
Why is this incorrect?

This is not a valid approach.

thumb up thumb dc

11.

You run a single instance application on an EC2 instance in AWS. Your architecture teams are

You run a single instance application on an EC2 instance in AWS. Your architecture teams are looking to make changes and convert the application to operate on multiple servers. The app runs on Linux and currently accesses millions of flat file data files in the `/data/...` folder structure. This database is stored on an EBS volume attached to the EC2 instance. How can this be moved to work on multiple servers, with as little application changes as possible? What product would you suggest?

❑

A. EFS

done **Correct**

forum
Why is this correct?

Correct. EFS is a network file system and could be utilised to provide access to the database files for all instances. It can also be mounted locally on Linux systems.

B. Use EBS to mount the existing volume on all the new instances.

C. S3

D. EMR and HDFS

close **Your Answer**

forum
Why is this incorrect?

Incorrect. This is an unsuitable product. HDFS is only used with EMR.

thumb_up thumb_do

12.

A custom CloudWatch metric has determined that your web application is returning a high number of 404 errors. How could you automatically create a message in your online Help Desk system for your webmaster? (Choose all that apply)

❑

A. Set an alarm for the metric that sends a notification to an SNS topic.

done **Correct**

forum
Why is this correct?

Create an alarm by setting a maximum number of errors per period.

B. Create an SNS topic and subscribe the Create Ticket url for your Help Desk to the topic.

done **Correct**

forum

Why is this correct?

You can subscribe HTTP and HTTPS endpoints to an SNS topic.

C. Use the Zen Desk plugin for CloudWatch

D. Run a report in AWS Config to find the source of the error, and send a message to an SNS topic.

E. Run a scan with Amazon Inspector to locate the source of the error, and send a message to an SNS topic.

close **Your Answer**

forum

Why is this incorrect?

Amazon Inspector reports on security best practices, it doesn't check for application errors.

thumb ur thumb dc

13.

Which of the following AWS storage services are able to be natively *mounted* as mount points on a Linux system.

❏

A. EBS and Instance Store only

B. Glacier, Instance Store, and EBS

C. Instance Store, EBS, and EFS

done **Correct**

forum

Why is this correct?

Instance Store, EBS and EFS are all capable of being mounted to EC2 instances. Using EFS (NFS) is not currently supported on windows instance.

D. Instance Store, EBS, S3, Glacier, and EFS

close **Your Answer**

forum

Why is this incorrect?

S3 and Glacier cannot be mounted as file systems.

thumb ur thumb dc

Demonstrate understanding of the Design Principles and Best Practices of the Reliability pillar

❑

1.

Which of the following services or service features are global features, that is, they operate globally and will continue working if a region fails?

❑

A. Route 53
done **Correct**
forum
Why is this correct?
Route 53 is globally distributed, as is DNS. All elements of the service are globally resilient. Route 53 is used when you want to provide global HA in most cases.

B. S3

C. Elastic Load Balancer

D. VPC
close **Your Answer**
forum
Why is this incorrect?
VPC's operate within a region. If that region fails, the VPC fails.

thumb_up thumb_do

2.

You need to design a VPC which is resilient to AZ failure from an internet access perspective. The VPC is in a four AZ region. How many Internet gateways are required to ensure multiple AZ failures won't disrupt internet connectivity.

❑

A. 1
done **Correct**
forum
Why is this correct?
An IGW is resilient by design, and only one needs to be attached to a VPC in order to provide *all* subnets in *all* AZ's with resilient internet connectivity.

B. 2

C. 0

D. 4

forum

Why is this incorrect?

Only one IGW can be attached to a VPC. Only one IGW is needed to provide resilience to *all* subnets in *all* AZs in a VPC.

thumb up thumb down

3.

Your company has moved a legacy application from an on-premises data center to the cloud. The legacy application requires a static IP address hard-coded into the backend. What options do you have to maximize the availability of this application?

❑

A. Associate an Elastic IP address to an instance running the application, then enable EC2 Auto-recovery.

done Correct

forum

Why is this correct?

An Elastic IP is a static public IP associated with your account. EC2 Auto-recovery will relaunch a failed instance and preserve the IP addresses.

B. Associate an Elastic IP with a CloudFront distribution that uses an EC2 instance running your application as the origin for all requests.

C. Create an AMI of the instance and launch it using Auto Scaling, which will deploy the instance again if it becomes unhealthy.

D. Do not migrate the application to the cloud until it can be converted to work with the ELB and Auto Scaling.

E. Associate an Elastic IP with a Network Load Balancer and target multiple instances in the AZ running the application.

done Correct

thumb up thumb down

4.

Which of the following services/service features is *natively* highly available in a region, and can cope with a AZ failure without itself failing?

❏

A. VPC Subnet
B. EC2
C. DynamoDB

C. DynamoDB

done Correct

forum

Why is this correct?

DynamoDB is resilient to AZ failure by design.

D. S3

done Correct

thumb up thumb do

5.

Which EC2 features can help mask the failure of an instance? (Choose all that apply)

❏

A. AWS CloudFail

B. EC2 Autorecovery

done Correct

forum

Why is this correct?

On supported instance types, EC2 Autorecovery will replace an instance with an identical one, preserving IP addresses.

C. AWS Glue

D. NAT Gateway

E. Elastic IP

done Correct

6.

You are designing an application with three components: an app server running on EC2, a media store running on S3, and a database running on DynamoDB. You have been asked to make sure your design allows a single AZ to fail without impacting service. Which option is correct?

❏

A. No specific changes are required. EC2, S3, and DynamoDB are all region resilient and will operate fine if an AZ fails.

B. Edit the configuration of the EC2 instance, enable the AZ roaming option, and pick all the availability zones.

C. S3 and DynamoDB are resilient to an AZ failure by design. Provision EC2 using a Launch Configuration and an Auto Scaling group to ensure it can cope with an AZ failure and auto-heal if needed.

done **Correct**

forum

Why is this correct?

EC2 is the only component which needs to have resilience added. LC and ASG are the products which achieve this.

D. Leave EC2 set up using defaults, enable AZ replication on S3, and set up master/slave replication on DynamoDB.

close **Your Answer**

forum

Why is this incorrect?

EC2 is not resilient by default. There are no such options for S3 and DynamoDB.

7.

You have been asked to provide a recommendation on the most resilient database solution available within AWS. The business requirements are that the data is structured. They require multiple availability zones and *very* low latency between mirrors. Right now, two availability zones are required, but whatever solution is selected needs to be able to cope with three or more. Which product would you recommend?

❏

A. Athena

B. DynamoDB

C. Aurora

forum

Why is this correct?

Aurora supports more than two AZ replicas and uses a shared storage platform. It's the most suitable candidate.

D. RDS

closeYour Answer

forum

Why is this incorrect?

Except for Aurora, DB engines can run in a maximum of two availability zones. Additionally they don't utilise shared storage, and so they suffer from the latency associated with replication.

thumb up thumb do

8.

Why does stopping and starting an instance usually fix a System Status Check error?

☐

A. Stopping and starting an instance causes the instance to be provisioned on different AWS hardware.

doneCorrect

forum

Why is this correct?

Unless you have dedicated tenancy enabled, stopping and starting an instance will generally cause it to be launched onto different AWS host hardware.

B. Stopping and starting an instance causes the instance to change the AMI.

C. None of the these

D. Stopping and starting an instance reboots the operating system.

closeYour Answer

forum

Why is this incorrect?

While stopping and starting does reboot the operating system, this is not the reason it tends to clear System Status Check errors.

thumb up thumb do

9.

You have designed a small VPC deployment for a highly-available web application. The VPC is in a Three Availability Zone region, and you have created nine subnets. Three are private (one per AZ), three are public (one per AZ), and three are database subnets (one per AZ). You have provisioned the three web servers in the public subnets, three application servers in the private subnets, and a three-node Aurora cluster. How many load balancers do you need to create, and in what subnets should they be placed, to ensure each tier is highly available?

❑

A. 2 - One placed in the public subnets, the other in the private

done Correct

forum

Why is this correct?

This will achieve the aim of high availability. The public classic load balancer will load balance across the web servers, and the one placed in the private tier will do the same for the app servers. The database doesn't need an elb, it is highly available via its cluster DNS name.

B. 3 - One placed in each tier

C. 9 - One placed in each subnet in each tier

D. 2 - One placed in the private subnet, the other placed in the DB subnet

close Your Answer

forum

Why is this incorrect?

The Web servers should have a public facing classic load balancer in the public tier, and the app servers need one in the private tier. Aurora doesn't need a load balancer; the cluster has high availability built in.

thumb up thumb do

10.

You have been asked to design an upgrade to a legacy environment running in an AWS VPC. The environment is currently using a single NAT instance running on EC2. The region the environment is in has four AZs. The VPC has eight subnets, four private (one in each AZ) and four public (one in each AZ). You have been asked to ensure the solution uses NAT gateways and that if any AZ fails, an instance in the other AZs can ALWAYS access the internet. What is the minimum number of NAT Gateways required?

❑

A. 1 - It spans all four public subnets. All private subnets use the single NAT gateway.

B. 2 - Each one is located in a single public subnet, but not the same one. Private subnets are set to round robin across them both.

C. 2 - Each spans two different public subnets, with private subnets set to round robin across them both.

D. 4 - Each is located in a single , but different public subnet. Each private subnet is set to use the NAT gateway in the same AZ.

done **Correct**

thumb up thumb do

11.

You have a single EC2 instance, which is automatically built from a Cloud Formation template, that runs some business-critical scripts on an hourly basis. The EC2 instance currently operates in a single AZ in us-east-1 and the business has asked that you add resilience to the instance, They would like to be able to cope with one or more AZ failures, and maintain its functionality. Which option below would you present as a possible solution?

◄ | | ►

□

A. Adjust the CloudFormation template. Add an LC and ASG, and add bootstrapping. Set the min/max/desired to 1/1/1. Optionally, add app specific health checking.

done **Correct**

forum
Why is this correct?

This is a effective way to add HA to a single instance. Add bootstrapping information into the launch configuration, and use a ASG with 1/1/1 to auto heal any failures.

B. Create a load balancer, attach the instance, and enable health checks to recover the instance if it fails.

C. Create an AMI of the EC2 instance, and configure CloudWatch to Auto Recovery from that AMI in another AZ.

D. Use the EC2 Auto Recovery feature to detect a failure, and start the instance up in another AZ.

close **Your Answer**

forum
Why is this incorrect?

Auto recovery will restart an instance if a host fails, but it doesn't allow for recovery in another AZ.

thumb up thumb do

12.

You are designing the implementation of a new application deployment. The application is capable of using a number of different DB engines, including MySQL, PostgreSQL and Microsoft SQL Server. The resilience of the application is critical. It needs to operate in three availability zones, and have the ability operate effectively even with the failure of two zones. Which DB platform should you select?

A. Pick MySQL running on an EC2 instance that is enabled for cross-az roaming.

B. Using the MySQL engine, ensure that Multi-AZ is enabled and that at least three AZs are selected within the HA configuration.

C. Pick RDS using the MySQL engine, selecting to use Multi-AZ .

D. Select Aurora as the DB platform

done Correct

thumb up thumb dc

13.

What happens if you reboot an instance store-backed EC2 instance with a Public IP?

A. The instance store volume is wiped.

B. The instance remains in the running state.

done Correct

forum
Why is this correct?

Rebooting only restarts the operating system. It does not stop the instance.

C. The Public IP changes and the instance store volume is wiped.

D. The Public IP changes

close Your Answer

forum
Why is this incorrect?

The Public IP is retained unless the instance is stopped or terminated.

thumb up thumb dc

Demonstrate an understanding of the Design Principles and Best Practices of the Security pillar

1.

Your CRM application running on EC2 needs to store and retrieve contract documents in an S3 bucket. How can your application get these permissions?

A. EC2 instances automatically have access to S3 buckets.

B. Create a bucket policy and grant read and write permissions to the ARN for your application.

C. Create an IAM role with a suitable permissions policy and a trust policy specifying the EC2 service

done Correct

forum
Why is this correct?

The instance will assume the role and receive temporary credentials from STS. The application can use the access keys stored in the instance metadata.

D. Embed the developer's access keys into the application code.

close Your Answer

forum
Why is this incorrect?

The developer's keys are "permanent" and run the risk of compromise.

thumb up thumb do

2.

You are a consultant and have been asked to perform an audit of the AWS environment for a medical company concerned about security compliance. The company administrator provides you with the root login to the AWS account. After beginning the audit, you discover that the Nurses that work for the company are all using a shared single login account called nurse_user1 to upload and download daily shift change reports from S3. After further investigation, you discover that the nurse_user1 account has full administrator privileges to EC2 and S3. When you document your findings, what security issues would you note in the report and what suggestion would you make to resolve the problem? Choose 2.

A. There are three security issues: 1. You were given access to the root account. 2. The nurses are sharing an account and 3. The nurses have full administrator privileges to EC2 and S3.

done Correct

forum
Why is this correct?

This answer is correct. AWS recommends granting access based on the principle of least privilege so there are three security issues. 1. As a consultant, you were given access to the root account. 2. The nurses have full access to all

EC2 and S3 services. 3. The nurses are sharing one IAM account.

B. To resolve the security issues you would recommend the following: 1. Create individual accounts for the nurses and put all of the nurse accounts into a group. 2. Grant read/write permissions for the newly created group to the appropriate S3 bucket.

C. To resolve the security issues you would recommend the following: 1. Create individual accounts for the nurses and put all of the nurse accounts into a group. 2. Grant read/write permissions for the newly created group to the appropriate S3 bucket. 3. Recommend as a best practice that temporary accounts be created for consultants.

done Correct

forum

Why is this correct?

The principle of least privilege recommends that the minimal access required to complete the task be provided. Therefore, to resolve the issue, you would recommend that the company no longer allow shared accounts, especially the root account. Groups should be used to simplify management for multiple accounts, and a temporary account should be created for consultants using Security Token Service so that the account will expire when the access is no longer required.

D. There are two security issues: 1. The nurses are sharing an account. 2. The nurses have full administrator privileges to EC2 and S3.

close Your Answer

forum

Why is this incorrect?

This answer is partially correct, there are three issues with the configuration, not two.

E. There is only one security issue: The nurses should not have full privileges to all EC2 instances and S3.

thumb up thumb do

3.

To maintain compliance with HIPPA laws, all data being backed up or stored on Amazon S3 needs to be encrypted at rest. What two things should you do for storing the healthcare-related (PHI) data in a compliant manner?

❑

A. Enable SSE on an S3 bucket to make use of AES-256 encryption

done Correct

forum

Why is this correct?

PHI data must be encrypted at rest. S3 Server Side Encryption provides that capability.

B. Store the data in encrypted EBS snapshots

C. S3 is not a HIPAA Eligible Service

C. S3 is not a HIPAA Eligible Service

D. Store the data on EBS volumes with encryption enabled instead of using Amazon S3

E. Set the bucket policy to Deny puts of objects without the server side encryption attribute

done **Correct**

thumb up thumb do

4.

You operate a stock images website with millions of images. Watermarked versions of the images are available for preview via an application running on an EC2 instance. Full resolution versions are stored on an EBS volume attached to the EC2 instance, delivered by the application. You have been asked to find a cheaper solution, which allows your business to scale. Which option is the most suitable.

☐

A. Move the images to S3 and add READ permissions for EVERYONE

B. Move the images to S3 and enable FTP read support

C. Add a storage optimised EBS volume to the EC2 instance

D. Move the images to S3 and Use pre-signed URL's

done **Correct**

thumb up thumb do

5.

A team of developers within your business has developed a mobile application which needs to access a DynamoDB table. The mobile application will be used by upwards of 1,000,000 users. Which security access method would you suggest to the developers in order to minimise costs & admin overhead while maximising security.

☐

A. Configure the DynamoDB firehose and twitter firehose integrations to allow connectivity between the mobile app (using twitter ID's) and DyanmoDB

B. Create a IAM user for the application. Allow the application to connect to AWS and create a IAM user for every new user of the application. Generate access keys for that user. Use those keys to connect to DynamoDB.

C. Create a single IAM user .. a service user for the mobile app. Hardcode the username and password into the application and allow all instances of it to connect to DynamoDB using those credentials.

D. Configure web identity federation in the mobile app. Use AWS Cognito. Use an IAM role and it's permissions to connect to DynamoDB

done **Correct**

thumb up thumb dc

6.

Ten students have just been employed by your company for one week, and it is your task to provide them with access to AWS through IAM. Your supervisor has come to you and said that he wants to be able to track these students as a group, rather than individually. Because of this, he has requested for them to all have the same login ID but completely different passwords. Which of the following is the best way to achieve this?

▢

A. Use Multi Factor Authentication to verify each user and they will all be able to use the same login

B. It isn't possible to have the same login ID for multiple IAM users of the same account

done **Correct**

forum
Why is this correct?

It's not possible for a good reason. If you check the CloudTrail logs, you won't be able to see which user actually misconfigured a resource or deleted critical data.

C. Create various groups and add each user with the same login ID to different groups. The user can login with their own group ID

D. Create a separate login ID, but give each IAM user the same alias so that each one can login with their alias

close **Your Answer**

forum
Why is this incorrect?

IAM login IDs do not have aliases.

thumb up thumb dc

7.

Multiple Directors in your company have opened AWS accounts. The Chief Security Officer has expressed a concern that accounts may be using unapproved AWS services and wants your advice. What would you recommend?

A. Create a Lambda function to delete the IAM users in each account.

B. Create a CloudTrail trail to monitor the API calls in each account.

C. Create a new Account. Contact AWS Support and have them move all IAM Users into the new Account.

D. Create a Root Account as the Master in AWS Organizations and have each account join your organization. Then apply Service Control Policies to the child accounts.

done Correct

thumb up thumb dc

8.

You are an EC2 administrator and you create an EC2 instance and attach an EBS volume. Two weeks later, your supervisor informs you that the data on the EBS volume must be encrypted. What must you do to encrypt the existing EBS volume?

A. You can enable encryption on a volume by changing the volume type to an instance store volume. Instance store volumes are automatically encrypted.

B. It is not possible to encrypt an existing EBS volume. You can take a snapshot of the unencrypted volume. Once the snapshot is taken, copy the snapshot and enable encryption on the copy so that the target snapshot is encrypted. Once the target snapshot is created, you can attach a new encrypted volume to the EC2 instance and restore the encrypted snapshot to a new volume.

done Correct

forum
Why is this correct?

This answer is correct. For more information about encrypting a snapshot during a copy visit the AWS documentation at this link: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-copy-snapshot.html

C. In the EC2 Dashboard, select the EBS volume, and under Actions select the encrypt volume option.

D. It is not possible to encrypt an existing EBS volume. You must delete the existing volume and all existing data will be lost. You will have to recreate the data on the new encrypted volume.

close Your Answer

forum
Why is this incorrect?

Although you cannot directly encrypt an existing volume, there is a better alternative than deleting the existing volume and recreating the data.

9.

Your company has been thinking about moving its networking resources over to AWS. Your boss is particularly interested in the AWS shared responsibility model, as it will allow him to offload some traditional responsibilities to AWS. He says that he is happy that AWS will now handle the following responsibilities listed below. However, you know that he is wrong and that AWS does not handle all of them as part of the shared responsibility model. Which of the following four (4) items do you need to tell him are not handled by AWS? (Choose 2)

❏

A. Datacenter Access

B. Security groups

don**Correct**

forum

Why is this correct?

In the shared responsibility model, AWS is NOT responsible for managing security groups, applying an SSL certificate to an ELB, and the installation of custom firewall software.

C. Storage Device Decommissioning

D. Change Management of Host Servers

E. Applying an SSL Certificate to an ELB

don**Correct**

10.

One of your environments utilises a DynamoDB as a database. You need to ensure that it can only be accessed from a select number of people using specific IP addresses. What design changes do you suggest?

❏

A. Configure IAM users for each of the people who need access. Give those people access to the DynamoDB operations they need, but add a 'condition' to the policy so that it has to match the specific IP address registered for each user.

don**Correct**

forum

Why is this correct?

This is the best solution. By default nobody has access to the DynamoDB tables, unless granted. Grants can be

allowed via IAM users, who have policies with conditions matching specific IP addresses.

B. Using the AWS console or CLI, edit the table(s) requiring the restrictions, set the default security to Deny and add the IP's who require access.

C. Create a security group, add allow rules for the IP's who need access and attach the SG to DynamoDB

D. Create a isolated VPC not connected to the internet, provision a private DynamoDB instance in the VPC and allow those who need access to connect to the VPC using a VPN.

close Your Answer

forum

Why is this incorrect?

DynamoDB is a service which utilises public endpoints, it cannot be created as a 'private' instance in the VPC.

thumb up thumb do

11.

You have been asked to advise a junior colleague how to explicitly DENY traffic from an EC2 instance to a specific remote internet FQDN - what advice would you give.

❑

A. Use a security group attached to the instance and explicitly DENY traffic to the FQDN

B. Use a security group attached to the VPC and explicitly DENY traffic to the FQDN

C. Implement a proxy service in the VPC, adjust route tables and use the proxy server to DENY access to the remote hostname.

done Correct

forum

Why is this correct?

This is the only valid option - AWS has no products capable of handling this type of deny to a FQDN

D. Use a NACL on the subnet the EC2 instance is on - DENY traffic from the EC2 instance to the FQDN.

close Your Answer

forum

Why is this incorrect?

A NACL is incapable of blocking traffic to a hostname, even a FQDN.

thumb up thumb do

12.

You are about to create an AWS Lambda function and need to give it the permissions to log in to Amazon S3. How do you best perform this (pick the best approach)

A. Store the credentials inside an S3 bucket and have the lambda function retrieve them upon execution.

B. Create an IAM user, set the username and password in the Lambda function authentication options - set the method to 'interactive'

C. Create an IAM role, assign a policy to the role and set the lambda function to use the role

done Correct

forum

Why is this correct?

This AWS supported approach.

D. Create an IAM user, create access keys, enter them into your function code

close Your Answer

forum

Why is this incorrect?

Not a recommended approach - better to use a role.

thumb up thumb do

13.

You have been asked how to provide another organisation with access to an S3 bucket in your companies account. The bucket is owned by your company and all files within it must be owned by your company. The bucket will be accessed by about 10,000 users of the other organisation. What solution matches these requirements.

A. Provision each member of the remote organisation with an IAM user account, and set a policy allowing them to manage their own account.

B. Use an S3 bucket policy to provide full access to the account ID of the remote organisation

C. Provision a single group for the remote organisation. Generate access keys for the group, and provide this to a member of the remote organisation.

D. Create an IAM role within your AWS account with access rights to the bucket. Using a TRUST policy, trust the account number of the remote organisations AWS account.

Demonstrate an understanding of the Design Principles and Best Practices of the Performance Efficiency pillar

☐

1.

Your autoscaling group launches instances that use provisioned IOPS EBS secondary data volumes in a RAID 0 configuration for serving 20TB of files. Whenever new instances are added to the group they perform very slowly compared to the already running instances. What is the most likely problem?

◀ ▶

☐

A. The EBS volumes have run out of credits

B. The EBS volumes are being encrypted

C. The Elastic Network Interface takes several minutes to provide full network throughput capacity

D. The EBS volumes containing the files are created from snapshots

done Correct

thumb up thumb do

2.

Your CIO has approached you with a problem to solve. You currently run a technical teaching business and provide online learning to students. The service is hosted on-premise and you are unable to expand capacity. A full migration into AWS is not an option - the business needs time to adjust to the idea and you have no infrastructure configured inside your recently created AWS account. The business needs to resolve the performance issues on the media delivery server, at the lowest cost point and ideally improve performance to international students. What should you suggest?

☐

A. There is no solution to this problem if the business doesn't want to do a full migration. CloudFront can only cache from AWS endpoints.

B. Leave the media on-premises, order an AWS Direct Connect and utilise CloudFront to Cache Content from an EC2 instance acting as a proxy server.

C. Ensure the media server in your on premises network has a public IP address. Provision CloudFront and configure it to globally cache content.

done Correct

forum

Why is this correct?

Correct - CloudFront can be configured with a custom origin that can be a non AWS server. It requires no other AWS services. This option is the quickest and lowest cost option for the business.

D. Migrate the media to an EC2 instance and use Amazon S3 as a content delivery network (CDN)

close Your Answer

forum

Why is this incorrect?

Incorrect - the business doesn't want a full migration into AWS in the short term, and S3 is not a content delivery network in a traditional sense.

thumb up thumb do

3.

You have an application which demands extreme database performance. It needs to be able to handle millions of read operations per second against the database and offer low latency. What product or combination of products would you suggest.

A. Aurora & SNS

B. DynamoDB and DAX

done Correct

forum

Why is this correct?

DynamoDB accelerator (DAX) adds performance enhancements to DynamoDB and is the best solution available to meet the scenarios demands.

C. DynamoDB

D. Aurora & SQS

close Your Answer

forum

Why is this incorrect?

SQS is a queue service - it can be used to help reduce burst writes on a database, but not reads.

thumb up thumb do

4.

You are in the middle of a design for a media processing application which runs on a fleet of EC2 instances. You need to make a choice on the most suitable EBS disk type to utilise. The business is concerned first about meeting its performance requirements and second about being as cost effective as possible.

The business needs storage which can provide 500 MB/s - and the IOPS requirements are a secondary consideration 500 or so is fine. Which volume type is required?

❏

A. gp2
B. sc1
C. io1
D. st1
don**Correct**

thumb up thumb do

5.

You run a small WordPress site focussing on photography. The site only experiences light usage, but has over 1TB of media files. The files are currently stored on an EC2 attached EBS volume. How can you reduce costs and improve performance. Which products can help. (select all that apply)

❏

A. CloudFront don**Correct**   forum **Why is this correct?** Correct - CloudFront can be enabled to cache content, delivering it locally to the website customers.
B. S3 don**Correct**   forum **Why is this correct?** Correct - S3 can be used to offload the media - this reduces storage costs and processing overhead on the EC2 instance. Static Web hosting can be enabled on the S3 bucket and media delivered from there.

C. Glacier

thumb up thumb do

6.

Your development team run a web application which provides dynamic content using query strings. They have requested a solution to provide better performance globally for the application, at the lowest running and maintenance costs. What should you suggest.

❑

A. Run the application from S3 using its web hosting feature

B. Provision multiple EC2 instances in all regions where the application is used

C. Configure CloudFront to cache dynamic content with query strings. Run the EC2 instance the most appropriate region to be accessed by the dev team.

doneCorrect

forum
Why is this correct?

This is the best solution - while CloudFront is slightly less efficient when caching dynamic content, it is capable of doing so

D. Use S3 acceleration and static hosting for the application

closeYour Answer

forum
Why is this incorrect?

S3 cannot be used to host dynamic content

thumb up thumb do

7.

You have been asked to design some scaling upgrades on a legacy web application which utilises a MySQL RDS instance. The application is suffering from increasing reports of performance issues during peak periods. The application is used for archival information storage; data is reviewed constantly and very rarely updated. Which option provides the best possibility of performance

improvements for the least cost.

☐

A. Enable Multi-AZ - this adds a second read/wrote instance and has the benefit of adding resiliency for no extra cost.

B. Add additional read/write nodes to the MySQL cluster, picking disks with read performance preference.

C. Add RDS read replicas, and adjust the application to move a percentage of reads to the read-replica

done **Correct**

forum

Why is this correct?

Correct - for applications where reads happen more frequently than writes, read-replicas allow performance scaling without significant expense.

D. Upgrade the application server instance and the DB instance - picking a side 4 or 8x the size to allow for ongoing growth.

close **Your Answer**

forum

Why is this incorrect?

Incorrect - this adds significant expense, better options exist

thumb_up thumb_do

8.

What can help boost performance of an HPC application that relies heavily on inter-node communication. (Choose 2)

☐

A. Enable VPC Peering

B. Add a secondary ENI to each instance to increase network capacity

C. Make sure all instances are using Enhanced Networking

done **Correct**

forum

Why is this correct?

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

D. Enable T2 Unlimited

E. Put all instances in a Cluster Placement Group

done Correct

thumb up thumb do

9.

You've been asked to architect a solution for a high volume website which needs to be highly available. In your proof of concept environment you chose to use RDS using the MySQL engine. In your failover testing, you have noticed that when a failover occurs there is sometimes data loss, as though the DB instance which takes over is behind the primary instance. What options do you have to resolve this. (choose one)

☐

A. Migrate to Aurora which uses a higher performance shared storage architecture

done Correct

forum
Why is this correct?

Aurora has much lower latency between the master and any other nodes in the cluster. If you need the low lag replication then this is the best solution.

B. Use the privatelink feature to improve the latency between the Master and Slave instances

C. Migrate from MySQL to PostgresSQL which offers 0 latency replication between master and slave

D. Create additional read replicas of the database - this will extend the capacity and allow replication to occur with less lag.

close Your Answer

forum
Why is this incorrect?

Replication is based on writes to the database - adding read replicas wont assist with replication lag.

thumb up thumb do

10.

You've been asked to upgrade an old AWS environment which is suffering from slow internet throughout. Which option below represents a potential solution (choose one)

☐

A. Change the Nat instance from a T2 large instance to a T2 medium instance

B. Add a virtual private gateway to the VPC

C. Replace the NAT instance in the VPC with a Nat Gateway

done Correct

forum

Why is this correct?

Nat gateways auto scale based on demand - replacing a NAT instance which would have a fixed bandwidth with a NAT gateway offers a potential solution.

D. Enable enhanced networking on the Nat instance

E. Add another internet gateway to the VPC for a total of two - providing 2x internet throughput.

close Your Answer

forum

Why is this incorrect?

Only one internet gateway can be attached to a VPC.

thumb up thumb do

11.

You have an application which needs to perform 100 reads per second from DynamoDB. Each read is 7KB is size. What is the minimum number of RCU required to meet this demand.

A. 200

B. 350

C. 700

D. 100

done Correct

thumb up thumb do

12.

You have been told about performance problems on one of your DB instances. The normal performance demands are met by the SSD storage allocated to the instance but at periods of heavy demand there seems to be a large variance in the time taken for DB operations with some taking

significantly longer than others. **Your product uses RDS and the MySQL engine. What is the best suggestion you can make without further information.**

❑

A. Migrate from RDS MySQL to DynamoDB - this by default provides much better performance

B. Check the memory utilisation of the DB instance - if commonly accessed data is larger than the member allocated to the instance consider increasing memory.

done Correct

forum

Why is this correct?

If data is being accessed from memory you should expect MUCH lower latency than if accessed from disk. The large variance or access times suggests disk is being used as well as memory. A memory update would resolve this.

C. Reboot the DB instances

D. Move some read load over to the slave member of the Multi-AZ set

close Your Answer

forum

Why is this incorrect?

The Slave of a Multi-AZ set isn't available for access unless failover occurs.

thumb up thumb do

13.

You have implemented an application used by millions of people worldwide. As people use the application they interact with S3 - adding, deleting and modifying objects on S3. Objects on S3 have the following format YYYYMMDD-ObjectID.dat - your users are experiencing performance issues at scale. What would you suggest to resolve the issue. (Choose one)

❑

A. Add random data at the start of the object name.

done Correct

forum

Why is this correct?

Object partition in S3 is selected based on the object name left to right ... adding random data at the start of the name will improve performance by increasing the spread of partitions on which objects are stored.

B. Purchase reserved capacity for S3

C. Add random data at the end of the object name

D. Increase the read and write allocation on the S3 bucket.

forum

Why is this incorrect?

S3 performance isn't managed in the same was ad DynamoDB - RCU and WCU isn't controlled in this way.

thumb up thumb dc

Demonstrate an understanding of the Design Principles and Best Practices of the Cost Optimization Pillar

❏

1.

A client has asked you to advise them on some AWS cost related questions. The client has over 1000 EC2 instances that are preconfigured and used during peak periods of the year for their application. The client has decided to perform an upgrade of their application before the next peak period and so has terminated all 1000 EC2 instances. They report still being charged a fee on an ongoing basis. Which option below is a possible reason.

❏

A. The machines are in an autoscaling group, which has a base charge, even if it contains no running instances

B. The instances have been un-terminated and started up without your knowledge, potentially by an IT support engineer for backup verification reasons.

C. When terminating an EC2 instance - you can either terminate attached volumes, or not. EBS is a potential cause of the charges via non deleted volumes.

doneCorrect

D. Terminations take 30 days to process - billing continues for 30 days post termination.

thumb up thumb dc

2.

Your business has a need for a small database to store simple names, addresses, DOB and ID picture information for 1000 employees. The usage will be low, queries will occur every day and the business wants the most suitable, but low cost solution available within AWS. Which database would you suggest.

❏

A. Elasticache

B. Redshift

C. DynamoDB

done **Correct**

forum

Why is this correct?

DynamoDB has no dedicated infrastructure footprint, and it's cost is based on usage, performance and storage.
Given the data doesn't require a structured format ... it would seem to be the best solution.

D. RDS Aurora

close **Your Answer**

forum

Why is this incorrect?

Aurora would be suitable , but as a full SQL database, it has infrastructure running 24/7/365, which has costs. Given another more suitable option Aurora is a less ideal product.

thumb up thumb do

3.

You have an environment which consists of 10 classic load balancers, serving HTTPS requests to 2 EC2 instances each - which are required for high availability. You have been asked to reduce costs, what would you suggest.

❑

A. Purchase a commercial load balancer and lodge a request for AWS support to install it into the AWS datacenter for your region

B. Merge the 10 classic load balancers into two Application Load Balancer's

done **Correct**

forum

Why is this correct?

ALB's are capable of SNI and so can handle multiple SSL certificates each with a different host name. You could even merge this into a single ALB.

C. Merge the 10 classic load balancers into a single classic load balancer

D. Inform the business that the solution cannot be optimised from a cost perspective

close **Your Answer**

forum

Why is this incorrect?

This isn't true, the Load balancers are able to be optimised.

thumb up thumb do

4.

Which of the following suggestions could help reduce DynamoDB running costs

❏

A. Use SCAN rather than query operations

B. Utilise indexes

doneCorrect

forum
Why is this correct?

Indexes are sparse and only contain items from a table which applies to those indexes. Additionally you can chose to populate (project) only certain attributes into indexes. They can be a useful tool to limit the size and thus cost of reads.

C. Limit the attributes read from a table

D. Increase RCU

closeYour Answer

forum
Why is this incorrect?

Increasing the RCU will increase NOT decrease costs.

thumb up thumb do

5.

Your business stores high resolution media imaging in one of its S3 buckets accessible internally to it's applications. The number of objects increase daily, and approximately 100,000 objects are added daily. After discussing the situation with your medical consultants you have learned a few things. Firstly, images are used extensively for 7 days, after that there maybe be some images accessed extensively for up to 60 days after arrival. Beyond that point, images are rarely accessed, only for scheduled consultations. How could you best design a solution to these mounting costs - at the lowest cost.

❏

A. Transition images from Standard to Standard_IA after 30 days. After a further 30 transition from Standard_IA to Glacier. Glacier objects are accessed from the S3 console.

forum

Why is this correct?

Correct - this solution design will provide the best value to the business while matching the requirements. Objects transitioned to glacier from S3 classes are accessed via the S3 console.

B. Implement an S3 lifecycle policy to move images between storage classes, Standard, Standard_IA and glacier. Train staff to access images via the glacier console once archived.

C. Transition Images from S3 Standard to Glacier after 7 days.

D. Hire a small team of admin staff to move images to archival storage when they are no longer used.

close **Your Answer**

forum

Why is this incorrect?

Incorrect - this is a manual task prone to error and not cheap.

thumb up thumb do

6.

You are a solutions architect for a software development company. You have noticed that the business is currently running a lot of small admin scripts written in python on a C3 instance type which is running 24/7/365 using on-demand billing. The scripts run once per hour, complete is around 45 seconds each, and utilise around 88MB while running. You have been asked to design a way to optimise the costs of this platform. It's worth noting that the business is about to launch a new product which would mean 100's or 1000's of these C3 instances. It's essential that these scripts run when scheduled.

☐

A. Migrate all the scripts to run on spot instances to reduce costs.

B. Ask the developers to migrate the scripts to AWS Lambda functions. Use timed events to schedule the invocation of these functions.

done **Correct**

forum

Why is this correct?

Correct - Lambda is a perfect solution. The scripts are already written in a supported runtime (python), you have in-house developers. The runtime is short and the memory utilisation is low. Lambda is ultra scalable and so fits the need perfectly.

C. Combine all scripts for all clients onto a single EC2 instance and purchase a reservation for this instance.

D. Purchase instance reservations to reduce the costs of the existing instance, make a forecast for how many instances you

closeYour Answer

forum

Why is this incorrect?

Incorrect - EC2 is not the right solution in this case, the scripts have short runtimes and low memory needs. Additionally purchasing instance reservations by guessing future capacity is a bad idea.

thumb up thumb do

7.

One of your systems is suffering from performance problems. It's a critical system and you have been asked to design an upgrade to resolve the issues. Checking CloudWatch you can see historically the instance is running at 20% CPU and 99% Memory utilisation. It currently runs on the 2nd smallest C type instance. What should your suggestion be for the best value way to resolve the performance issues.

▢

A. Power down the instance and change the instance to a memory optimised instance type.

doneCorrect

forum

Why is this correct?

Correct - memory optimised instances sacrifice vCPU and provide more memory allocation for a similar cost price. You will generally achieve better value for a memory intensive application by moving to a memory optimised instance type.

B. Rebuild the application, reinstalling all components and the data into a new memory optimised instance type.

C. Increase the size of the instance moving from the current C class instance to next step.

D. Edit the EC2 instance properties and select the custom memory option - add additional memory until the performance issues are resolved.

closeYour Answer

forum

Why is this incorrect?

Incorrect - custom memory is not a EC2 feature.

thumb up thumb do

8.

You are designing the storage needs for a movie processing application. Large videos are uploaded to your website and stored on S3. These master copies are processed using AWS Elastic Transcoder and multiple sizes are output and also stored on S3. There are over 20 size and bitrate variations for each master movie file. 90% of users of your website use only 2 of these size variants. Storage costs

are increasing rapidly and you have been asked to optimise the running costs.

❏

A. Store the master video files on Glacier Immediately, and all resized versions on S3 Standard

B. Store the master video files on Glacier Immediately, and all resized versions on 'S3 One Zone-IA'

C. Store the master video files on 'S3 Standard-IA' and migrate to Glacier after 12 months. Store the popular resized versions on S3 Standard and the less popular resized versions on 'S3 One Zone-IA'

done **Correct**

forum

Why is this correct?

Storing master data on Standard IA is a good choice, it means they still have the level of resilience needed, but cost less to store. Then once older , migrate to Glacier for a significant cost reduction. Resized versions can in theory be stored on one zone to save costs, but the popular versions which will be regularly accessed should remain on standard.

D. Store the master video files on 'S3 One Zone-IA' and migrate to Glacier after 12 months. Store the resized versions on 'S3 Standard-IA'

close **Your Answer**

forum

Why is this incorrect?

Storing master data (non replaceable) on One Zone (which has less resilience) is a huge risk, storing all resized versions on infrequent access could cause additional costs for the popular versions.

thumb_up thumb_down

9.

You have millions of objects in an S3 bucket. Which of the following storage classes is the cheapest SUITABLE class to use when you are storing original data .. i,e. cant be remade. realtime access to the objects occurs constantly.

❏

A. Amazon S3 One Zone-Infrequent Access

B. Amazon S3 Standard

done **Correct**

forum

Why is this correct?

Realtime access is needed. Constantly real-time access is needed. the data is un-replaceable and so S3 Standard is the only option.

C. Amazon S3 Standard-Infrequent Access

D. Amazon Glacier

forum

Why is this incorrect?

This is unsuitable because it doesn't offer real-time access to objects.

thumb up thumb do

10.

You've been asked to review the architecture of an application within a clients AWS environment. It runs as a web app, with a DynamoDB backend. DynamoDB stores 100's of millions of items of information - each of which is about 350KB in size. Most of every item, is a satellite image of a plot of land - anywhere on the earths surface. The information is generated from a satellite imager - and so cant be regenerated. The data is read constantly - and is costing the business a fortune AND is impacting performance of reads. What would you suggest as a quick potential way to reduce costs. (choose one)

☐

A. Adjust the DynamoDB table - remove the satellite image data, replace with a S3 URL, and move the data to an S3 bucket, with static hosting enabled, and the STANDARD storage class. Drop the RCU on the table.

done **Correct**

forum
Why is this correct?

This is a common solution, S3 is cheaper for larger binary objects. DynamoDB is more suited to data requiring quick access. Removing the binary data reduces every ITEM size so the RCU can be dropped and still deliver the same performance.

B. Move all the data to S3 Standard - store the information in a JSON file, and the image data in a seperate JPG object. Adjust the web app to use S3 as a data source. Remove the DynamoDB table.

C. Adjust the DynamoDB operations to exclude the image attribute unless requested.

D. Adjust the DynamoDB table - remove the satellite image data, replace with a S3 URL, and move the data to an S3 bucket, with static hosting enabled, and the STANDARD_IA storage class. Drop the RCU on the table.

close **Your Answer**

forum
Why is this incorrect?

This is not a good option - remember the satellite imaging data is constantly accessed. IA would begin adding significant costs.

11.

Your internal development team want to create an API and have it accessible over the internet. They have no infrastructure skills and so want the option with the least infrastructure requirements and maintenance needs. Which set of AWS products meets this requirement.

☐

A. API Gateway + Lambda

done **Correct**

forum
Why is this correct?

API Gateway and Lambda offer a serverless way to host API's - it scales, it's low cost and requires no infrastructure skills

B. API Gateway + EC2

C. Opsworks, CloudFormation & API Gateway

D. Elastic Beanstalk + API Gateway

close **Your Answer**

forum
Why is this incorrect?

Requires some infrastructure skills for elastic beanstalk and it's not a valid service pairing.

12.

A client has asked you to advise them on some AWS cost related questions. The client has over 1000 EC2 instances that are preconfigured and used during peak periods of the year for their application. They are currently in a STOPPED state, but they still have cost incurred in that region. What's a possible reason for this?

☐

A. Every EC2 instance performs automatic snapshots as a backup mechanism, The costs are for snapshots on S3

B. The cost is for the VPC that the instances operate in.

C. The instances have attached EBS volumes which have a monthly /G charge while those volumes exist.

forum

Why is this correct?

EBS volumes have a per GB month charge - EBS volumes remain while the instance is stopped.

D. EC2 instances in a stopped state still have an hourly cost, terminated the instances to resolve this

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Why is this incorrect?

Stopped instances have no costs, only while running.

thumb up thumb dc

13.

You are designing infrastructure for an application which handles HUGE data volumes, multiple petabytes per month of data transfer. It's utilised by customers globally and you have been asked to develop a solution to provide the lowest costs and best user experience. The data consists of static large video clips. You already have datacenter infrastructure and the business is keep to re-use that if possible Which option would you suggest to meet the requirements.

❑

A. Migrate the media to AWS S3 and Configure CloudFront to use that server as an origin.

don Correct

forum

Why is this correct?

S3 is a very economical storage system and benefits from free transfer from IT, to CloudFront (known as origin fetch). This is the best option for cost and for user experience - even accounting for NOT using existing infrastructure. Note given the data volume - transfer costs are likely to be MUCH more important.

B. Migrate the media to an EC2 instance, store the media on an attached PIOPS EBS volume and configure CloudFront to use that server as an origin.

C. Use internal servers within your datacenter and serve the content from a single location

D. Store the media on an on-premises web server and configure CloudFront to use that server as an origin.

close Your Answer

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Why is this incorrect?

This might save 'some' costs in terms of using an existing server but you will pay origin fetch costs to Cloud Front which could be substantial.

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