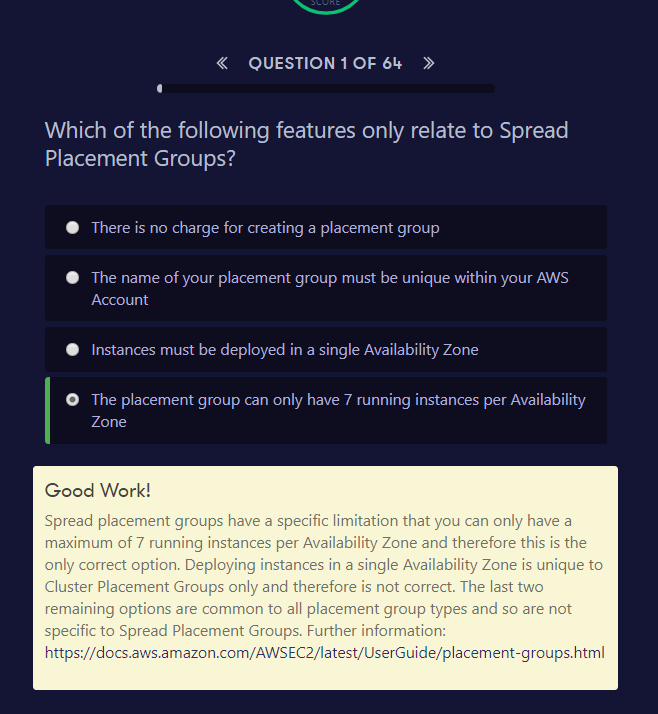
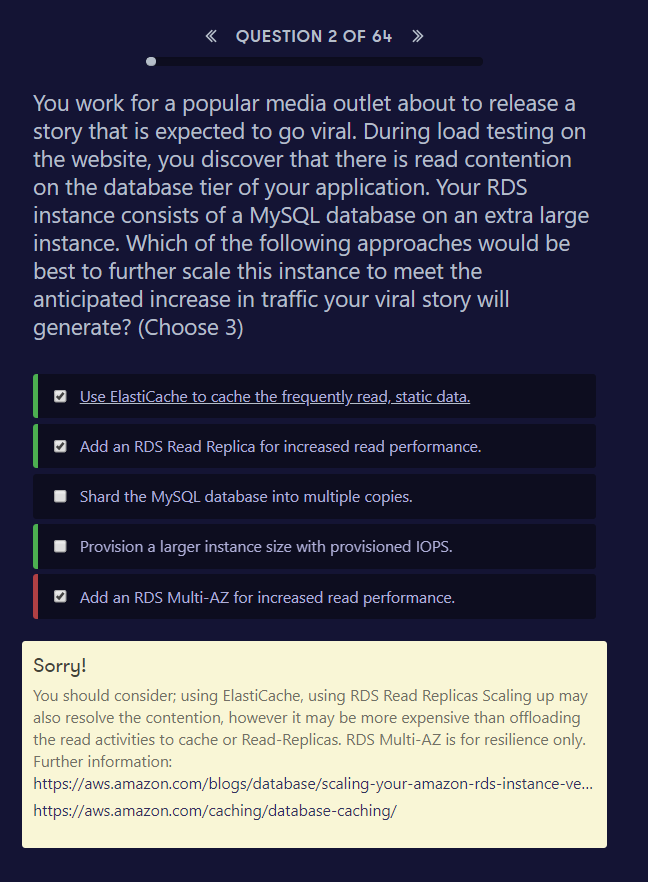
<https://acloud.guru/forums/aws-csa-2019/discussion/-LjHuo9ULafyTDSeh9FO/this_practice_test_has_serious>



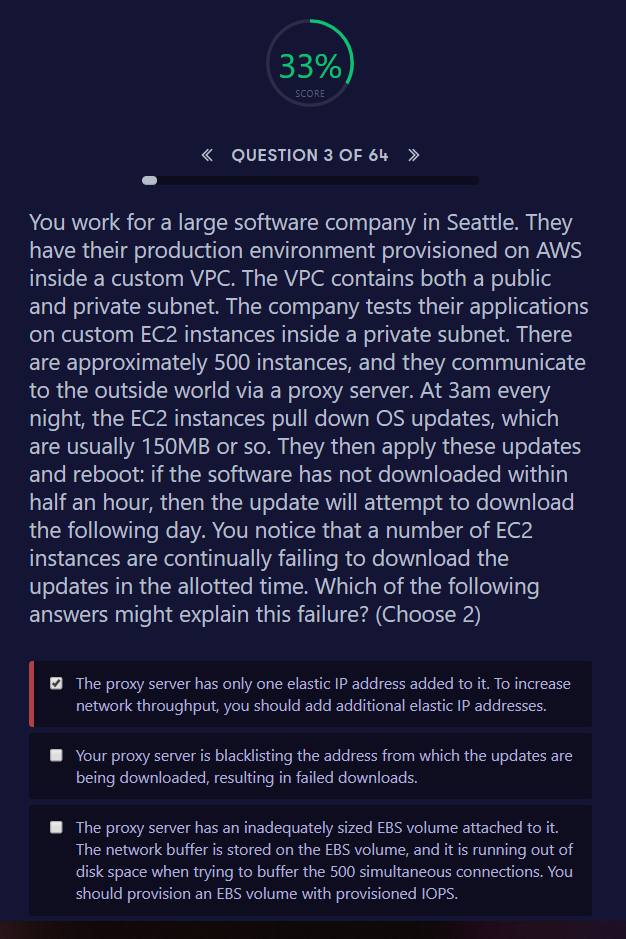
Good Work!

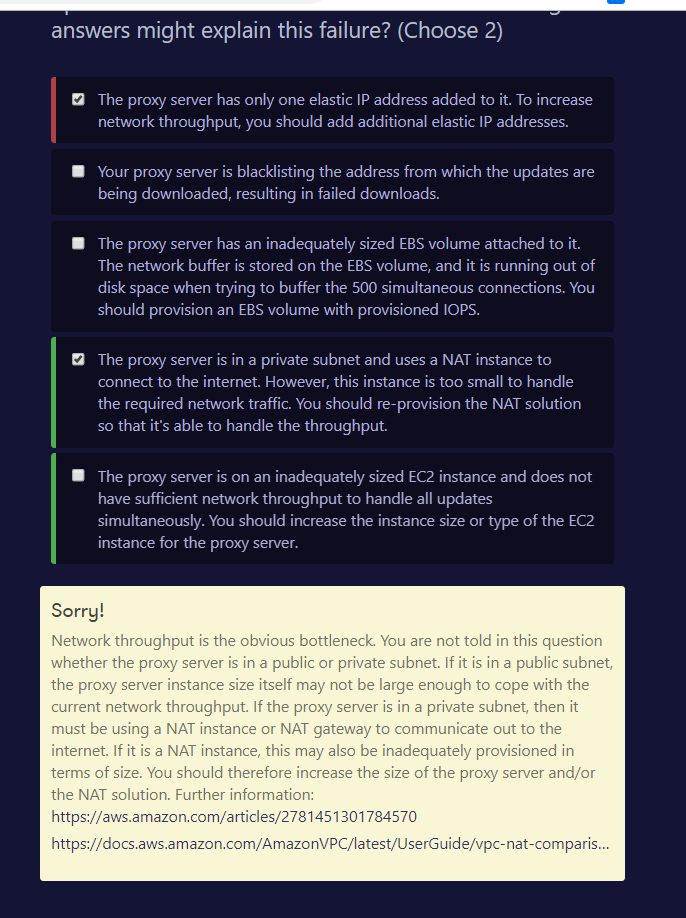
Spread placement groups have a specific limitation that you can only have a maximum of 7 running instances per Availability Zone and therefore this is the only correct option. Deploying instances in a single Availability Zone is unique to Cluster Placement Groups only and therefore is not correct. The last two remaining options are common to all placement group types and so are not specific to Spread Placement Groups. Further information: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html>



##### Sorry!

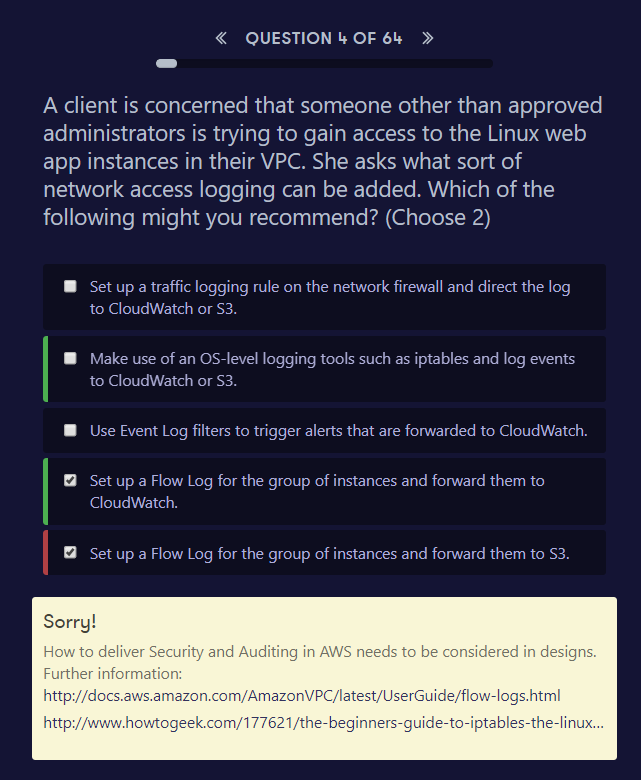
You should consider; using ElastiCache, using RDS Read Replicas Scaling up may also resolve the contention, however it may be more expensive than offloading the read activities to cache or Read-Replicas. RDS Multi-AZ is for resilience only. Further information: <https://aws.amazon.com/blogs/database/scaling-your-amazon-rds-instance-vertically-and-horizontally/><https://aws.amazon.com/caching/database-caching/>





##### Sorry!

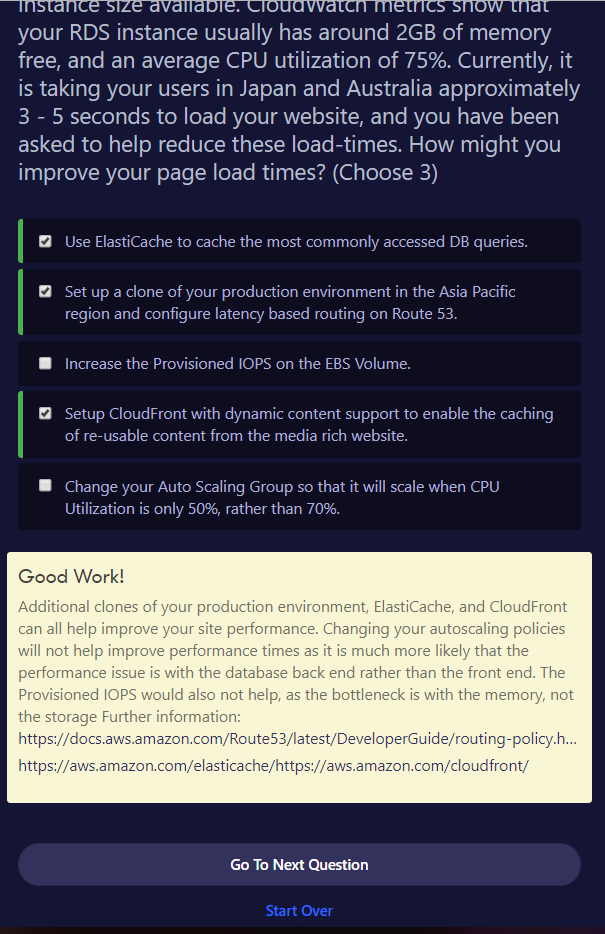
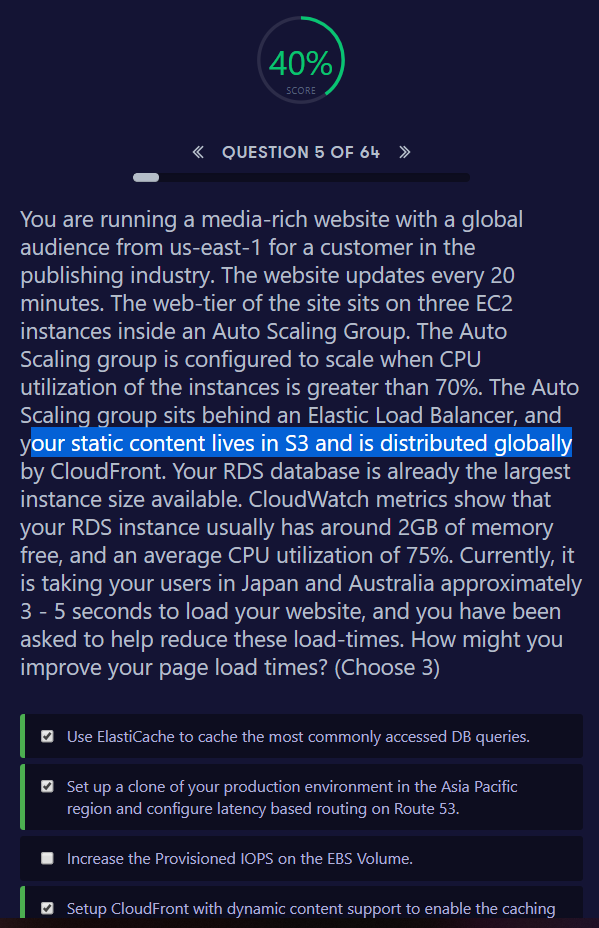
Network throughput is the obvious bottleneck. You are not told in this question whether the proxy server is in a public or private subnet. If it is in a public subnet, the proxy server instance size itself may not be large enough to cope with the current network throughput. If the proxy server is in a private subnet, then it must be using a NAT instance or NAT gateway to communicate out to the internet. If it is a NAT instance, this may also be inadequately provisioned in terms of size. You should therefore increase the size of the proxy server and/or the NAT solution. Further information: <https://aws.amazon.com/articles/2781451301784570><https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-nat-comparison.html>



##### Sorry!

How to deliver Security and Auditing in AWS needs to be considered in designs. Further information: <http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/flow-logs.html><http://www.howtogeek.com/177621/the-beginners-guide-to-iptables-the-linux-firewall/>

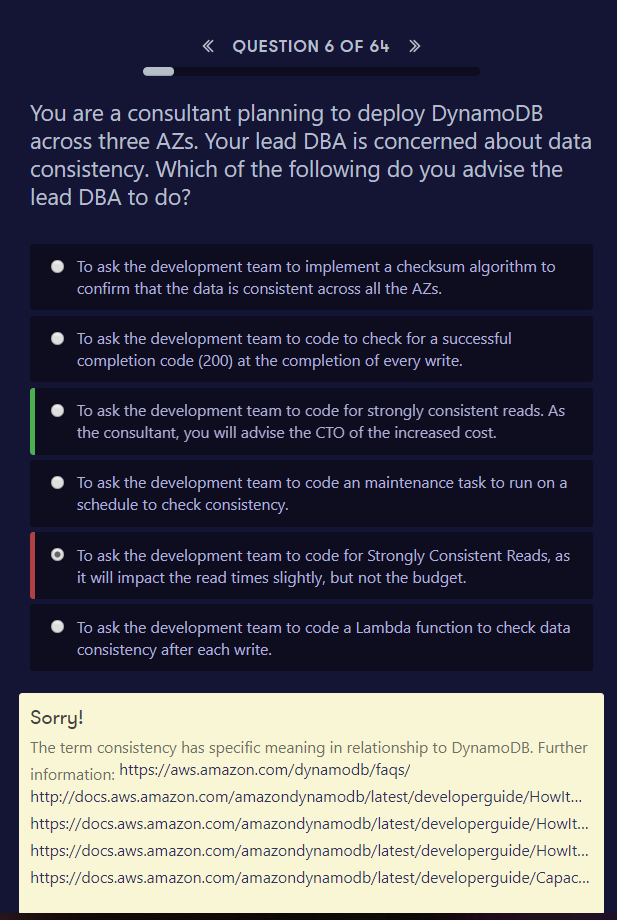
Flow logs can not be forwarded to S3 ??? is it?



##### Good Work!

Additional clones of your production environment, ElastiCache, and CloudFront can all help improve your site performance. Changing your autoscaling policies will not help improve performance times as it is much more likely that the performance issue is with the database back end rather than the front end. The Provisioned IOPS would also not help, as the bottleneck is with the memory, not the storage Further information: <https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html#routing-policy-failover><https://aws.amazon.com/elasticache/><https://aws.amazon.com/cloudfront/>

Caching , latency and cloudfront is used to reduce the delay , no need to use IOPS which is required is number of users increase in short period of time , I guess?

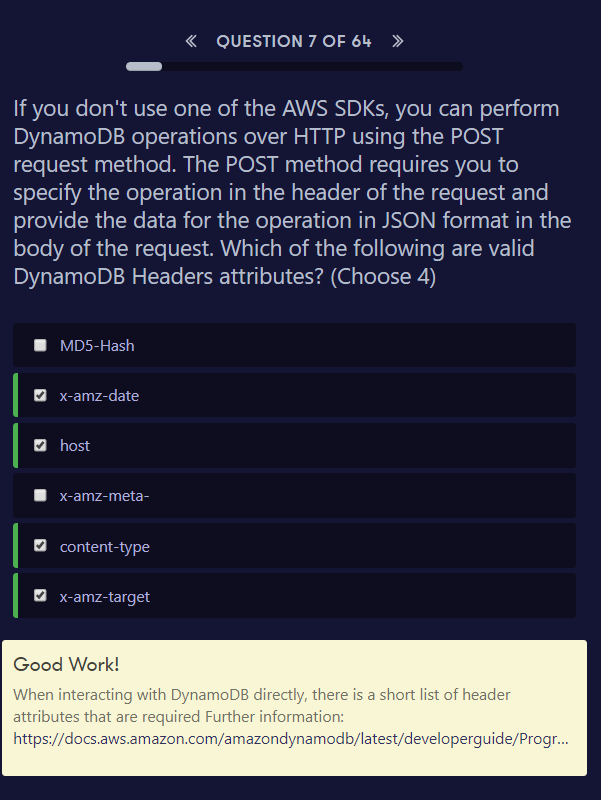


<https://blog.yugabyte.com/dynamodb-pricing-calculator-expensive-vs-alternatives/>

### Reads

AWS calculates the cost of reads using “Read Capacity Units.” Each RCU provides up to two reads per second, enough for 5.2 million reads per month. The first 25 RCUs per month are free. As of the writing this post, prices start at $0.09 per RCU-month thereafter. For reads, DynamoDB charges one read request unit for each strongly consistent read (up to 4 KB), two read request units for each transactional read, and one-half read request unit for each eventually consistent read.

<https://acloud.guru/forums/aws-certified-solutions-architect-associate/discussion/-KN2YTRouSfyMIJpEz3Z/dynamodb-eventual-vs-strongly-consistent-reads>



##### Good Work!

When interacting with DynamoDB directly, there is a short list of header attributes that are required Further information: <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.LowLevelAPI.html>

**Sample request below**

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.LowLevelAPI.html>

POST / HTTP/1.1

Host: dynamodb.<region>.<domain>;

Accept-Encoding: identity

Content-Length: <PayloadSizeBytes>

User-Agent: <UserAgentString>

Content-Type: application/x-amz-json-1.0

Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>, Signature=<Signature>

X-Amz-Date: <Date>

**X-Amz-Target: DynamoDB\_20120810.GetItem**

{

"TableName": "Pets",

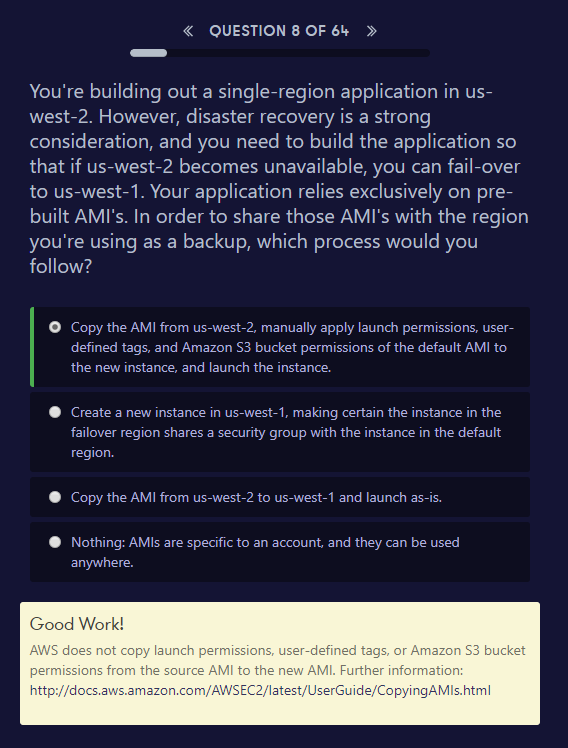
"Key": {

"AnimalType": {"S": "Dog"},

"Name": {"S": "Fido"}

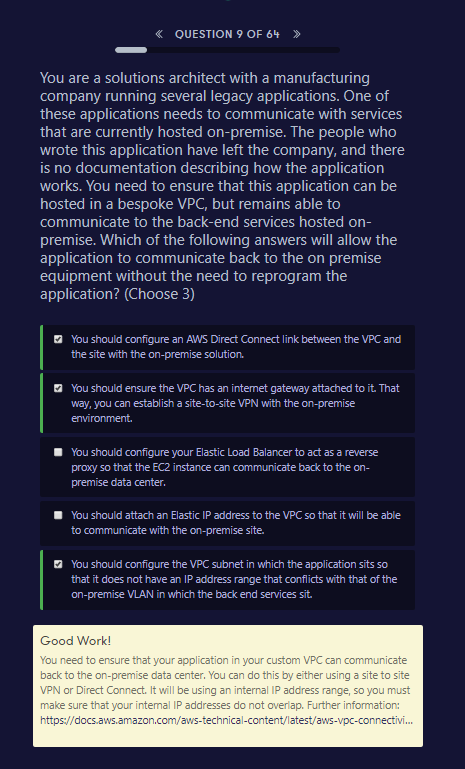
}

}



##### Good Work!

AWS does not copy launch permissions, user-defined tags, or Amazon S3 bucket permissions from the source AMI to the new AMI. Further information: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html>



##### Good Work!

You need to ensure that your application in your custom VPC can communicate back to the on-premise data center. You can do this by either using a site to site VPN or Direct Connect. It will be using an internal IP address range, so you must make sure that your internal IP addresses do not overlap. Further information: <https://docs.aws.amazon.com/aws-technical-content/latest/aws-vpc-connectivity-options/network-to-amazon-vpc-connectivity-options.html>

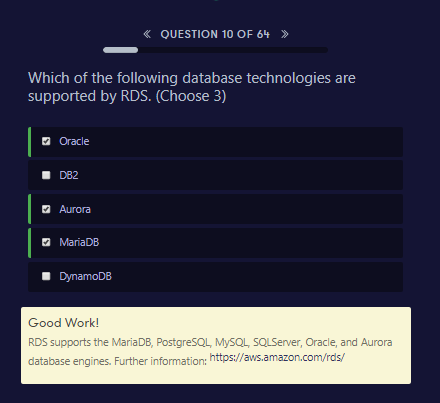
<https://acloud.guru/forums/aws-certified-solutions-architect-associate/discussion/-KYg4yc1Un3wpnGKV3mH/direct-connect-question>

There are 2 ways to connect an on-premise data center to a VPC on AWS:  
1) over the internet and 2) using AWS Direct connect

B refers to solution 1, which requires the VPC to have access to internet: internet gateway attached to the VPC.

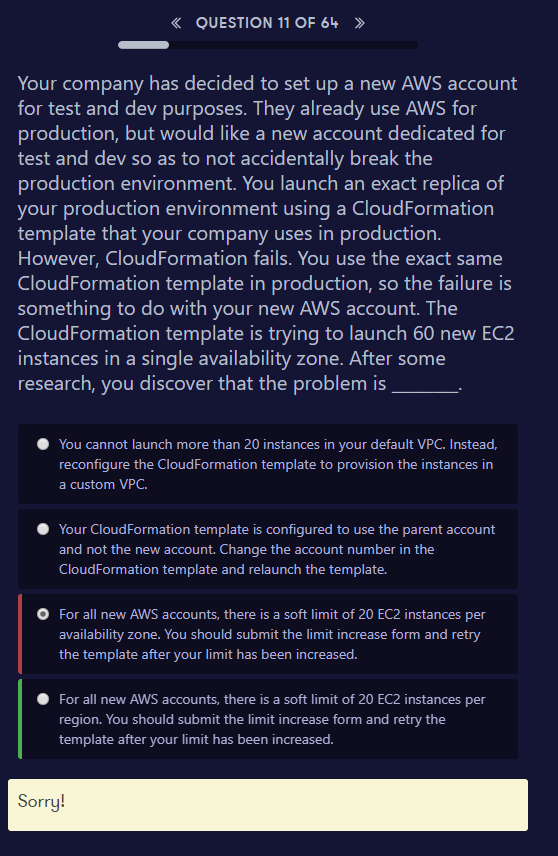
A VPG is needed but without a IGW, it still won't work because your VPC won't be able to route to the outside world.

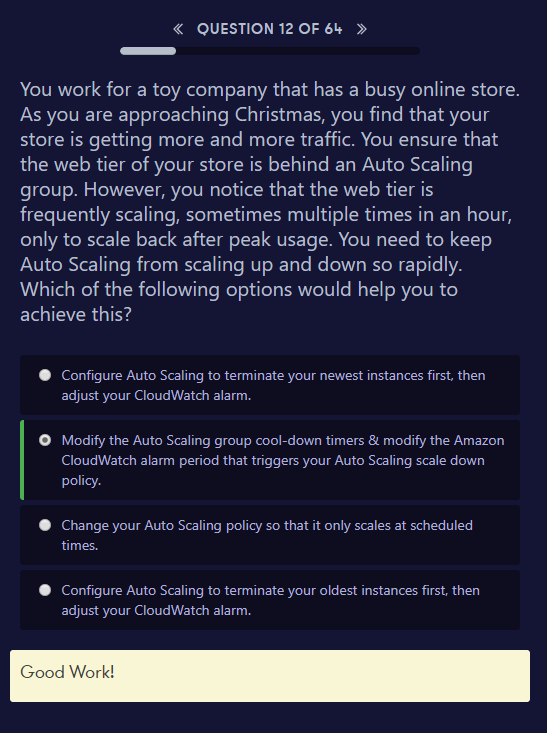
The biggest thing you should be looking at here is that the services referred to in C and D do not work in the way describe to get the desired outcome. For an exam, always remove the answers that are flat out incorrect before determining a correct answer.

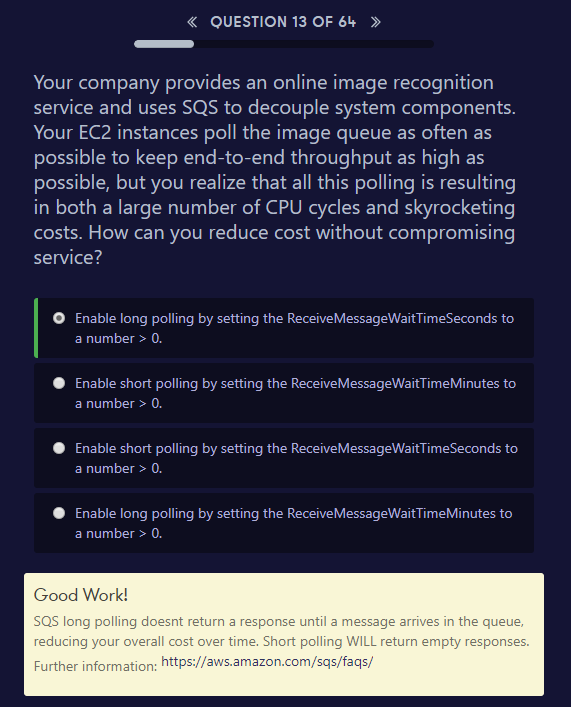


##### Good Work!

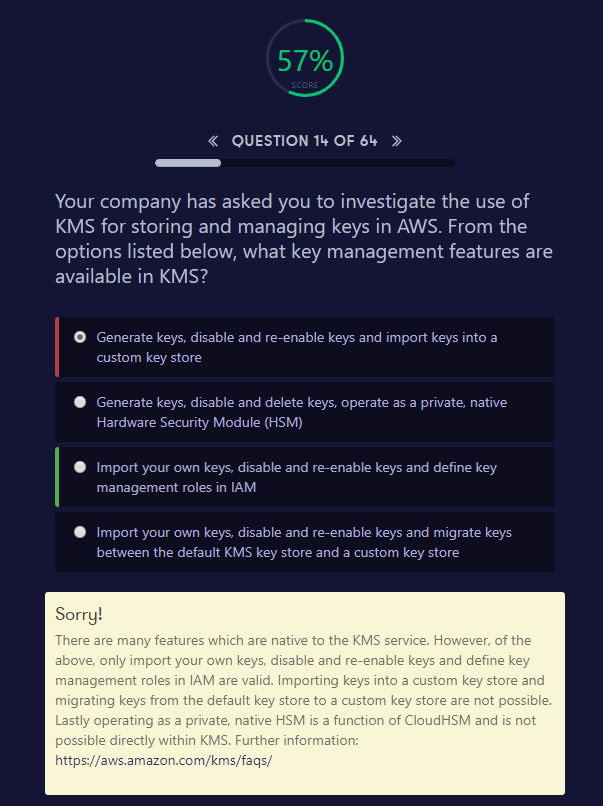
RDS supports the MariaDB, PostgreSQL, MySQL, SQLServer, Oracle, and Aurora database engines. Further information: <https://aws.amazon.com/rds/>







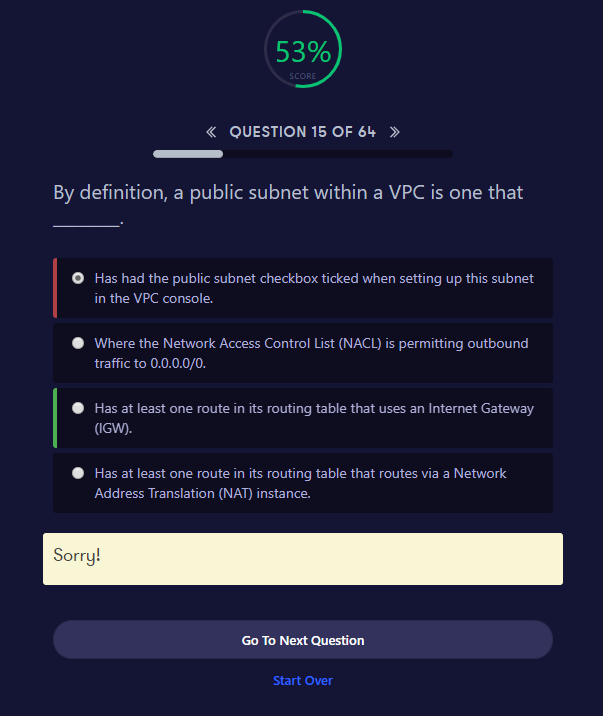
<https://aws.amazon.com/kms/faqs/>

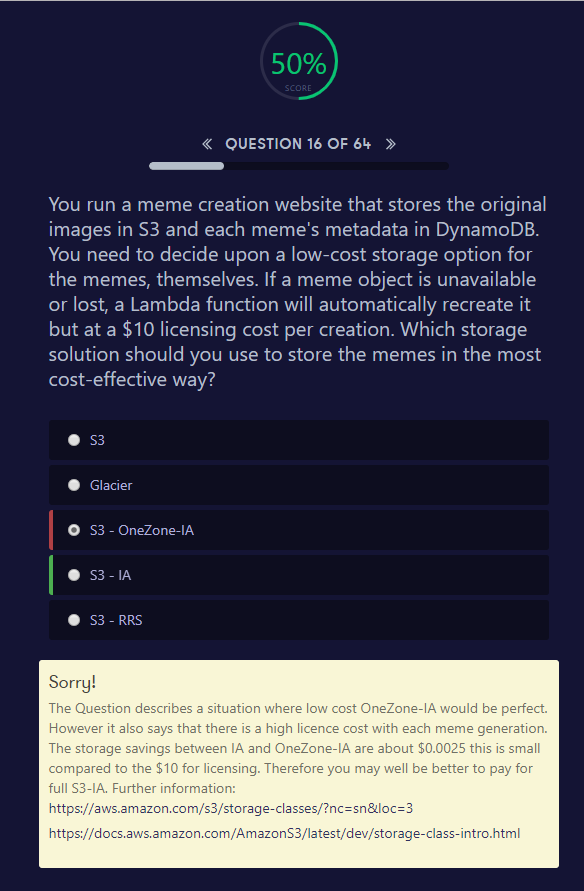


##### Sorry!

There are many features which are native to the KMS service. However, of the above, only import your own keys, disable and re-enable keys and define key management roles in IAM are valid. Importing keys into a custom key store and migrating keys from the default key store to a custom key store are not possible. Lastly operating as a private, native HSM is a function of CloudHSM and is not possible directly within KMS. Further information: <https://aws.amazon.com/kms/faqs/>

<https://aws.amazon.com/kms/faqs/>





##### Sorry!

The Question describes a situation where low cost OneZone-IA would be perfect. However it also says that there is a high licence cost with each meme generation. The storage savings between IA and OneZone-IA are about $0.0025 this is small compared to the $10 for licensing. Therefore you may well be better to pay for full S3-IA. Further information: <https://aws.amazon.com/s3/storage-classes/?nc=sn&loc=3><https://docs.aws.amazon.com/AmazonS3/latest/dev/storage-class-intro.html>