Amazon

Exam AWS-Solution-Architect-Associate

AWS Certified Solutions Architect - Associate

Version: 18.0

[Total Questions: 419]

DUMPS 4 DOWNLOAD

Topic break down

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Topic 1, Exam A

Question No : 1 - (Topic 1)

Your company has an on-premises multi-tier PHP web application, which recently experienced downtime due to a large burst In web traffic due to a company announcement Over the coming days, you are expecting similar announcements to drive similar unpredictable bursts, and are looking to find ways to quickly improve your infrastructures ability to handle unexpected increases in traffic.

The application currently consists of 2 tiers a web tier which consists of a load balancer and several Linux Apache web servers as well as a database tier which hosts a Linux server hosting a MySQL database.

Which scenario below will provide full site functionality, while helping to improve the ability of your application in the short timeframe required?

A. Failover environment: Create an S3 bucket and configure it for website hosting. Migrate your DNS to Route53 using zone file import, and leverage Route53 DNS failover to failover to the S3 hosted website.
B. Hybrid environment: Create an AMI, which can be used to launch web servers in EC2. Create an Auto Scaling group, which uses the AMI to scale the web tier based on incoming traffic. Leverage Elastic Load Balancing to balance traffic between on-premises web servers and those hosted In AWS.
C. Offload traffic from on-premises environment: Setup a CIoudFront distribution, and configure CloudFront to cache objects from a custom origin. Choose to customize your object cache behavior, and select a TTL that objects should exist in cache.
D. Migrate to AWS: Use VM Import/Export to quickly convert an on-premises web server to an AMI. Create an Auto Scaling group, which uses the imported AMI to scale the web tier based on incoming traffic. Create an RDS read replica and setup replication between the RDS instance and on-premises MySQL server to migrate the database.

Answer: C

Question No : 2 - (Topic 1)

A web company is looking to implement an external payment service into their highly available application deployed in a VPC Their application EC2 instances are behind a public lacing ELB Auto scaling is used to add additional instances as traffic increases under normal load the application runs 2 instances in the Auto Scaling group but at peak it can scale 3x in size. The application instances need to communicate with the payment service

over the Internet which requires whitelisting of all public IP addresses used to communicate with it. A maximum of 4 whitelisting IP addresses are allowed at a time and can be added through an API.

How should they architect their solution?

A. Route payment requests through two NAT instances setup for High Availability and whitelist the Elastic IP addresses attached to the MAT instances.
B. Whitelist the VPC Internet Gateway Public IP and route payment requests through the Internet Gateway.
C. Whitelist the ELB IP addresses and route payment requests from the Application servers through the ELB.
D. Automatically assign public IP addresses to the application instances in the Auto Scaling group and run a script on boot that adds each instances public IP address to the payment validation whitelist API.

Answer: D

Question No : 3 - (Topic 1)

A web-startup runs its very successful social news application on Amazon EC2 with an Elastic Load Balancer, an Auto-Scaling group of Java/Tomcat application-servers, and DynamoDB as data store. The main web-application best runs on m2 x large instances since it is highly memory- bound Each new deployment requires semi-automated creation and testing of a new AMI for the application servers which takes quite a while ana is therefore only done once per week.

Recently, a new chat feature has been implemented in nodejs and wails to be integrated in the architecture. First tests show that the new component is CPU bound Because the company has some experience with using Chef, they decided to streamline the deployment process and use AWS Ops Works as an application life cycle tool to simplify management of the application and reduce the deployment cycles.

What configuration in AWS Ops Works is necessary to integrate the new chat module in the most cost-efficient and flexible way?

A. Create one AWS OpsWorks stack, create one AWS Ops Works layer, create one custom recipe
B. Create one AWS OpsWorks stack create two AWS Ops Works layers create one custom recipe
C. Create two AWS OpsWorks stacks create two AWS Ops Works layers create one

custom recipe
D. Create two AWS OpsWorks stacks create two AWS Ops Works layers create two custom recipe

Answer: C

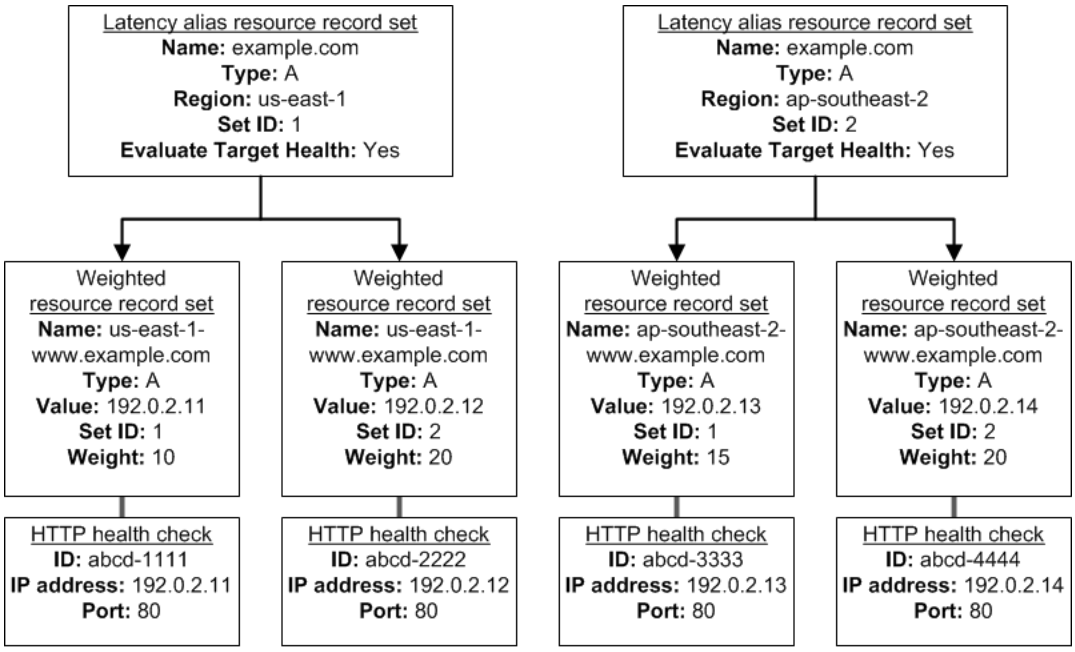
Question No : 4 - (Topic 1)

You have deployed a web application targeting a global audience across multiple AWS Regions under the domain name.example.com. You decide to use Route53 Latency-Based Routing to serve web requests to users from the region closest to the user. To provide business continuity in the event of server downtime you configure weighted record sets associated with two web servers in separate Availability Zones per region. Dunning a DR test you notice that when you disable all web servers in one of the regions Route53 does not automatically direct all users to the other region. What could be happening? (Choose 2 answers)

A. Latency resource record sets cannot be used in combination with weighted resource record sets.
B. You did not setup an HTTP health check tor one or more of the weighted resource record sets associated with me disabled web servers.
C. The value of the weight associated with the latency alias resource record set in the region with the disabled servers is higher than the weight for the other region.
D. One of the two working web servers in the other region did not pass its HTTP health check.
E. You did not set "Evaluate Target Health" to "Yes" on the latency alias resource record set associated with example com in the region where you disabled the servers.

Answer: B,E

Explanation:
How Health Checks Work in Complex Amazon Route 53 ConfigurationsChecking the health of resources in complex configurations works much the same way as in simple configurations. However, in complex configurations, you use a combination of alias resource record sets (including weighted alias, latency alias, and failover alias) and nonalias resource record sets to build a decision tree that gives you greater control over how Amazon Route 53 responds to requests. For more information, see How Health Checks Work in Simple Amazon Route 53 Configurations.
For example, you might use latency alias resource record sets to select a region close to a user and use weighted resource record sets for two or more resources within each region to protect against the failure of a single endpoint or an Availability Zone. The following diagram shows this configuration.



Three weighted resource record sets, only two of which have health checks.

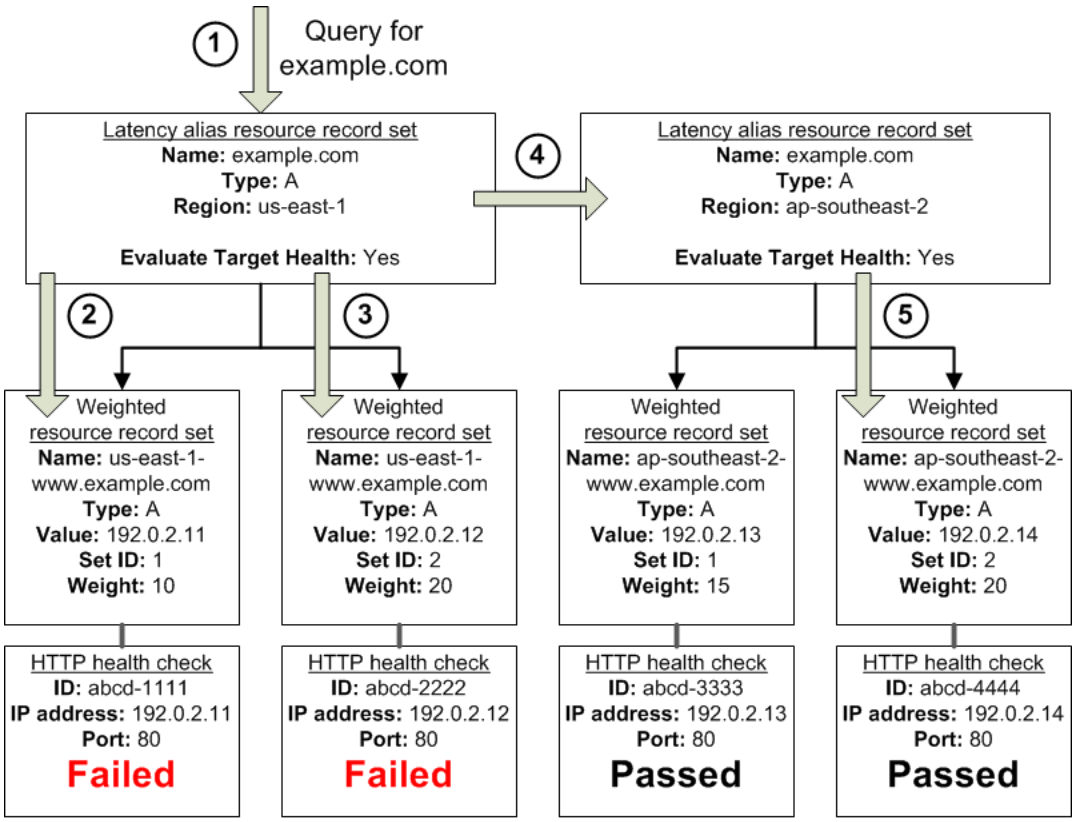
Here's how Amazon EC2 and Amazon Route 53 are configured:

- You have Amazon EC2 instances in two regions, us-east-1 and ap-southeast-2.
- You want Amazon Route 53 to respond to queries by using the resource record sets in the region that provides the lowest latency for your customers, so you create a latency alias resource record set for each region. (You create the latency alias resource record sets after you create resource record sets for the individual Amazon EC2 instances.)
- Within each region, you have two Amazon EC2 instances. You create a weighted resource record set for each instance. The name and the type are the same for both of the weighted resource record sets in each region.

When you have multiple resources in a region, you can create weighted or failover resource record sets for your resources. You can also create even more complex configurations by creating weighted alias or failover alias resource record sets that, in turn, refer to multiple resources.

- Each weighted resource record set has an associated health check. The IP address for each health check matches the IP address for the corresponding resource record set. This isn't required, but it's the most common configuration.
- For both latency alias resource record sets, you set the value of Evaluate Target Health to Yes.

You use the Evaluate Target Health setting for each latency alias resource record set to make Amazon Route 53 evaluate the health of the alias targets—the weighted resource record sets—and respond accordingly.



Three weighted resource record sets, only two of which have health checks.

The preceding diagram illustrates the following sequence of events:

Amazon Route 53 receives a query for example.com. Based on the latency for the user making the request, Amazon Route 53 selects the latency alias resource record set for the us-east-1 region.

Amazon Route 53 selects a weighted resource record set based on weight.

Evaluate Target Health is Yes for the latency alias resource record set, so Amazon Route 53 checks the health of the selected weighted resource record set.

The health check failed, so Amazon Route 53 chooses another weighted resource record set based on weight and checks its health. That resource record set also is unhealthy.

Amazon Route 53 backs out of that branch of the tree, looks for the latency alias resource record set with the next-best latency, and chooses the resource record set for ap-southeast-2.

Amazon Route 53 again selects a resource record set based on weight, and then checks the health of the selected resource record set. The health check passed, so Amazon Route 53 returns the applicable value in response to the query.

What Happens When You Associate a Health Check with an Alias Resource Record Set?You can associate a health check with an alias resource record set instead of or in addition to setting the value of Evaluate Target Health to Yes. However, it's generally more useful if Amazon Route 53 responds to queries based on the health of the underlying resources—the HTTP servers, database servers, and other resources that your alias resource record sets refer to. For example, suppose the following configuration:

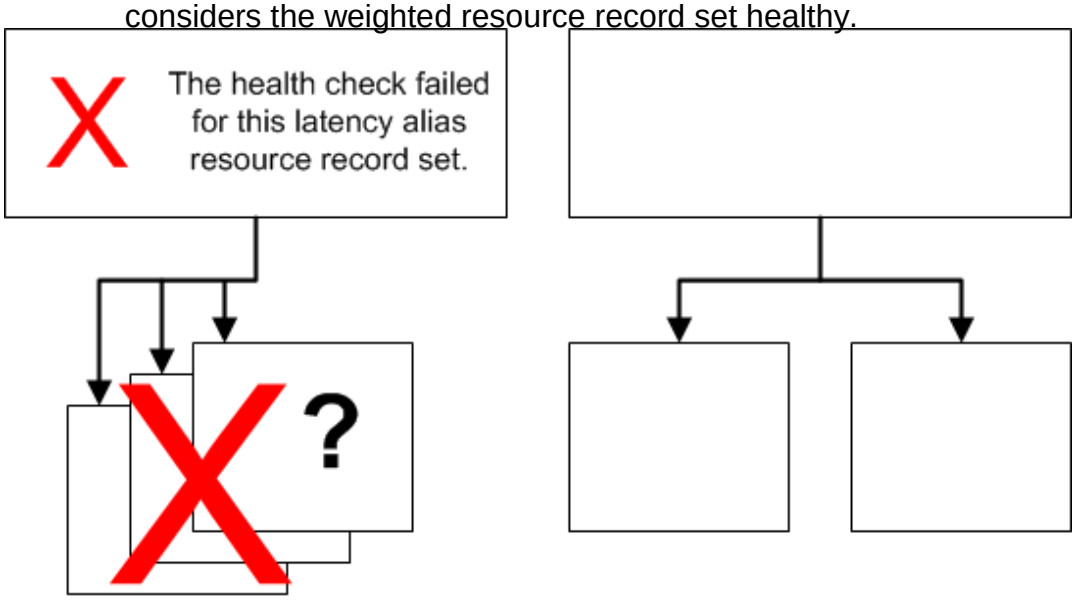
You assign a health check to a latency alias resource record set for which the alias target is a group of weighted resource record sets.

You set the value of Evaluate Target Health to Yes for the latency alias resource record set.

In this configuration, both of the following must be true before Amazon Route 53 will return the applicable value for a weighted resource record set:

The health check associated with the latency alias resource record set must pass.

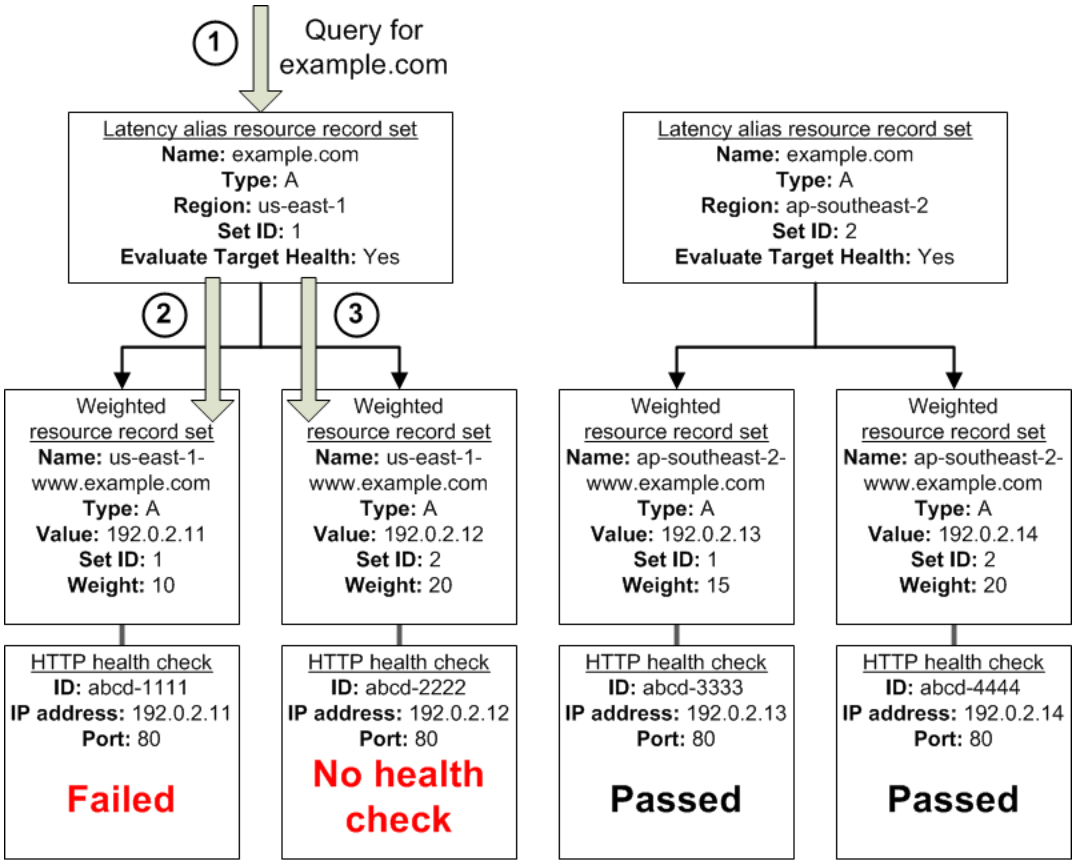
At least one weighted resource record set must be considered healthy, either because it's associated with a health check that passes or because it's not associated with a health check. In the latter case, Amazon Route 53 always considers the weighted resource record set healthy.



Three weighted resource record sets, only two of which have health checks.

If the health check for the latency alias resource record set fails, Amazon Route 53 stops responding to queries using any of the weighted resource record sets in the alias target, even if they're all healthy. Amazon Route 53 doesn't know the status of the weighted resource record sets because it never looks past the failed health check on the alias resource record set.

What Happens When You Omit Health Checks?In a complex configuration, it's important to associate health checks with all of the non-alias resource record sets. Let's return to the preceding example, but assume that a health check is missing on one of the weighted resource record sets in the us-east-1 region:



One failed health check, one resource record set that has no health check.

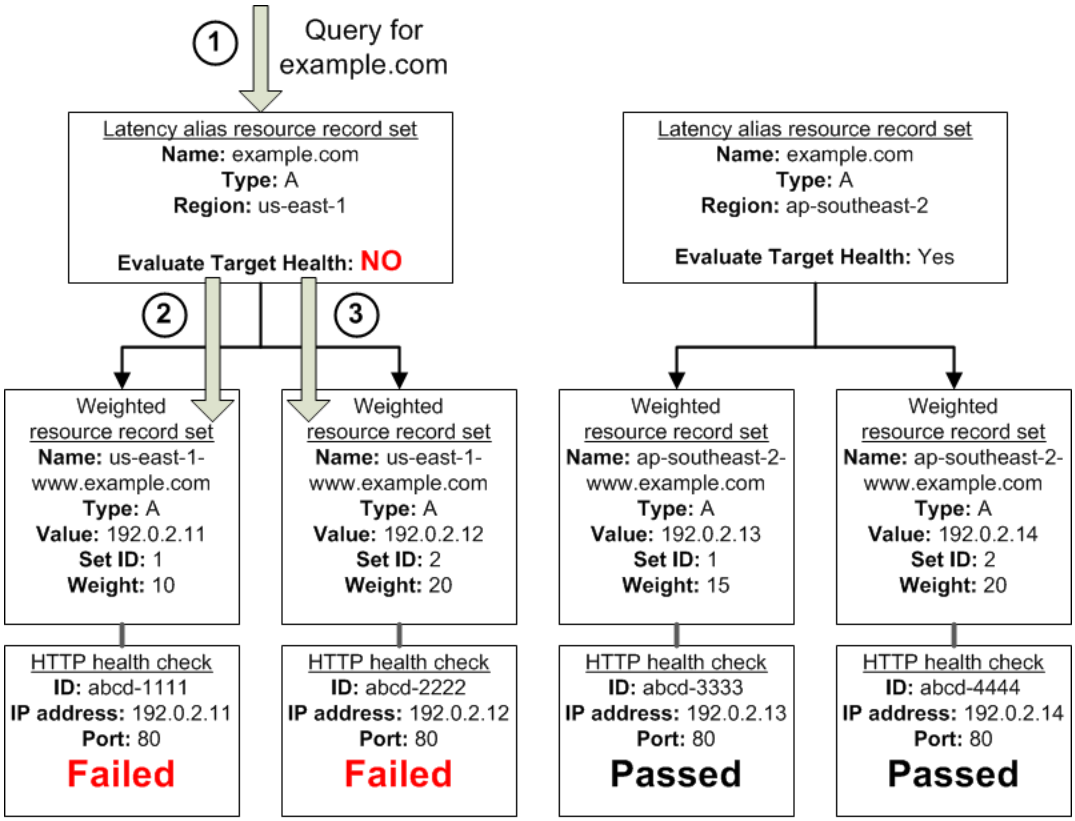
Here's what happens when you omit a health check on a non-alias resource record set in this configuration:

Amazon Route 53 receives a query for example.com. Based on the latency for the user making the request, Amazon Route 53 selects the latency alias resource record set for the us-east-1 region.

Amazon Route 53 looks up the alias target for the latency alias resource record set, and checks the status of the corresponding health checks. The health check for one weighted resource record set failed, so that resource record set is omitted from consideration.

The other weighted resource record set in the alias target for the us-east-1 region has no health check. The corresponding resource might or might not be healthy, but without a health check, Amazon Route 53 has no way to know. Amazon Route 53 assumes that the resource is healthy and returns the applicable value in response to the query.

What Happens When You Set Evaluate Target Health to No?In general, you also want to set Evaluate Target Health to Yes for all of the alias resource record sets. In the following example, all of the weighted resource record sets have associated health checks, but Evaluate Target Health is set to No for the latency alias resource record set for the us-east-1 region:



Two failed health checks, Evaluate Target Health is No.
Here's what happens when you set Evaluate Target Health to No for an alias resource record set in this configuration:

Amazon Route 53 receives a query for example.com. Based on the latency for the user making the request, Amazon Route 53 selects the latency alias resource record set for the us-east-1 region.

Amazon Route 53 determines what the alias target is for the latency alias resource record set, and checks the corresponding health checks. They're both failing.

Because the value of Evaluate Target Health is No for the latency alias resource record set for the us-east-1 region, Amazon Route 53 must choose one resource record set in this branch instead of backing out of the branch and looking for a healthy resource record set in the ap-southeast-2 region.

Question No : 5 - (Topic 1)

Your company has HQ in Tokyo and branch offices all over the world and is using a logistics software with a multi-regional deployment on AWS in Japan, Europe and USA. The logistic software has a 3-tier architecture and currently uses MySQL 5.6 for data persistence. Each region has deployed its own database

In the HQ region you run an hourly batch process reading data from every region to compute cross-regional reports that are sent by email to all offices this batch process must

be completed as fast as possible to quickly optimize logistics how do you build the database architecture in order to meet the requirements'?

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

Answer: A

Question No : 6 - (Topic 1)

You are designing a data leak prevention solution for your VPC environment. You want your VPC Instances to be able to access software depots and distributions on the Internet for product updates. The depots and distributions are accessible via third party CONs by their URLs. You want to explicitly deny any other outbound connections from your VPC instances to hosts on the internet.

Which of the following options would you consider?

A. Configure a web proxy server in your VPC and enforce URL-based rules for outbound access Remove default routes.
B. Implement security groups and configure outbound rules to only permit traffic to software depots.
C. Move all your instances into private VPC subnets remove default routes from all routing tables and add specific routes to the software depots and distributions only.
D. Implement network access control lists to all specific destinations, with an Implicit deny as a rule.

Answer: A

Question No : 7 - (Topic 1)

Your company is in the process of developing a next generation pet collar that collects biometric information to assist families with promoting healthy lifestyles for their pets Each collar will push 30kb of biometric data In JSON format every 2 seconds to a collection platform that will process and analyze the data providing health trending information back to the pet owners and veterinarians via a web portal Management has tasked you to architect the collection platform ensuring the following requirements are met.

Provide the ability for real-time analytics of the inbound biometric data

Ensure processing of the biometric data is highly durable. Elastic and parallel

The results of the analytic processing should be persisted for data mining

Which architecture outlined below win meet the initial requirements for the collection platform?

A. Utilize S3 to collect the inbound sensor data analyze the data from S3 with a daily scheduled Data Pipeline and save the results to a Redshift Cluster.
B. Utilize Amazon Kinesis to collect the inbound sensor data, analyze the data with Kinesis clients and save the results to a Redshift cluster using EMR.
C. Utilize SQS to collect the inbound sensor data analyze the data from SQS with Amazon Kinesis and save the results to a Microsoft SQL Server RDS instance.
D. Utilize EMR to collect the inbound sensor data, analyze the data from EUR with Amazon Kinesis and save me results to DynamoDB.

Answer: B

Question No : 8 - (Topic 1)

Your application is using an ELB in front of an Auto Scaling group of web/application servers deployed across two AZs and a Multi-AZ RDS Instance for data persistence.

The database CPU is often above 80% usage and 90% of I/O operations on the database are reads. To improve performance you recently added a single-node Memcached ElastiCache Cluster to cache frequent DB query results. In the next weeks the overall workload is expected to grow by 30%.

Do you need to change anything in the architecture to maintain the high availability or the application with the anticipated additional load? Why?

A. Yes, you should deploy two Memcached ElastiCache Clusters in different AZs because the RDS instance will not be able to handle the load if the cache node fails.
B. No, if the cache node fails you can always get the same data from the DB withouthaving any availability impact.
C. No, if the cache node fails the automated ElastiCache node recovery feature will prevent any availability impact.
D. Yes, you should deploy the Memcached ElastiCache Cluster with two nodes in the same AZ as the RDS DB master instance to handle the load if one cache node fails.

Answer: A

Explanation:

ElastiCache for Memcached

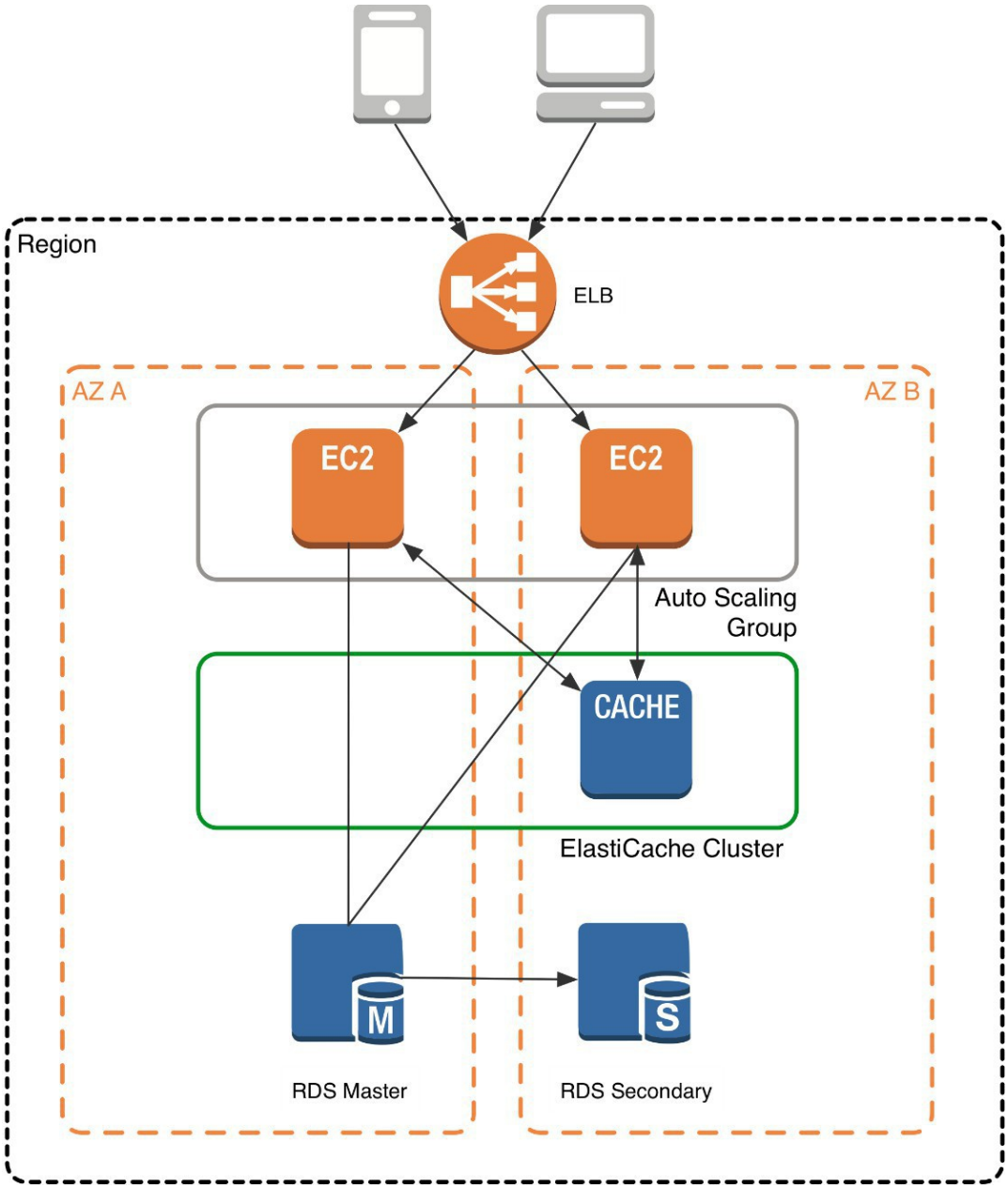
The primary goal of caching is typically to offload reads from your database or other primary data source. In most apps, you have hot spots of data that are regularly queried, but only updated periodically. Think of the front page of a blog or news site, or the top 100 leaderboard in an online game. In this type of case, your app can receive dozens, hundreds, or even thousands of requests for the same data before it's updated again. Having your caching layer handle these queries has several advantages. First, it's considerably cheaper to add an in-memory cache than to scale up to a larger database cluster. Second, an in-memory cache is also easier to scale out, because it's easier to distribute an in-memory cache horizontally than a relational database.

Last, a caching layer provides a request buffer in the event of a sudden spike in usage. If your app or game ends up on the front page of Reddit or the App Store, it's not unheard of to see a spike that is 10 to 100 times your normal application load. Even if you autoscale your application instances, a 10x request spike will likely make your database very unhappy.

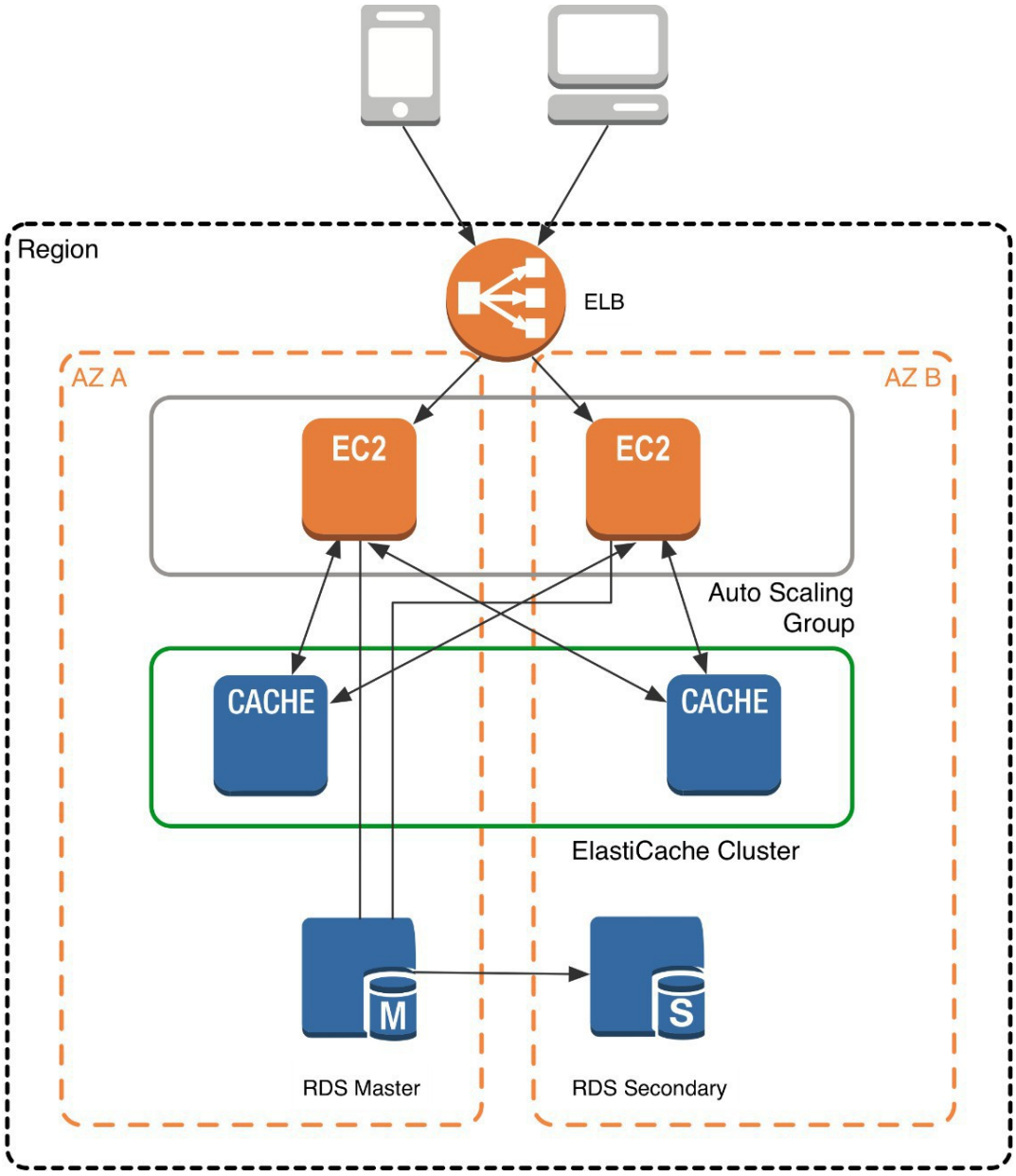
Let's focus on ElastiCache for Memcached first, because it is the best fit for a cachingfocused solution. We'll revisit Redis later in the paper, and weigh its advantages and disadvantages.

Architecture with ElastiCache for Memcached

When you deploy an ElastiCache Memcached cluster, it sits in your application as a separate tier alongside your database. As mentioned previously, Amazon ElastiCache does not directly communicate with your database tier, or indeed have any particular knowledge of your database. A simplified deployment for a web application looks something like this:

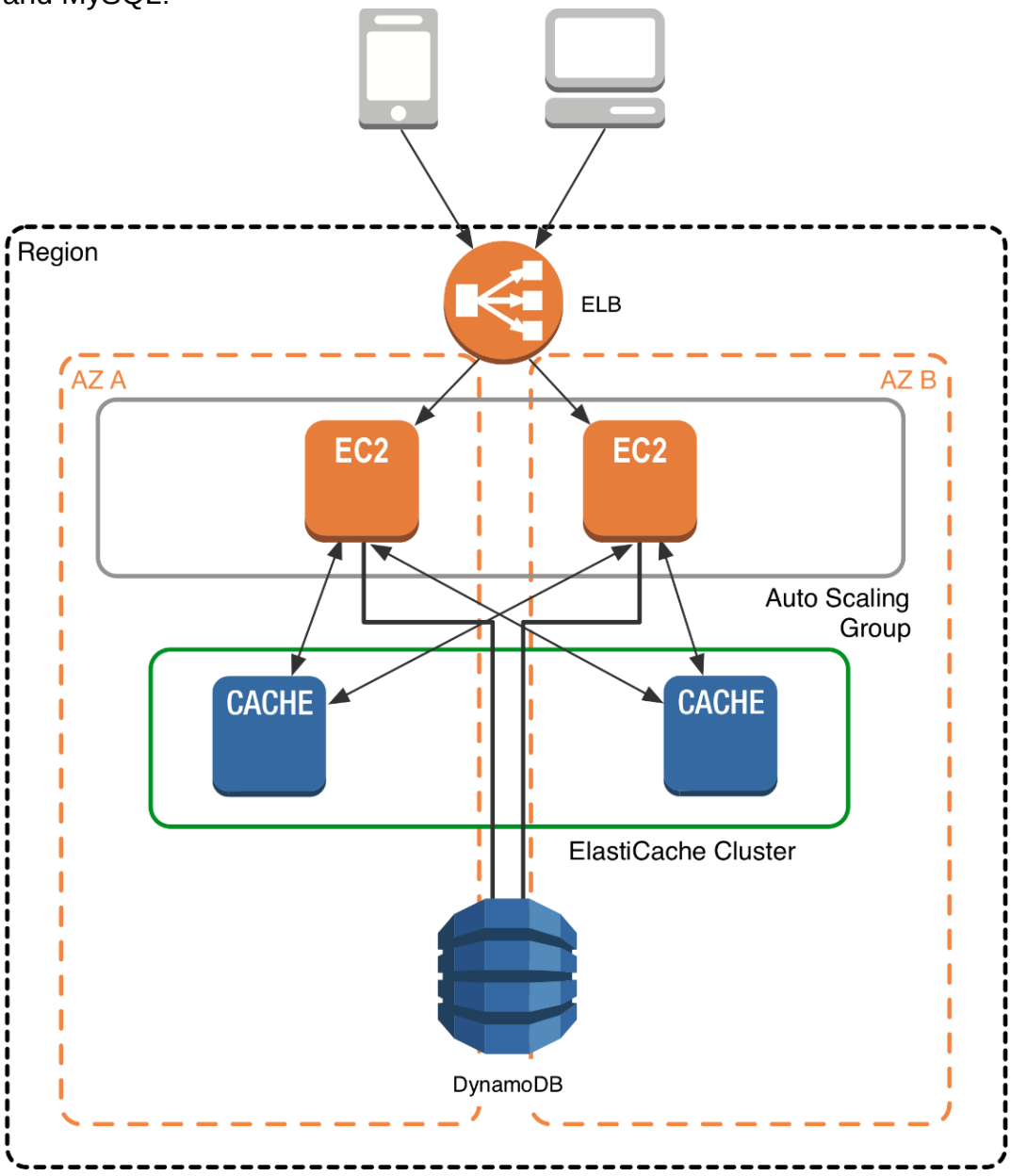


In this architecture diagram, the Amazon EC2 application instances are in an Auto Scaling group, located behind a load balancer using Elastic Load Balancing, which distributes requests among the instances. As requests come into a given EC2 instance, that EC2 instance is responsible for communicating with ElastiCache and the database tier. For development purposes, you can begin with a single ElastiCache node to test your application, and then scale to additional cluster nodes by modifying the ElastiCache cluster. As you add additional cache nodes, the EC2 application instances are able to distribute cache keys across multiple ElastiCache nodes. The most common practice is to use client-side sharding to distribute keys across cache nodes, which we will discuss later in this paper.



When you launch an ElastiCache cluster, you can choose the Availability Zone(s) that the cluster lives in. For best performance, you should configure your cluster to use the same Availability Zones as your application servers. To launch an ElastiCache cluster in a specific Availability Zone, make sure to specify the **Preferred Zone(s)** option during cache cluster creation. The Availability Zones that you specify will be where ElastiCache will launch your cache nodes. We recommend that you select **Spread Nodes Across Zones**, which tells ElastiCache to distribute cache nodes across these zones as evenly as possible. This distribution will mitigate the impact of an Availability Zone disruption on your ElastiCache nodes. The trade-off is that some of the requests from your application to ElastiCache will go to a node in a different Availability Zone, meaning latency will be slightly higher. For more details, refer to Creating a Cache Cluster in the Amazon ElastiCache User Guide.

As mentioned at the outset, ElastiCache can be coupled with a wide variety of databases. Here is an example architecture that uses Amazon DynamoDB instead of Amazon RDS and MySQL:



This combination of DynamoDB and ElastiCache is very popular with mobile and game companies, because DynamoDB allows for higher write throughput at lower cost than traditional relational databases. In addition, DynamoDB uses a key-value access pattern similar to ElastiCache, which also simplifies the programming model. Instead of using relational SQL for the primary database but then key-value patterns for the cache, both the primary database and cache can be programmed similarly. In this architecture pattern, DynamoDB remains the source of truth for data, but application reads are offloaded to ElastiCache for a speed boost.

Question No : 9 - (Topic 1)

You are implementing AWS Direct Connect. You intend to use AWS public service end points such as Amazon S3, across the AWS Direct Connect link. You want other Internet traffic to use your existing link to an Internet Service Provider.

What is the correct way to configure AWS Direct connect for access to services such as Amazon S3?

A. Configure a public Interface on your AWS Direct Connect link Configure a static route via your AWS Direct Connect link that points to Amazon S3 Advertise a default route to AWS using BGP.
B. Create a private interface on your AWS Direct Connect link. Configure a static route via your AWS Direct connect link that points to Amazon S3 Configure specific routes to your network in your VPC.
C. Create a public interface on your AWS Direct Connect link Redistribute BGP routes into your existing routing infrastructure advertise specific routes for your network to AWS.
D. Create a private interface on your AWS Direct connect link. Redistribute BGP routes into your existing routing infrastructure and advertise a default route to AWS.

Answer: C

Question No : 10 - (Topic 1)

Your department creates regular analytics reports from your company's log files All log data is collected in Amazon S3 and processed by daily Amazon Elastic MapReduce (EMR) jobs that generate daily PDF reports and aggregated tables in CSV format for an Amazon Redshift data warehouse.

Your CFO requests that you optimize the cost structure for this system.

Which of the following alternatives will lower costs without compromising average performance of the system or data integrity for the raw data?

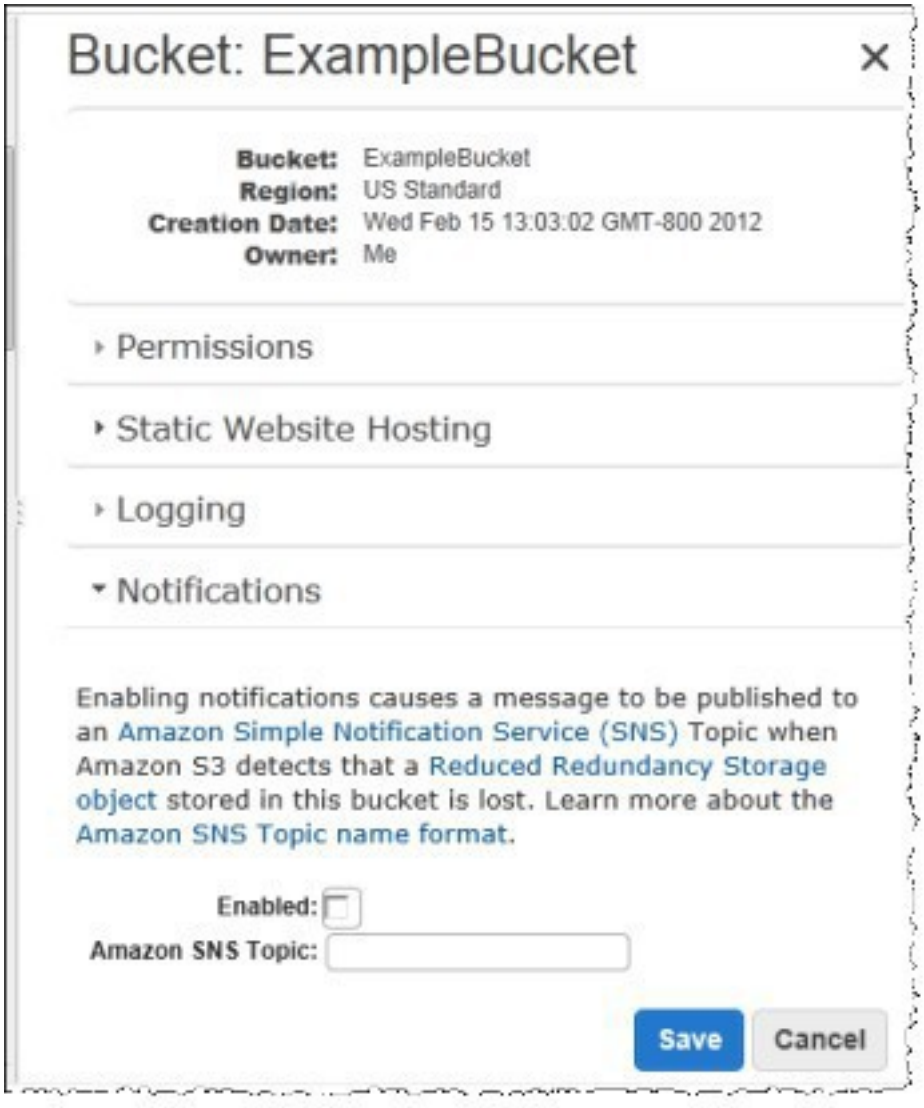
A. Use reduced redundancy storage (RRS) for all data In S3. Use a combination of Spot Instances and Reserved Instances for Amazon EMR jobs. Use Reserved Instances for

Amazon Redshift.
B. Use reduced redundancy storage (RRS) for PDF and .csv data in S3. Add Spot Instances to EMR jobs. Use Spot Instances for Amazon Redshift.
C. Use reduced redundancy storage (RRS) for PDF and .csv data In Amazon S3. Add Spot Instances to Amazon EMR jobs. Use Reserved Instances for Amazon Redshift.
D. Use reduced redundancy storage (RRS) for all data in Amazon S3. Add Spot Instances to Amazon EMR jobs. Use Reserved Instances for Amazon Redshift.

Answer: C

Explanation:
Using Reduced Redundancy StorageAmazon S3 stores objects according to their storage class. It assigns the storage class to an object when it is written to Amazon S3. You can assign objects a specific storage class (standard or reduced redundancy) only when you write the objects to an Amazon S3 bucket or when you copy objects that are already stored in Amazon S3. Standard is the default storage class. For information about storage classes, see Object Key and Metadata.
In order to reduce storage costs, you can use reduced redundancy storage for noncritical, reproducible data at lower levels of redundancy than Amazon S3 provides with standard storage. The lower level of redundancy results in less durability and availability, but in many cases, the lower costs can make reduced redundancy storage an acceptable storage solution. For example, it can be a cost-effective solution for sharing media content that is durably stored elsewhere. It can also make sense if you are storing thumbnails and other resized images that can be easily reproduced from an original image.
Reduced redundancy storage is designed to provide 99.99% durability of objects over a given year. This durability level corresponds to an average annual expected loss of 0.01% of objects. For example, if you store 10,000 objects using the RRS option, you can, on average, expect to incur an annual loss of a single object per year (0.01% of 10,000 objects).
Note
This annual loss represents an expected average and does not guarantee the loss of less than 0.01% of objects in a given year.
Reduced redundancy storage stores objects on multiple devices across multiple facilities, providing 400 times the durability of a typical disk drive, but it does not replicate objects as many times as Amazon S3 standard storage. In addition, reduced redundancy storage is designed to sustain the loss of data in a single facility.
If an object in reduced redundancy storage has been lost, Amazon S3 will return a 405 error on requests made to that object. Amazon S3 also offers notifications for reduced redundancy storage object loss: you can configure your bucket so that when Amazon S3 detects the loss of an RRS object, a notification will be sent through Amazon Simple Notification Service (Amazon SNS). You can then replace the lost object. To enable notifications, you can use the Amazon S3 console to set the Notifications property of your

bucket.



SettingRRSNotif

Question No : 11 - (Topic 1)

You are designing the network infrastructure for an application server in Amazon VPC Users will access all the application instances from the Internet as well as from an on-premises network The on-premises network is connected to your VPC over an AWS Direct Connect link.

How would you design routing to meet the above requirements?

A. Configure a single routing Table with a default route via the Internet gateway Propagate

a default route via BGP on the AWS Direct Connect customer router. Associate the routing table with all VPC subnets.

B. Configure a single routing table with a default route via the internet gateway Propagate specific routes for the on-premises networks via BGP on the AWS Direct Connect customer router Associate the routing table with all VPC subnets.

C. Configure a single routing table with two default routes: one to the internet via an Internet gateway the other to the on-premises network via the VPN gateway use this routing table across all subnets in your VPC.

D. Configure two routing tables one that has a default route via the Internet gateway and another that has a default route via the VPN gateway Associate both routing tables with each VPC subnet.

Answer: A

Question No : 12 - (Topic 1)

You have launched an EC2 instance with four (4) 500 GB EBS Provisioned IOPS volumes attached The EC2 Instance Is EBS-Optimized and supports 500 Mbps throughput between EC2 and EBS The two EBS volumes are configured as a single RAID o device, and each Provisioned IOPS volume is provisioned with 4.000 IOPS (4 000 16KB reads or writes) for a total of 16.000 random IOPS on the instance The EC2 Instance initially delivers the expected 16 000 IOPS random read and write performance Sometime later in order to increase the total random I/O performance of the instance, you add an additional two 500 GB EBS Provisioned IOPS volumes to the RAID Each volume Is provisioned to 4.000 IOPs like the original four for a total of 24.000 IOPS on the EC2 instance Monitoring shows that the EC2 instance CPU utilization increased from 50% to 70%. but the total random IOPS measured at the instance level does not increase at all.

What is the problem and a valid solution?

A. Larger storage volumes support higher Provisioned IOPS rates: increase the provisioned volume storage of each of the 6 EBS volumes to 1TB.

B. The EBS-Optimized throughput limits the total IOPS that can be utilized use an EBS-Optimized instance that provides larger throughput.

C. Small block sizes cause performance degradation, limiting the I'O throughput, configure the instance device driver and file system to use 64KB blocks to increase throughput.

D. RAID 0 only scales linearly to about 4 devices, use RAID 0 with 4 EBS Provisioned IOPS volumes but increase each Provisioned IOPS EBS volume to 6.000 IOPS.

E. The standard EBS instance root volume limits the total IOPS rate, change the instant root volume to also be a 500GB 4.000 Provisioned IOPS volume.

Answer: E

Question No : 13 - (Topic 1)

A web company is looking to implement an intrusion detection and prevention system into their deployed VPC. This platform should have the ability to scale to thousands of instances running inside of the VPC.

How should they architect their solution to achieve these goals?

A. Configure an instance with monitoring software and the elastic network interface (ENI) set to promiscuous mode packet sniffing to see an traffic across the VPC.
B. Create a second VPC and route all traffic from the primary application VPC through the second VPC where the scalable virtualized IDS/IPS platform resides.
C. Configure servers running in the VPC using the host-based 'route' commands to send all traffic through the platform to a scalable virtualized IDS/IPS.
D. Configure each host with an agent that collects all network traffic and sends that traffic to the IDS/IPS platform for inspection.

Answer: C

Question No : 14 - (Topic 1)

An International company has deployed a multi-tier web application that relies on DynamoDB in a single region For regulatory reasons they need disaster recovery capability In a separate region with a Recovery Time Objective of 2 hours and a Recovery Point Objective of 24 hours They should synchronize their data on a regular basis and be able to provision me web application rapidly using CloudFormation.

The objective is to minimize changes to the existing web application, control the throughput of DynamoDB used for the synchronization of data and synchronize only the modified elements.

Which design would you choose to meet these requirements?

A. Use AWS data Pipeline to schedule a DynamoDB cross region copy once a day. create a Lastupdated' attribute in your DynamoDB table that would represent the timestamp of the last update and use it as a filter.
B. Use EMR and write a custom script to retrieve data from DynamoDB in the current region using a SCAN operation and push it to DynamoDB in the second region.

C. Use AWS data Pipeline to schedule an export of the DynamoDB table to S3 in the current region once a day then schedule another task immediately after it that will import data from S3 to DynamoDB in the other region.
D. Send also each Ante into an SQS queue in me second region; use an auto-scaling group behind the SQS queue to replay the write in the second region.

Answer: A

Question No : 15 - (Topic 1)

You are designing a connectivity solution between on-premises infrastructure and Amazon VPC Your server's on-premises will De communicating with your VPC instances You will De establishing IPSec tunnels over the internet You will be using VPN gateways and terminating the IPsec tunnels on AWS-supported customer gateways.

Which of the following objectives would you achieve by implementing an IPSec tunnel as outlined above? (Choose 4 answers)

A. End-to-end protection of data in transit
B. End-to-end Identity authentication
C. Data encryption across the Internet
D. Protection of data in transit over the Internet
E. Peer identity authentication between VPN gateway and customer gateway
F. Data integrity protection across the Internet

Answer: C,D,E,F

Question No : 16 - (Topic 1)

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

A. Use an EC2 Instance that is launched with an EC2 role providing access to the Score Data DynamoDB table and the GameState S3 bucket that communicates with the mobile app via web services.

B. Use temporary security credentials that assume a role providing access to the Score Data DynamoDB table and the Game State S3 bucket using web identity federation.
C. Use Login with Amazon allowing users to sign in with an Amazon account providing the mobile app with access to the Score Data DynamoDB table and the Game State S3 bucket.
D. Use an IAM user with access credentials assigned a role providing access to the Score Data DynamoDB table and the Game State S3 bucket for distribution with the mobile app.

Answer: B

Explanation: Web Identity FederationImagine that you are creating a mobile app that accesses AWS resources, such as a game that runs on a mobile device and stores player and score information using Amazon S3 and DynamoDB.
When you write such an app, you'll make requests to AWS services that must be signed with an AWS access key. However, we strongly recommend that you do not embed or distribute long-term AWS credentials with apps that a user downloads to a device, even in an encrypted store. Instead, build your app so that it requests temporary AWS security credentials dynamically when needed using web identity federation. The supplied temporary credentials map to an AWS role that has only the permissions needed to perform the tasks required by the mobile app.
With web identity federation, you don't need to create custom sign-in code or manage your own user identities. Instead, users of your app can sign in using a well-known identity provider (IdP) —such as Login with Amazon, Facebook, Google, or any other OpenID Connect (OIDC)-compatible IdP, receive an authentication token, and then exchange that token for temporary security credentials in AWS that map to an IAM role with permissions to use the resources in your AWS account. Using an IdP helps you keep your AWS account secure, because you don't have to embed and distribute long-term security credentials with your application.
For most scenarios, we recommend that you use Amazon Cognito because it acts as an identity broker and does much of the federation work for you. For details, see the following section, Using Amazon Cognito for Mobile Apps.
If you don't use Amazon Cognito, then you must write code that interacts with a web IdP (Login with Amazon, Facebook, Google, or any other OIDC-compatible IdP) and then calls the AssumeRoleWithWebIdentity API to trade the authentication token you get from those IdPs for AWS temporary security credentials. If you have already used this approach for existing apps, you can continue to use it.
Using Amazon Cognito for Mobile AppsThe preferred way to use web identity federation is to use Amazon Cognito. For example, Adele the developer is building a game for a mobile device where user data such as scores and profiles is stored in Amazon S3 and Amazon DynamoDB. Adele could also store this data locally on the device and use Amazon Cognito to keep it synchronized across devices. She knows that for security and maintenance reasons, long-term AWS security credentials should not be distributed with the game. She

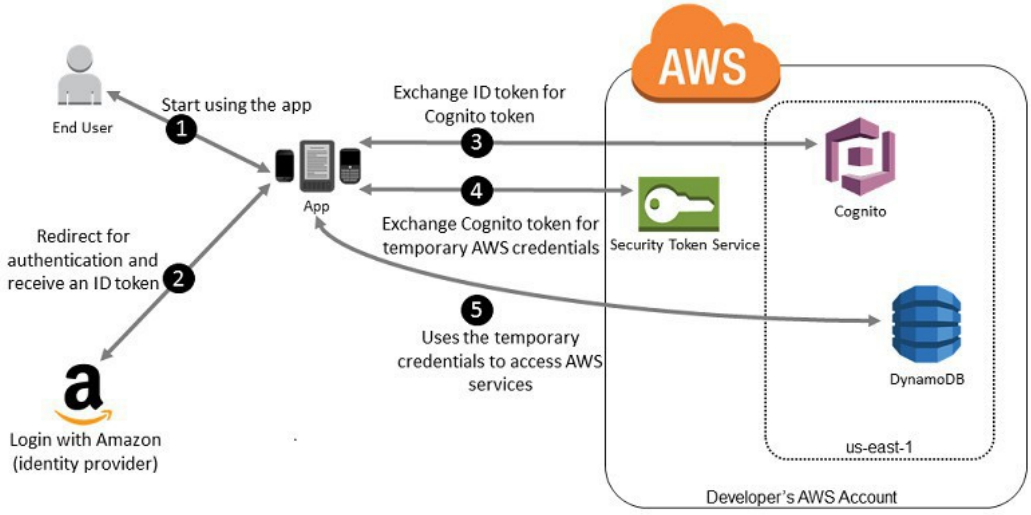
also knows that the game might have a large number of users. For all of these reasons, she does not want to create new user identities in IAM for each player. Instead, she builds the game so that users can sign in using an identity that they've already established with a well-known identity provider, such as Login with Amazon, Facebook, Google, or any OpenID Connect (OIDC)-compatible identity provider. Her game can take advantage of the authentication mechanism from one of these providers to validate the user's identity.

To enable the mobile app to access her AWS resources, Adele first registers for a developer ID with her chosen IdPs. She also configures the application with each of these providers. In her AWS account that contains the Amazon S3 bucket and DynamoDB table for the game, Adele uses Amazon Cognito to create IAM roles that precisely define permissions that the game needs. If she is using an OIDC IdP, she also creates an IAM OIDC identity provider entity to establish trust between her AWS account and the IdP.

In the app's code, Adele calls the sign-in interface for the IdP that she configured previously. The IdP handles all the details of letting the user sign in, and the app gets an OAuth access token or OIDC ID token from the provider. Adele's app can trade this authentication information for a set of temporary security credentials that consist of an AWS access key ID, a secret access key, and a session token. The app can then use these credentials to access web services offered by AWS. The app is limited to the permissions that are defined in the role that it assumes.

The following figure shows a simplified flow for how this might work, using Login with Amazon as the IdP. For Step 2, the app can also use Facebook, Google, or any OIDC-compatible identity provider, but that's not shown here.

Sample workflow using Amazon Cognito to federate users for a mobile application



Sample workflow using Amazon Cognito to federate users for a mobile application

A customer starts your app on a mobile device. The app asks the user to sign in.
The app uses Login with Amazon resources to accept the user's credentials.
The app uses Cognito APIs to exchange the Login with Amazon ID token for a Cognito token.
The app requests temporary security credentials from AWS STS, passing the

Cognito token.
The temporary security credentials can be used by the app to access any AWS resources required by the app to operate. The role associated with the temporary security credentials and its assigned policies determines what can be accessed.

Use the following process to configure your app to use Amazon Cognito to authenticate users and give your app access to AWS resources. For specific steps to accomplish this scenario, consult the documentation for Amazon Cognito.

(Optional) Sign up as a developer with Login with Amazon, Facebook, Google, or any other OpenID Connect (OIDC)–compatible identity provider and configure one or more apps with the provider. This step is optional because Amazon Cognito also supports unauthenticated (guest) access for your users.

Go to Amazon Cognito in the AWS Management Console. Use the Amazon Cognito wizard to create an identity pool, which is a container that Amazon Cognito uses to keep end user identities organized for your apps. You can share identity pools between apps. When you set up an identity pool, Amazon Cognito creates one or two IAM roles (one for authenticated identities, and one for unauthenticated "guest" identities) that define permissions for Amazon Cognito users.

Download and integrate the AWS SDK for iOS or the AWS SDK for Android with your app, and import the files required to use Amazon Cognito.

Create an instance of the Amazon Cognito credentials provider, passing the identity pool ID, your AWS account number, and the Amazon Resource Name (ARN) of the roles that you associated with the identity pool. The Amazon Cognito wizard in the AWS Management Console provides sample code to help you get started.

When your app accesses an AWS resource, pass the credentials provider instance to the client object, which passes temporary security credentials to the client. The permissions for the credentials are based on the role or roles that you defined earlier.

Question No : 17 - (Topic 1)

You have been asked to design the storage layer for an application. The application requires disk performance of at least 100,000 IOPS in addition, the storage layer must be able to survive the loss of an individual disk. EC2 instance, or Availability Zone without any data loss. The volume you provide must have a capacity of at least 3 TB. Which of the following designs will meet these objectives'?

A. Instantiate a c3.8xlarge instance in us-east-1. Provision 4x1TB EBS volumes, attach them to the instance, and configure them as a single RAID 5 volume. Ensure that EBS snapshots are performed every 15 minutes.

B. Instantiate a c3.8xlarge instance in us-east-1. Provision 3xlTB EBS volumes, attach

them to the Instance, and configure them as a single RAID 0 volume. Ensure that EBS snapshots are performed every 15 minutes.

C. Instantiate an i2.8xlarge instance in us-east-1a. Create a RAID 0 volume using the four 800GB SSD ephemeral disks provided with the instance. Provision 3x1TB EBS volumes, attach them to the instance, and configure them as a second RAID 0 volume. Configure synchronous, block-level replication from the ephemeral-backed volume to the EBS-backed volume.

D. Instantiate a c3.8xlarge instance in us-east-1. Provision an AWS Storage Gateway and configure it for 3 TB of storage and 100,000 IOPS. Attach the volume to the instance. E. Instantiate an i2.8xlarge instance in us-east-1a. Create a RAID 0 volume using the four 800GB SSD ephemeral disks provided with the instance. Configure synchronous, block-level replication to an identically configured instance in us-east-1b.

Answer: C

Question No : 18 - (Topic 1)

You are designing a multi-platform web application for AWS The application will run on EC2 instances and will be accessed from PCs. tablets and smart phones Supported accessing platforms are Windows. MACOS. IOS and Android Separate sticky session and SSL certificate setups are required for different platform types which of the following describes the most cost effective and performance efficient architecture setup?

A. Setup a hybrid architecture to handle session state and SSL certificates on-prem and separate EC2 Instance groups running web applications for different platform types running in a VPC.

B. Set up one ELB for all platforms to distribute load among multiple instance under it Each EC2 instance implements ail functionality for a particular platform.

C. Set up two ELBs The first ELB handles SSL certificates for all platforms and the second ELB handles session stickiness for all platforms for each ELB run separate EC2 instance groups to handle the web application for each platform.

D. Assign multiple ELBS to an EC2 instance or group of EC2 instances running the common components of the web application, one ELB for each platform type Session stickiness and SSL termination are done at the ELBs.

Answer: D

Question No : 19 - (Topic 1)

A read only news reporting site with a combined web and application tier and a database

tier that receives large and unpredictable traffic demands must be able to respond to these traffic fluctuations automatically. What AWS services should be used meet these requirements?

A. Stateless instances for the web and application tier synchronized using Elasticache Memcached in an autoscaimg group monitored with CloudWatch. And RDS with read replicas.
B. Stateful instances for the web and application tier in an autoscaling group monitored with CloudWatch and RDS with read replicas.
C. Stateful instances for the web and application tier in an autoscaling group monitored with CloudWatch. And multi-AZ RDS.
D. Stateless instances for the web and application tier synchronized using ElastiCache Memcached in an autoscaling group monitored with CloudWatch and multi-AZ RDS.

Answer: A

Question No : 20 - (Topic 1)

Your company produces customer commissioned one-of-a-kind skiing helmets combining nigh fashion with custom technical enhancements Customers can show off their Individuality on the ski slopes and have access to head-up-displays. GPS rear-view cams and any other technical innovation they wish to embed in the helmet.

The current manufacturing process is data rich and complex including assessments to ensure that the custom electronics and materials used to assemble the helmets are to the highest standards Assessments are a mixture of human and automated assessments you need to add a new set of assessment to model the failure modes of the custom electronics using GPUs with CUDA. across a cluster of servers with low latency networking.

What architecture would allow you to automate the existing process Copproach and ensure that the architecture can support the evolution of processes over time?

A. Use AWS Data Pipeline to manage movement of data & meta-data and assessments Use an auto-scaling group of G2 instances in a placement group.
B. Use Amazon Simple Workflow (SWF) to manages assessments, movement of data & meta-data Use an auto-scaling group of G2 instances in a placement group.
C. Use Amazon Simple Workflow (SWF) to manages assessments movement of data & meta-data Use an auto-scaling group of C3 instances with SR-IOV (Single Root I/O Virtualization).
D. Use AWS data Pipeline to manage movement of data & meta-data and assessments use auto-scaling group of C3 with SR-IOV (Single Root I/O virtualization).

Answer: B

Question No : 21 - (Topic 1)

A 3-tier e-commerce web application is current deployed on-premises and will be migrated to AWS for greater scalability and elasticity The web server currently shares read-only data using a network distributed file system The app server tier uses a clustering mechanism for discovery and shared session state that depends on IP multicast The database tier uses shared-storage clustering to provide database fall over capability, and uses several read slaves for scaling Data on all servers and the distributed file system directory is backed up weekly to off-site tapes

Which AWS storage and database architecture meets the requirements of the application?

A. Web servers: store read-only data in S3, and copy from S3 to root volume at boot time. App servers: share state using a combination of DynamoDB and IP unicast. Database: use RDS with multi-AZ deployment and one or more read replicas. Backup: web servers, app servers, and database backed up weekly to Glacier using snapshots.
B. Web servers: store read-only data in an EC2 NFS server, mount to each web server at boot time. App servers: share state using a combination of DynamoDB and IP multicast. Database: use RDS with multi-AZ deployment and one or more Read Replicas. Backup: web and app servers backed up weekly via AMIs, database backed up via DB snapshots.
C. Web servers: store read-only data in S3, and copy from S3 to root volume at boot time. App servers: share state using a combination of DynamoDB and IP unicast. Database: use RDS with multi-AZ deployment and one or more Read Replicas. Backup: web and app servers backed up weekly via AMIs, database backed up via DB snapshots.
D. Web servers: store read-only data in S3, and copy from S3 to root volume at boot time. App servers: share state using a combination of DynamoDB and IP unicast. Database: use RDS with multi-AZ deployment. Backup: web and app servers backed up weekly via AMIs, database backed up via DB snapshots.

Answer: C

Explanation: Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Each AZ runs on its own physically distinct, independent infrastructure, and is engineered to be highly reliable. In case of an infrastructure failure (for example, instance hardware failure, storage failure, or network disruption), Amazon RDS performs an automatic failover to the standby, so that you can resume database operations as soon as the failover is complete. Since the endpoint for

your DB Instance remains the same after a failover, your application can resume database operation without the need for manual administrative intervention.
Benefits Enhanced Durability Multi-AZ deployments for the MySQL, Oracle, and PostgreSQL engines utilize synchronous physical replication to keep data on the standby up-to-date with the primary. Multi-AZ deployments for the SQL Server engine use synchronous logical replication to achieve the same result, employing SQL Server-native Mirroring technology. Both approaches safeguard your data in the event of a DB Instance failure or loss of an Availability Zone.
If a storage volume on your primary fails in a Multi-AZ deployment, Amazon RDS automatically initiates a failover to the up-to-date standby. Compare this to a Single-AZ deployment: in case of a Single-AZ database failure, a user-initiated point-in-time-restore operation will be required. This operation can take several hours to complete, and any data updates that occurred after the latest restorable time (typically within the last five minutes) will not be available.
Amazon Aurora employs a highly durable, SSD-backed virtualized storage layer purpose-built for database workloads. Amazon Aurora automatically replicates your volume six ways, across three Availability Zones. Amazon Aurora storage is fault-tolerant, transparently handling the loss of up to two copies of data without affecting database write availability and up to three copies without affecting read availability. Amazon Aurora storage is also self-healing. Data blocks and disks are continuously scanned for errors and replaced automatically.
Increased Availability You also benefit from enhanced database availability when running Multi-AZ deployments. If an Availability Zone failure or DB Instance failure occurs, your availability impact is limited to the time automatic failover takes to complete: typically under one minute for Amazon Aurora and one to two minutes for other database engines (see the RDS FAQ for details).
The availability benefits of Multi-AZ deployments also extend to planned maintenance and backups. In the case of system upgrades like OS patching or DB Instance scaling, these operations are applied first on the standby, prior to the automatic failover. As a result, your availability impact is, again, only the time required for automatic failover to complete.
Unlike Single-AZ deployments, I/O activity is not suspended on your primary during backup for Multi-AZ deployments for the MySQL, Oracle, and PostgreSQL engines, because the backup is taken from the standby. However, note that you may still experience elevated latencies for a few minutes during backups for Multi-AZ deployments.
On instance failure in Amazon Aurora deployments, Amazon RDS uses RDS Multi-AZ technology to automate failover to one of up to 15 Amazon Aurora Replicas you have created in any of three Availability Zones. If no Amazon Aurora Replicas have been provisioned, in the case of a failure, Amazon RDS will attempt to create a new Amazon Aurora DB instance for you automatically.
No Administrative Intervention DB Instance failover is fully automatic and requires no

administrative intervention. Amazon RDS monitors the health of your primary and standbys, and initiates a failover automatically in response to a variety of failure conditions. Failover conditions Amazon RDS detects and automatically recovers from the most common failure scenarios for Multi-AZ deployments so that you can resume database operations as quickly as possible without administrative intervention. Amazon RDS automatically performs a failover in the event of any of the following:

- Loss of availability in primary Availability Zone
- Loss of network connectivity to primary
- Compute unit failure on primary
- Storage failure on primary

Note: When operations such as DB Instance scaling or system upgrades like OS patching are initiated for Multi-AZ deployments, for enhanced availability, they are applied first on the standby prior to an automatic failover. As a result, your availability impact is limited only to the time required for automatic failover to complete. Note that Amazon RDS Multi-AZ deployments do not failover automatically in response to database operations such as long running queries, deadlocks or database corruption errors.

Question No : 22 - (Topic 1)

Your company hosts a social media site supporting users in multiple countries. You have been asked to provide a highly available design tor the application that leverages multiple regions tor the most recently accessed content and latency sensitive portions of the wet) site The most latency sensitive component of the application involves reading user preferences to support web site personalization and ad selection.

In addition to running your application in multiple regions, which option will support this application's requirements?

A. Serve user content from S3. CloudFront and use Route53 latency-based routing between ELBs in each region Retrieve user preferences from a local DynamoDB table in each region and leverage SQS to capture changes to user preferences with SOS workers for propagating updates to each table.

B. Use the S3 Copy API to copy recently accessed content to multiple regions and serve user content from S3. CloudFront with dynamic content and an ELB in each region Retrieve user preferences from an ElasticCache cluster in each region and leverage SNS notifications to propagate user preference changes to a worker node in each region.

C. Use the S3 Copy API to copy recently accessed content to multiple regions and serve user content from S3 CloudFront and Route53 latency-based routing Between ELBs In each region Retrieve user preferences from a DynamoDB table and leverage SQS to capture changes to user preferences with SOS workers for propagating DynamoDB

updates.
D. Serve user content from S3. CloudFront with dynamic content, and an ELB in each region Retrieve user preferences from an ElastiCache cluster in each region and leverage Simple Workflow (SWF) to manage the propagation of user preferences from a centralized OB to each ElastiCache cluster.

Answer: A

Question No : 23 - (Topic 1)

You have an application running on an EC2 Instance which will allow users to download flies from a private S3 bucket using a pre-assigned URL. Before generating the URL the application should verify the existence of the file in S3.

How should the application use AWS credentials to access the S3 bucket securely?

A. Use the AWS account access Keys the application retrieves the credentials from the source code of the application.
B. Create an IAM user for the application with permissions that allow list access to the S3 bucket launch the instance as the IAM user and retrieve the IAM user's credentials from the EC2 instance user data.
C. Create an IAM role for EC2 that allows list access to objects in the S3 bucket. Launch the instance with the role, and retrieve the role's credentials from the EC2 Instance metadata
D. Create an IAM user for the application with permissions that allow list access to the S3 bucket. The application retrieves the IAM user credentials from a temporary directory with permissions that allow read access only to the application user.

Answer: C

Question No : 24 - (Topic 1)

Your company currently has a 2-tier web application running in an on-premises data center. You have experienced several infrastructure failures in the past two months resulting in significant financial losses. Your CIO is strongly agreeing to move the application to AWS. While working on achieving buy-in from the other company executives, he asks you to develop a disaster recovery plan to help improve Business continuity in the short term. He specifies a target Recovery Time Objective (RTO) of 4 hours and a Recovery Point Objective (RPO) of 1 hour or less. He also asks you to implement the solution within 2 weeks. Your database is 200GB in size and you have a 20Mbps Internet connection. How

would you do this while minimizing costs?

A. Create an EBS backed private AMI which includes a fresh install of your application. Develop a CloudFormation template which includes your AMI and the required EC2, AutoScaling, and ELB resources to support deploying the application across Multiple-Availability-Zones. Asynchronously replicate transactions from your on-premises database to a database instance in AWS across a secure VPN connection.
B. Deploy your application on EC2 instances within an Auto Scaling group across multiple availability zones. Asynchronously replicate transactions from your on-premises database to a database instance in AWS across a secure VPN connection.
C. Create an EBS backed private AMI which includes a fresh install of your application. Setup a script in your data center to backup the local database every 1 hour and to encrypt and copy the resulting file to an S3 bucket using multi-part upload.
D. Install your application on a compute-optimized EC2 instance capable of supporting the application's average load. Synchronously replicate transactions from your on-premises database to a database instance in AWS across a secure Direct Connect connection.

Answer: A

Explanation: Overview of Creating Amazon EBS-Backed AMIsFirst, launch an instance from an AMI that's similar to the AMI that you'd like to create. You can connect to your instance and customize it. When the instance is configured correctly, ensure data integrity by stopping the instance before you create an AMI, then create the image. When you create an Amazon EBS-backed AMI, we automatically register it for you.
Amazon EC2 powers down the instance before creating the AMI to ensure that everything on the instance is stopped and in a consistent state during the creation process. If you're confident that your instance is in a consistent state appropriate for AMI creation, you can tell Amazon EC2 not to power down and reboot the instance. Some file systems, such as XFS, can freeze and unfreeze activity, making it safe to create the image without rebooting the instance.
During the AMI-creation process, Amazon EC2 creates snapshots of your instance's root volume and any other EBS volumes attached to your instance. If any volumes attached to the instance are encrypted, the new AMI only launches successfully on instances that support Amazon EBS encryption. For more information, see Amazon EBS Encryption.
Depending on the size of the volumes, it can take several minutes for the AMI-creation process to complete (sometimes up to 24 hours).You may find it more efficient to create snapshots of your volumes prior to creating your AMI. This way, only small, incremental snapshots need to be created when the AMI is created, and the process completes more quickly (the total time for snapshot creation remains the same). For more information, see Creating an Amazon EBS Snapshot.
After the process completes, you have a new AMI and snapshot created from the root volume of the instance. When you launch an instance using the new AMI, we create a new EBS volume for its root volume using the snapshot. Both the AMI and the snapshot incur

charges to your account until you delete them. For more information, see Deregistering Your AMI.
If you add instance-store volumes or EBS volumes to your instance in addition to the root device volume, the block device mapping for the new AMI contains information for these volumes, and the block device mappings for instances that you launch from the new AMI automatically contain information for these volumes. The instance-store volumes specified in the block device mapping for the new instance are new and don't contain any data from the instance store volumes of the instance you used to create the AMI. The data on EBS volumes persists. For more information, see Block Device Mapping.

Question No : 25 - (Topic 1)

Your website is serving on-demand training videos to your workforce. Videos are uploaded monthly in high resolution MP4 format. Your workforce is distributed globally often on the move and using company-provided tablets that require the HTTP Live Streaming (HLS) protocol to watch a video. Your company has no video transcoding expertise and it required you may need to pay for a consultant.

How do you implement the most cost-efficient architecture without compromising high availability and quality of video delivery'?

A. A video transcoding pipeline running on EC2 using SQS to distribute tasks and Auto Scaling to adjust the number of nodes depending on the length of the queue. EBS volumes to host videos and EBS snapshots to incrementally backup original files after a few days. CloudFront to serve HLS transcoded videos from EC2.
B. Elastic Transcoder to transcode original high-resolution MP4 videos to HLS. EBS volumes to host videos and EBS snapshots to incrementally backup original files after a few days. CloudFront to serve HLS transcoded videos from EC2.
C. Elastic Transcoder to transcode original high-resolution MP4 videos to HLS. S3 to host videos with Lifecycle Management to archive original files to Glacier after a few days. CloudFront to serve HLS transcoded videos from S3.
D. A video transcoding pipeline running on EC2 using SQS to distribute tasks and Auto Scaling to adjust the number of nodes depending on the length of the queue. S3 to host videos with Lifecycle Management to archive all files to Glacier after a few days. CloudFront to serve HLS transcoded videos from Glacier.

Answer: C

Question No : 26 - (Topic 1)

You need a persistent and durable storage to trace call activity of an IVR (Interactive Voice Response) system. Call duration is mostly in the 2-3 minutes timeframe. Each traced call can be either active or terminated. An external application needs to know each minute the list of currently active calls, which are usually a few calls/second. Put once per month there is a periodic peak up to 1000 calls/second for a few hours. The system is open 24/7 and any downtime should be avoided. Historical data is periodically archived to files. Cost saving is a priority for this project.

What database implementation would better fit this scenario, keeping costs as low as possible?

A. Use RDS Multi-AZ with two tables, one for -Active calls" and one for -Terminated calls". In this way the "Active calls_ table is always small and effective to access.
B. Use DynamoDB with a "Calls" table and a Global Secondary Index on a "IsActive"' attribute that is present for active calls only in this way the Global Secondary index is sparse and more effective.
C. Use DynamoDB with a 'Calls" table and a Global secondary index on a 'State" attribute that can equal to "active" or "terminated" in this way the Global Secondary index can be used for all Items in the table.
D. Use RDS Multi-AZ with a "CALLS" table and an Indexed "STATE* field that can be equal to 'ACTIVE" or -TERMINATED" In this way the SOL query Is optimized by the use of the Index.

Answer: A

Question No : 27 - (Topic 1)

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

A. Deploy ElastiCache in-memory cache running in each availability zone
B. Implement sharding to distribute load to multiple RDS MySQL instances
C. Increase the RDS MySQL Instance size and Implement provisioned IOPS
D. Add an RDS MySQL read replica in each availability zone

Answer: A,C

Question No : 28 - (Topic 1)

You are the new IT architect in a company that operates a mobile sleep tracking application

When activated at night, the mobile app is sending collected data points of 1 kilobyte every 5 minutes to your backend

The backend takes care of authenticating the user and writing the data points into an Amazon DynamoDB table.

Every morning, you scan the table to extract and aggregate last night's data on a per user basis, and store the results in Amazon S3.

Users are notified via Amazon SMS mobile push notifications that new data is available, which is parsed and visualized by (The mobile app Currently you have around 100k users who are mostly based out of North America.

You have been tasked to optimize the architecture of the backend system to lower cost what would you recommend? (Choose 2 answers)

A. Create a new Amazon DynamoDB (able each day and drop the one for the previous day after its data is on Amazon S3.
B. Have the mobile app access Amazon DynamoDB directly instead of JSON files stored on Amazon S3.
C. Introduce an Amazon SQS queue to buffer writes to the Amazon DynamoDB table and reduce provisioned write throughput.
D. Introduce Amazon Elasticache lo cache reads from the Amazon DynamoDB table and reduce provisioned read throughput.
E. Write data directly into an Amazon Redshift cluster replacing both Amazon DynamoDB and Amazon S3.

Answer: B,D

Question No : 29 - (Topic 1)

You are looking to migrate your Development (Dev) and Test environments to AWS. You have decided to use separate AWS accounts to host each environment. You plan to link each accounts bill to a Master AWS account using Consolidated Billing. To make sure you Keep within budget you would like to implement a way for administrators in the Master

account to have access to stop, delete and/or terminate resources in both the Dev and Test accounts. Identify which option will allow you to achieve this goal.

A. Create IAM users in the Master account with full Admin permissions. Create cross-account roles in the Dev and Test accounts that grant the Master account access to the resources in the account by inheriting permissions from the Master account.
B. Create IAM users and a cross-account role in the Master account that grants full Admin permissions to the Dev and Test accounts.
C. Create IAM users in the Master account Create cross-account roles in the Dev and Test accounts that have full Admin permissions and grant the Master account access.
D. Link the accounts using Consolidated Billing. This will give IAM users in the Master account access to resources in the Dev and Test accounts

Answer: C

Explanation:

Bucket Owner Granting Cross-account Permission to objects It Does Not OwnIn this example scenario, you own a bucket and you have enabled other AWS accounts to upload objects. That is, your bucket can have objects that other AWS accounts own.

Now, suppose as a bucket owner, you need to grant cross-account permission on objects, regardless of who the owner is, to a user in another account. For example, that user could be a billing application that needs to access object metadata. There are two core issues:

- The bucket owner has no permissions on those objects created by other AWS accounts. So for the bucket owner to grant permissions on objects it does not own, the object owner, the AWS account that created the objects, must first grant permission to the bucket owner. The bucket owner can then delegate those permissions.
- Bucket owner account can delegate permissions to users in its own account but it cannot delegate permissions to other AWS accounts, because cross-account delegation is not supported.

In this scenario, the bucket owner can create an AWS Identity and Access Management (IAM) role with permission to access objects, and grant another AWS account permission to assume the role temporarily enabling it to access objects in the bucket.

Background: Cross-Account Permissions and Using IAM RolesIAM roles enable several scenarios to delegate access to your resources, and cross-account access is one of the key scenarios. In this example, the bucket owner, Account A, uses an IAM role to temporarily delegate object access cross-account to users in another AWS account, Account C. Each IAM role you create has two policies attached to it:

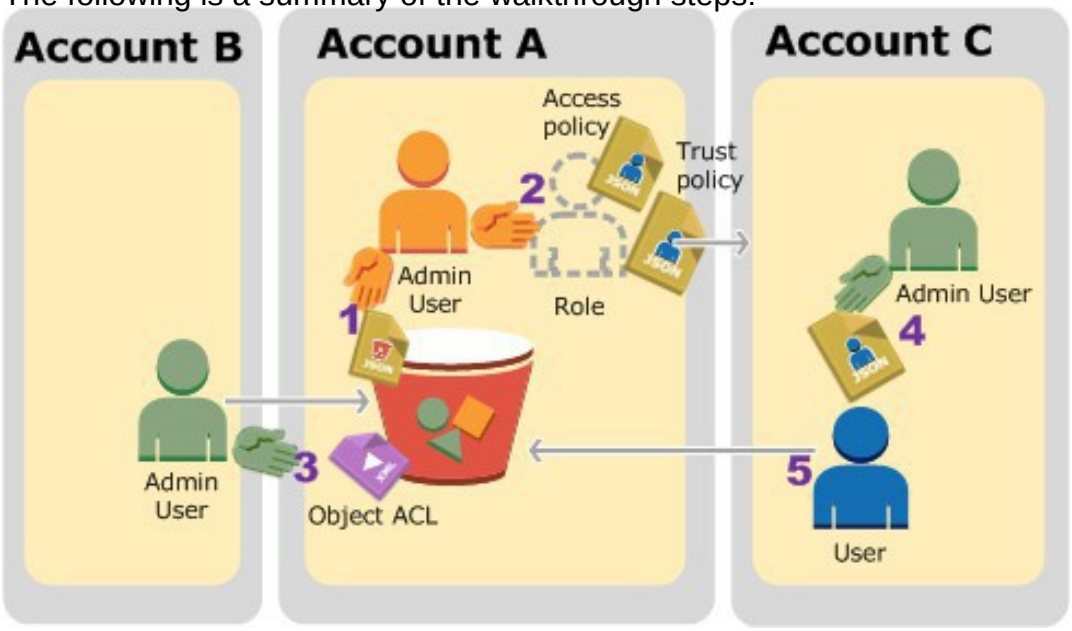
- A trust policy identifying another AWS account that can assume the role.
- An access policy defining what permissions—for example, s3:GetObject—are allowed when someone assumes the role. For a list of permissions you can specify in a policy, see Specifying Permissions in a Policy.

The AWS account identified in the trust policy then grants its user permission to assume the role. The user can then do the following to access objects:

- Assume the role and, in response, get temporary security credentials.
- Using the temporary security credentials, access the objects in the bucket.

For more information about IAM roles, go to Roles (Delegation and Federation) in IAM User

Guide.
The following is a summary of the walkthrough steps:



access-policy-ex4

Account A administrator user attaches a bucket policy granting Account B conditional permission to upload objects.

Account A administrator creates an IAM role, establishing trust with Account C, so users in that account can access Account A. The access policy attached to the role limits what user in Account C can do when the user accesses Account A.

Account B administrator uploads an object to the bucket owned by Account A, granting full-control permission to the bucket owner.

Account C administrator creates a user and attaches a user policy that allows the user to assume the role.

User in Account C first assumes the role, which returns the user temporary security credentials. Using those temporary credentials, the user then accesses objects in the bucket.

For this example, you need three accounts. The following table shows how we refer to these accounts and the administrator users in these accounts. Per IAM guidelines (see About Using an Administrator User to Create Resources and Grant Permissions) we do not use the account root credentials in this walkthrough. Instead, you create an administrator user in each account and use those credentials in creating resources and granting them permissions

AWS Account ID
Account Referred To As
Administrator User in the Account
1111-1111-1111

Account A

AccountAadmin
2222-2222-2222

Account B

AccountBadmin
3333-3333-3333

Account C

AccountCadmin

Question No : 30 - (Topic 1)

You currently operate a web application In the AWS US-East region The application runs on an auto-scaled layer of EC2 instances and an RDS Multi-AZ database Your IT security compliance officer has tasked you to develop a reliable and durable logging solution to track changes made to your EC2.IAM And RDS resources. The solution must ensure the integrity and confidentiality of your log data. Which of these solutions would you recommend?

A. Create a new CloudTrail trail with one new S3 bucket to store the logs and with the global services option selected Use IAM roles S3 bucket policies and Multi Factor Authentication (MFA) Delete on the S3 bucket that stores your logs.
B. Create a new CloudTrail with one new S3 bucket to store the logs Configure SNS to send log file delivery notifications to your management system Use IAM roles and S3 bucket policies on the S3 bucket mat stores your logs.
C. Create a new CloudTrail trail with an existing S3 bucket to store the logs and with the global services option selected Use S3 ACLs and Multi Factor Authentication (MFA) Delete on the S3 bucket that stores your logs.
D. Create three new CloudTrail trails with three new S3 buckets to store the logs one for the AWS Management console, one for AWS SDKs and one for command line tools Use IAM roles and S3 bucket policies on the S3 buckets that store your logs.

Answer: A

Question No : 31 - (Topic 1)

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

A. Delete your existing VPN connection to avoid routing loops configure your DirectConnect router with the appropriate settings and verity network traffic is leveraging DirectConnect.
B. Configure your DirectConnect router with a higher BGP priority man your VPN router, verify network traffic is leveraging Directconnect and then delete your existing VPN

connection.

C. Update your VPC route tables to point to the DirectConnect connection configure your DirectConnect router with the appropriate settings verify network traffic is leveraging DirectConnect and then delete the VPN connection.

D. Configure your DirectConnect router, update your VPC route tables to point to the DirectConnect connection, configure your VPN connection with a higher BGP priority. And verify network traffic is leveraging the DirectConnect connection.

Answer: D

Question No : 32 - (Topic 1)

A web design company currently runs several FTP servers that their 250 customers use to upload and download large graphic files They wish to move this system to AWS to make it more scalable, but they wish to maintain customer privacy and Keep costs to a minimum.

What AWS architecture would you recommend?

A. ASK their customers to use an S3 client instead of an FTP client. Create a single S3 bucket Create an IAM user for each customer Put the IAM Users in a Group that has an IAM policy that permits access to sub-directories within the bucket via use of the 'username' Policy variable.

B. Create a single S3 bucket with Reduced Redundancy Storage turned on and ask their customers to use an S3 client instead of an FTP client Create a bucket for each customer with a Bucket Policy that permits access only to that one customer.

C. Create an auto-scaling group of FTP servers with a scaling policy to automatically scale-in when minimum network traffic on the auto-scaling group is below a given threshold. Load a central list of ftp users from S3 as part of the user Data startup script on each Instance.

D. Create a single S3 bucket with Requester Pays turned on and ask their customers to use an S3 client instead of an FTP client Create a bucket tor each customer with a Bucket Policy that permits access only to that one customer.

Answer: A

Question No : 33 - (Topic 1)

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

users sign in again to the AWS Management Console Which option below will meet the needs for your NOC members?

A. Use OAuth 2 0 to retrieve temporary AWS security credentials to enable your NOC members to sign in to the AVVS Management Console.
B. Use web Identity Federation to retrieve AWS temporary security credentials to enable your NOC members to sign in to the AWS Management Console.
C. Use your on-premises SAML 2.0-compliant identity provider (IDP) to grant the NOC members federated access to the AWS Management Console via the AWS single sign-on (SSO) endpoint.
D. Use your on-premises SAML2.0-compliam identity provider (IDP) to retrieve temporary security credentials to enable NOC members to sign in to the AWS Management Console.

Answer: D

Question No : 34 - (Topic 1)

Your company runs a customer facing event registration site This site is built with a 3-tier architecture with web and application tier servers and a MySQL database The application requires 6 web tier servers and 6 application tier servers for normal operation, but can run on a minimum of 65% server capacity and a single MySQL database. When deploying this application in a region with three availability zones (AZs) which architecture provides high availability?

A. A web tier deployed across 2 AZs with 3 EC2 (Elastic Compute Cloud) instances in each AZ inside an Auto Scaling Group behind an ELB (elastic load balancer), and an application tier deployed across 2 AZs with 3 EC2 instances in each AZ inside an Auto Scaling Group behind an ELB. and one RDS (Relational Database Service) instance deployed with read replicas in the other AZ.
B. A web tier deployed across 3 AZs with 2 EC2 (Elastic Compute Cloud) instances in each AZ inside an Auto Scaling Group behind an ELB (elastic load balancer) and an application tier deployed across 3 AZs with 2 EC2 instances in each AZ inside an Auto Scaling Group behind an ELB and one RDS (Relational Database Service) Instance deployed with read replicas in the two other AZs.
C. A web tier deployed across 2 AZs with 3 EC2 (Elastic Compute Cloud) instances in each AZ inside an Auto Scaling Group behind an ELB (elastic load balancer) and an application tier deployed across 2 AZs with 3 EC2 instances m each AZ inside an Auto Scaling Group behind an ELS and a Multi-AZ RDS (Relational Database Service) deployment.
D. A web tier deployed across 3 AZs with 2 EC2 (Elastic Compute Cloud) instances in each AZ Inside an Auto Scaling Group behind an ELB (elastic load balancer). And an application tier deployed across 3 AZs with 2 EC2 instances in each AZ inside an Auto Scaling Group behind an ELB. And a Multi-AZ RDS (Relational Database services) deployment.

Answer: D

Explanation:

Amazon RDS Multi-AZ Deployments Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Each AZ runs on its own physically distinct, independent infrastructure, and is engineered to be highly reliable. In case of an infrastructure failure (for example, instance hardware failure, storage failure, or network disruption), Amazon RDS performs an automatic failover to the standby, so that you can resume database operations as soon as the failover is complete. Since the endpoint for your DB Instance remains the same after a failover, your application can resume database operation without the need for manual administrative intervention.

Enhanced Durability Multi-AZ deployments for the MySQL, Oracle, and PostgreSQL engines utilize synchronous physical replication to keep data on the standby up-to-date with the primary. Multi-AZ deployments for the SQL Server engine use synchronous logical replication to achieve the same result, employing SQL Server-native Mirroring technology. Both approaches safeguard your data in the event of a DB Instance failure or loss of an Availability Zone.

If a storage volume on your primary fails in a Multi-AZ deployment, Amazon RDS automatically initiates a failover to the up-to-date standby. Compare this to a Single-AZ deployment: in case of a Single-AZ database failure, a user-initiated point-in-time-restore operation will be required. This operation can take several hours to complete, and any data updates that occurred after the latest restorable time (typically within the last five minutes) will not be available.

Amazon Aurora employs a highly durable, SSD-backed virtualized storage layer purpose-built for database workloads. Amazon Aurora automatically replicates your volume six ways, across three Availability Zones. Amazon Aurora storage is fault-tolerant, transparently handling the loss of up to two copies of data without affecting database write availability and up to three copies without affecting read availability. Amazon Aurora storage is also self-healing. Data blocks and disks are continuously scanned for errors and replaced automatically.

Increased Availability You also benefit from enhanced database availability when running Multi-AZ deployments. If an Availability Zone failure or DB Instance failure occurs, your availability impact is limited to the time automatic failover takes to complete: typically under one minute for Amazon Aurora and one to two minutes for other database engines (see the RDS FAQ for details).

The availability benefits of Multi-AZ deployments also extend to planned maintenance and backups. In the case of system upgrades like OS patching or DB Instance scaling, these operations are applied first on the standby, prior to the automatic failover. As a result, your

availability impact is, again, only the time required for automatic failover to complete. Unlike Single-AZ deployments, I/O activity is not suspended on your primary during backup for Multi-AZ deployments for the MySQL, Oracle, and PostgreSQL engines, because the backup is taken from the standby. However, note that you may still experience elevated latencies for a few minutes during backups for Multi-AZ deployments.
On instance failure in Amazon Aurora deployments, Amazon RDS uses RDS Multi-AZ technology to automate failover to one of up to 15 Amazon Aurora Replicas you have created in any of three Availability Zones. If no Amazon Aurora Replicas have been provisioned, in the case of a failure, Amazon RDS will attempt to create a new Amazon Aurora DB instance for you automatically.

Question No : 35 - (Topic 1)

A company is building a voting system for a popular TV show, viewers win watch the performances then visit the show's website to vote for their favorite performer. It is expected that in a short period of time after the show has finished the site will receive millions of visitors. The visitors will first login to the site using their Amazon.com credentials and then submit their vote. After the voting is completed the page will display the vote totals. The company needs to build the site such that can handle the rapid influx of traffic while maintaining good performance but also wants to keep costs to a minimum. Which of the design patterns below should they use?

A. Use CloudFront and an Elastic Load balancer in front of an auto-scaled set of web servers, the web servers will first call the Login With Amazon service to authenticate the user then process the users vote and store the result into a multi-AZ Relational Database Service instance.
B. Use CloudFront and the static website hosting feature of S3 with the Javascript SDK to call the Login With Amazon service to authenticate the user, use IAM Roles to gain permissions to a DynamoDB table to store the users vote.
C. Use CloudFront and an Elastic Load Balancer in front of an auto-scaled set of web servers, the web servers will first call the Login with Amazon service to authenticate the user, the web servers will process the users vote and store the result into a DynamoDB table using IAM Roles for EC2 instances to gain permissions to the DynamoDB table.
D. Use CloudFront and an Elastic Load Balancer in front of an auto-scaled set of web servers, the web servers will first call the Login With Amazon service to authenticate the user, the web servers win process the users vote and store the result into an SQS queue using IAM Roles for EC2 Instances to gain permissions to the SQS queue. A set of application servers will then retrieve the items from the queue and store the result into a DynamoDB table.

Answer: D

Question No : 36 - (Topic 1)

You have deployed a three-tier web application in a VPC with a CIOR block of 10 0 0 0/28 You initially deploy two web servers, two application servers, two database servers and one NAT instance tor a total of seven EC2 instances The web. Application and database servers are deployed across two availability zones (AZs). You also deploy an ELB in front of the two web servers, and use Route53 for DNS Web (raffle gradually increases in the first few days following the deployment, so you attempt to double the number of instances in each tier of the application to handle the new load unfortunately some of these new instances fail to launch.

Which of the following could De the root caused? (Choose 2 answers)

A. AWS reserves the first and the last private IP address in each subnet's CIDR block so you do not have enough addresses left to launch all of the new EC2 instances
B. The Internet Gateway (IGW) of your VPC has scaled-up, adding more instances to handle the traffic spike, reducing the number of available private IP addresses for new instance launches
C. The ELB has scaled-up, adding more instances to handle the traffic spike, reducing the number of available private IP addresses for new instance launches
D. AWS reserves one IP address in each subnet's CIDR block for Route53 so you do not have enough addresses left to launch all of the new EC2 instances
E. AWS reserves the first four and the last IP address in each subnet's CIDR block so you do not have enough addresses left to launch all of the new EC2 instances

Answer: C,E

Question No : 37 - (Topic 1)

A customer has a 10 GB AWS Direct Connect connection to an AWS region where they have a web application hosted on Amazon Elastic Computer Cloud (EC2). The application has dependencies on an on-premises mainframe database that uses a BASE (Basic Available. Sort stale Eventual consistency) rather than an ACID (Atomicity. Consistency isolation. Durability) consistency model. The application is exhibiting undesirable behavior because the database is not able to handle the volume of writes. How can you reduce the load on your on-premises database resources in the most cost-effective way?

A. Use an Amazon Elastic Map Reduce (EMR) S3DistCp as a synchronization mechanism between the on-premises database and a Hadoop cluster on AWS.
B. Modify the application to write to an Amazon SQS queue and develop a worker process to flush the queue to the on-premises database.
C. Modify the application to use DynamoDB to feed an EMR cluster which uses a map function to write to the on-premises database.
D. Provision an RDS read-replica database on AWS to handle the writes and synchronize the two databases using Data Pipeline.

Answer: A
Reference: https://aws.amazon.com/blogs/aws/category/amazon-elastic-map-reduce/

Question No : 38 - (Topic 1)

A customer has established an AWS Direct Connect connection to AWS. The link is up and routes are being advertised from the customer's end, however the customer is unable to connect from EC2 instances inside its VPC to servers residing in its datacenter.

Which of the following options provide a viable solution to remedy this situation? (Choose 2 answers)

A. Add a route to the route table with an iPsec VPN connection as the target.
B. Enable route propagation to the virtual pinnate gateway (VGW).
C. Enable route propagation to the customer gateway (CGW).
D. Modify the route table of all Instances using the 'route' command.
E. Modify the Instances VPC subnet route table by adding a route back to the customer's on-premises environment.

Answer: A,C

Question No : 39 - (Topic 1)

An AWS customer runs a public blogging website. The site users upload two million blog entries a month The average blog entry size is 200 KB. The access rate to blog entries drops to negligible 6 months after publication and users rarely access a blog entry 1 year after publication. Additionally, blog entries have a high update rate during the first 3 months following publication, this drops to no updates after 6 months. The customer wants to use CloudFront to improve his user's load times. Which of the following recommendations

would you make to the customer?

A. Duplicate entries into two different buckets and create two separate CloudFront distributions where S3 access is restricted only to Cloud Front identity
B. Create a CloudFront distribution with "US'Europe price class for US/Europe users and a different CloudFront distribution with All Edge Locations' for the remaining users.
C. Create a CloudFront distribution with S3 access restricted only to the CloudFront identity and partition the blog entry's location in S3 according to the month it was uploaded to be used with CloudFront behaviors.
D. Create a CloudFronl distribution with Restrict Viewer Access Forward Query string set to true and minimum TTL of 0.

Answer: C

Question No : 40 - (Topic 1)

Your customer is willing to consolidate their log streams (access logs application logs security logs etc.) in one single system. Once consolidated, the customer wants to analyze these logs in real time based on heuristics. From time to time, the customer needs to validate heuristics, which requires going back to data samples extracted from the last 12 hours?

What is the best approach to meet your customer's requirements?

A. Send all the log events to Amazon SQS. Setup an Auto Scaling group of EC2 servers to consume the logs and apply the heuristics.
B. Send all the log events to Amazon Kinesis develop a client process to apply heuristics on the logs
C. Configure Amazon CloudTrail to receive custom logs, use EMR to apply heuristics the logs
D. Setup an Auto Scaling group of EC2 syslogd servers, store the logs on S3 use EMR to apply heuristics on the logs

Answer: B

Explanation:
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 Base64-encoding)

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.

Question No : 41 - (Topic 1)

A company is running a batch analysis every hour on their main transactional DB. running on an RDS MySQL instance to populate their central Data Warehouse running on Redshift During the execution of the batch their transactional applications are very slow When the batch completes they need to update the top management dashboard with the new data The dashboard is produced by another system running on-premises that is currently started when a manually-sent email notifies that an update is required The on-premises system cannot be modified because is managed by another team.

How would you optimize this scenario to solve performance issues and automate the process as much as possible?

A. Replace RDS with Redshift for the batch analysis and SNS to notify the on-premises system to update the dashboard
B. Replace ROS with Redsnift for the oaten analysis and SQS to send a message to the on-premises system to update the dashboard
C. Create an RDS Read Replica for the batch analysis and SNS to notify me on-premises system to update the dashboard
D. Create an RDS Read Replica for the batch analysis and SQS to send a message to the on-premises system to update the dashboard.

Answer: A

Question No : 42 - (Topic 1)

An administrator is using Amazon CloudFormation to deploy a three tier web application that consists of a web tier and application tier that will utilize Amazon DynamoDB for storage when creating the CloudFormation template which of the following would allow the application instance access to the DynamoDB tables without exposing API credentials?

A. Create an Identity and Access Management Role that has the required permissions to read and write from the required DynamoDB table and associate the Role to the application instances by referencing an instance profile.

B. Use the Parameter section in the Cloud Formation template to nave the user input Access and Secret Keys from an already created IAM user that has me permissions required to read and write from the required DynamoDB table.
C. Create an Identity and Access Management Role that has the required permissions to read and write from the required DynamoDB table and reference the Role in the instance profile property of the application instance.
D. Create an identity and Access Management user in the CloudFormation template that has permissions to read and write from the required DynamoDB table, use the GetAtt function to retrieve the Access and secret keys and pass them to the application instance through user-data.

Answer: C

Question No : 43 - (Topic 1)

Your fortune 500 company has under taken a TCO analysis evaluating the use of Amazon S3 versus acquiring more hardware The outcome was that ail employees would be granted access to use Amazon S3 for storage of their personal documents.

Which of the following will you need to consider so you can set up a solution that incorporates single sign-on from your corporate AD or LDAP directory and restricts access for each user to a designated user folder in a bucket? (Choose 3 Answers)

A. Setting up a federation proxy or identity provider
B. Using AWS Security Token Service to generate temporary tokens
C. Tagging each folder in the bucket
D. Configuring IAM role
E. Setting up a matching IAM user for every user in your corporate directory that needs access to a folder in the bucket

Answer: A,B,D

Question No : 44 - (Topic 1)

Your team has a tomcat-based Java application you need to deploy into development, test and production environments. After some research, you opt to use Elastic Beanstalk due to its tight integration with your developer tools and RDS due to its ease of management. Your QA team lead points out that you need to roll a sanitized set of production data into your environment on a nightly basis. Similarly, other software teams in your org want access to that same restored data via their EC2 instances in your VPC .The optimal setup

for persistence and security that meets the above requirements would be the following.

A. Create your RDS instance as part of your Elastic Beanstalk definition and alter its security group to allow access to it from hosts in your application subnets.
B. Create your RDS instance separately and add its IP address to your application's DB connection strings in your code Alter its security group to allow access to it from hosts within your VPC's IP address block.
C. Create your RDS instance separately and pass its DNS name to your app's DB connection string as an environment variable. Create a security group for client machines and add it as a valid source for DB traffic to the security group of the RDS instance itself.
D. Create your RDS instance separately and pass its DNS name to your's DB connection string as an environment variable Alter its security group to allow access to It from hosts In your application subnets.

Answer: A

Question No : 45 - (Topic 1)

A benefits enrollment company is hosting a 3-tier web application running in a VPC on AWS which includes a NAT (Network Address Translation) instance in the public Web tier. There is enough provisioned capacity for the expected workload tor the new fiscal year benefit enrollment period plus some extra overhead Enrollment proceeds nicely for two days and then the web tier becomes unresponsive, upon investigation using CloudWatch and other monitoring tools it is discovered that there is an extremely large and unanticipated amount of inbound traffic coming from a set of 15 specific IP addresses over port 80 from a country where the benefits company has no customers. The web tier instances are so overloaded that benefit enrollment administrators cannot even SSH into them. Which activity would be useful in defending against this attack?

A. Create a custom route table associated with the web tier and block the attacking IP addresses from the IGW (Internet Gateway)
B. Change the EIP (Elastic IP Address) of the NAT instance in the web tier subnet and update the Main Route Table with the new EIP
C. Create 15 Security Group rules to block the attacking IP addresses over port 80
D. Create an inbound NACL (Network Access control list) associated with the web tier subnet with deny rules to block the attacking IP addresses

Answer: D

Explanation:

Explaination:

Use AWS Identity and Access Management (IAM) to control who in your organization has permission to create and manage security groups and network ACLs (NACL). Isolate the

responsibilities and roles for better defense. For example, you can give only your network administrators or security admin the permission to manage the security groups and restrict other roles.

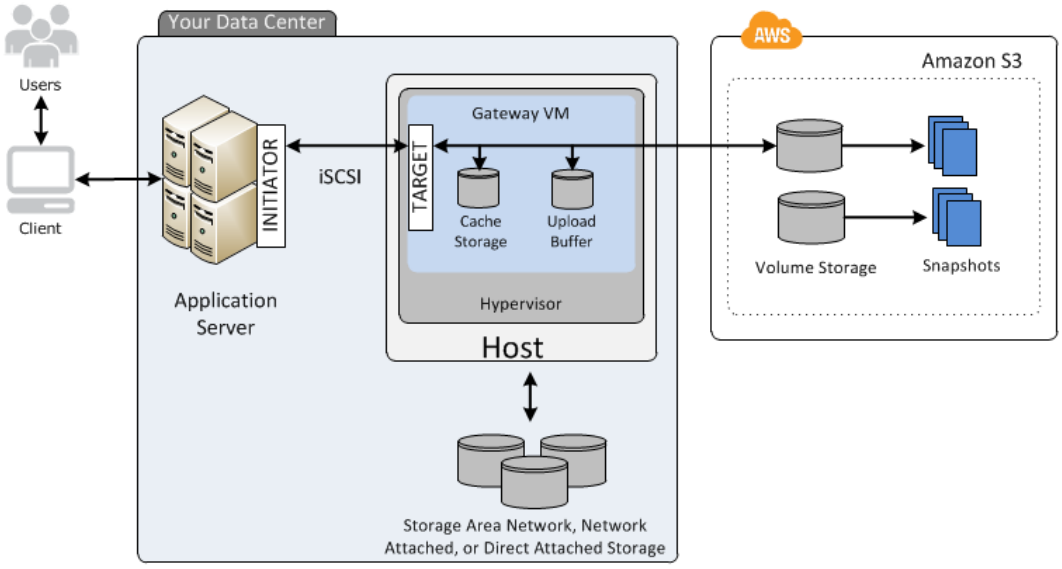
Question No : 46 - (Topic 1)

You're running an application on-premises due to its dependency on non-x86 hardware and want to use AWS for data backup. Your backup application is only able to write to POSIX-compatible block-based storage. You have 140TB of data and would like to mount it as a single folder on your file server Users must be able to access portions of this data while the backups are taking place. What backup solution would be most appropriate for this use case?

A. Use Storage Gateway and configure it to use Gateway Cached volumes.
B. Configure your backup software to use S3 as the target for your data backups.
C. Configure your backup software to use Glacier as the target for your data backups.
D. Use Storage Gateway and configure it to use Gateway Stored volumes.

Answer: A

Explanation: Gateway-Cached Volume ArchitectureGateway-cached volumes let you use Amazon Simple Storage Service (Amazon S3) as your primary data storage while retaining frequently accessed data locally in your storage gateway. Gateway-cached volumes minimize the need to scale your on-premises storage infrastructure, while still providing your applications with low-latency access to their frequently accessed data. You can create storage volumes up to 32 TiB in size and attach to them as iSCSI devices from your on-premises application servers. Your gateway stores data that you write to these volumes in Amazon S3 and retains recently read data in your on-premises storage gateway's cache and upload buffer storage.
Gateway-cached volumes can range from 1 GiB to 32 TiB in size and must be rounded to the nearest GiB. Each gateway configured for gateway-cached volumes can support up to 32 volumes for a total maximum storage volume of 1,024 TiB (1 PiB).
In the gateway-cached volume solution, AWS Storage Gateway stores all your on-premises application data in a storage volume in Amazon S3.
The following diagram provides an overview of the AWS Storage Gateway-cached volume deployment.



aws-storage-gateway-cached-diagram

After you've installed the AWS Storage Gateway software appliance—the virtual machine (VM)—on a host in your data center and activated it, you can use the AWS Management Console to provision storage volumes backed by Amazon S3. You can also provision storage volumes programmatically using the AWS Storage Gateway API or the AWS SDK libraries. You then mount these storage volumes to your on-premises application servers as iSCSI devices.

You also allocate disks on-premises for the VM. These on-premises disks serve the following purposes:

Disks for use by the gateway as cache storage – As your applications write data to the storage volumes in AWS, the gateway initially stores the data on the on-premises disks referred to as cache storage before uploading the data to Amazon S3. The cache storage acts as the on-premises durable store for data that is waiting to upload to Amazon S3 from the upload buffer.

The cache storage also lets the gateway store your application's recently accessed data on-premises for low-latency access. If your application requests data, the gateway first checks the cache storage for the data before checking Amazon S3.

You can use the following guidelines to determine the amount of disk space to allocate for cache storage. Generally, you should allocate at least 20 percent of your existing file store size as cache storage. Cache storage should also be larger than the upload buffer. This latter guideline helps ensure cache storage is large enough to persistently hold all data in the upload buffer that has not yet been uploaded to Amazon S3.

Disks for use by the gateway as the upload buffer – To prepare for upload to Amazon S3, your gateway also stores incoming data in a staging area, referred to as an upload buffer. Your gateway uploads this buffer data over an encrypted Secure Sockets Layer (SSL) connection to AWS, where it is stored encrypted in Amazon S3.

You can take incremental backups, called snapshots, of your storage volumes in Amazon S3. These point-in-time snapshots are also stored in Amazon S3 as Amazon EBS snapshots. When you take a new snapshot, only the data that has changed since your last snapshot is stored. You can initiate snapshots on a scheduled or one-time basis. When you delete a snapshot, only the data not needed for any other snapshots is removed.

You can restore an Amazon EBS snapshot to a gateway storage volume if you need to recover a backup of your data. Alternatively, for snapshots up to 16 TiB in size, you can use the snapshot as a starting point for a new Amazon EBS volume. You can then attach this new Amazon EBS volume to an Amazon EC2 instance.
All gateway-cached volume data and snapshot data is stored in Amazon S3 encrypted at rest using server-side encryption (SSE). However, you cannot access this data with the Amazon S3 API or other tools such as the Amazon S3 console.

Question No : 47 - (Topic 1)

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

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

Answer: A,C,D

Question No : 48 - (Topic 1)

You are implementing a URL whitelisting system for a company that wants to restrict outbound HTTP'S connections to specific domains from their EC2-hosted applications you deploy a single EC2 instance running proxy software and configure It to accept traffic from all subnets and EC2 instances in the VPC. You configure the proxy to only pass through traffic to domains that you define in its whitelist configuration You have a nightly maintenance window or 10 minutes where ail instances fetch new software updates. Each update Is about 200MB In size and there are 500 instances In the VPC that routinely fetch updates After a few days you notice that some machines are failing to successfully download some, but not all of their updates within the maintenance window. The download URLs used for these updates are correctly listed in the proxy's whitelist configuration and you are able to access them manually using a web browser on the instances. What might be happening? (Choose 2 answers)

A. You are running the proxy on an undersized EC2 instance type so network throughput is not sufficient for all instances to download their updates in time.
B. You are running the proxy on a sufficiently-sized EC2 instance in a private subnet andits network throughput is being throttled by a NAT running on an undersized EC2 instance.
C. The route table for the subnets containing the affected EC2 instances is not configured to direct network traffic for the software update locations to the proxy.
D. You have not allocated enough storage to the EC2 instance running the proxy so the network buffer is filling up, causing some requests to fail.
E. You are running the proxy in a public subnet but have not allocated enough EIPs to support the needed network throughput through the Internet Gateway (IGW).

Answer: A,B

Question No : 49 - (Topic 1)

Your company plans to host a large donation website on Amazon Web Services (AWS). You anticipate a large and undetermined amount of traffic that will create many database writes. To be certain that you do not drop any writes to a database hosted on AWS. Which service should you use?

A. Amazon RDS with provisioned IOPS up to the anticipated peak write throughput.
B. Amazon Simple Queue Service (SQS) for capturing the writes and draining the queue to write to the database.
C. Amazon ElastiCache to store the writes until the writes are committed to the database.
D. Amazon DynamoDB with provisioned write throughput up to the anticipated peak write throughput.

Answer: B

Explanation:

Explaination:

Amazon Simple Queue Service (Amazon SQS) offers a reliable, highly scalable hosted queue for storing messages as they travel between computers. By using Amazon SQS, developers can simply move data between distributed application components performing different tasks, without losing messages or requiring each component to be always available. Amazon SQS makes it easy to build a distributed, decoupled application, working in close conjunction with the Amazon Elastic Compute Cloud (Amazon EC2) and the other AWS infrastructure web services.

What can I do with Amazon SQS?

Amazon SQS is a web service that gives you access to a message queue that can be used to store messages while waiting for a computer to process them. This allows you to quickly build message queuing applications that can be run on any computer on the internet. Since

Amazon SQS is highly scalable and you only pay for what you use, you can start small and grow your application as you wish, with no compromise on performance or reliability. This lets you focus on building sophisticated message-based applications, without worrying about how the messages are stored and managed. You can use Amazon SQS with software applications in various ways. For example, you can:

Integrate Amazon SQS with other AWS infrastructure web services to make applications more reliable and flexible.

Use Amazon SQS to create a queue of work where each message is a task that needs to be completed by a process. One or many computers can read tasks from the queue and perform them.

Build a microservices architecture, using queues to connect your microservices. Keep notifications of significant events in a business process in an Amazon SQS queue. Each event can have a corresponding message in a queue, and applications that need to be aware of the event can read and process the messages.

Question No : 50 - (Topic 1)

You are running a news website in the eu-west-1 region that updates every 15 minutes. The website has a world-wide audience it uses an Auto Scaling group behind an Elastic Load Balancer and an Amazon RDS database Static content resides on Amazon S3, and is distributed through Amazon CloudFront. Your Auto Scaling group is set to trigger a scale up event at 60% CPU utilization, you use an Amazon RDS extra large DB instance with 10.000 Provisioned IOPS its CPU utilization is around 80%. While freeable memory is in the 2 GB range.

Web analytics reports show that the average load time of your web pages is around 1 5 to 2 seconds, but your SEO consultant wants to bring down the average load time to under 0.5 seconds.

How would you improve page load times for your users? (Choose 3 answers)

A. Lower the scale up trigger of your Auto Scaling group to 30% so it scales more aggressively.

B. Add an Amazon ElastiCache caching layer to your application for storing sessions and frequent DB queries

C. Configure Amazon CloudFront dynamic content support to enable caching of re-usable content from your site

D. Switch the Amazon RDS database to the high memory extra large Instance type

E. Set up a second installation in another region, and use the Amazon Route 53 latency-

based routing feature to select the right region.

Answer: A,B,D

Question No : 51 - (Topic 1)

You require the ability to analyze a large amount of data, which is stored on Amazon S3 using Amazon Elastic Map Reduce. You are using the cc2 8x large Instance type, whose CPUs are mostly idle during processing. Which of the below would be the most cost efficient way to reduce the runtime of the job?

A. Create more smaller flies on Amazon S3.
B. Add additional cc2 8x large instances by introducing a task group.
C. Use smaller instances that have higher aggregate I/O performance.
D. Create fewer, larger files on Amazon S3.

Answer: C

Question No : 52 - (Topic 1)

You are responsible for a legacy web application whose server environment is approaching end of life You would like to migrate this application to AWS as quickly as possible, since the application environment currently has the following limitations:

The VM's single 10GB VMDK is almost full
Me virtual network interface still uses the 10Mbps driver, which leaves your 100Mbps WAN connection completely underutilized
It is currently running on a highly customized. Windows VM within a VMware environment:
You do not have me installation media

This is a mission critical application with an RTO (Recovery Time Objective) of 8 hours. RPO (Recovery Point Objective) of 1 hour. How could you best migrate this application to AWS while meeting your business continuity requirements?

A. Use the EC2 VM Import Connector for vCenter to import the VM into EC2.
B. Use Import/Export to import the VM as an ESS snapshot and attach to EC2.
C. Use S3 to create a backup of the VM and restore the data into EC2.
D. Use me ec2-bundle-instance API to Import an Image of the VM into EC2

Answer: A

Question No : 53 - (Topic 1)

An ERP application is deployed across multiple AZs in a single region. In the event of failure, the Recovery Time Objective (RTO) must be less than 3 hours, and the Recovery Point Objective (RPO) must be 15 minutes the customer realizes that data corruption occurred roughly 1.5 hours ago.

What DR strategy could be used to achieve this RTO and RPO in the event of this kind of failure?

A. Take hourly DB backups to S3, with transaction logs stored in S3 every 5 minutes.
B. Use synchronous database master-slave replication between two availability zones.
C. Take hourly DB backups to EC2 Instance store volumes with transaction logs stored In S3 every 5 minutes.
D. Take 15 minute DB backups stored In Glacier with transaction logs stored in S3 every 5 minutes.

Answer: A

Question No : 54 - (Topic 1)

An enterprise wants to use a third-party SaaS application. The SaaS application needs to have access to issue several API commands to discover Amazon EC2 resources running within the enterprise's account The enterprise has internal security policies that require any outside access to their environment must conform to the principles of least privilege and there must be controls in place to ensure that the credentials used by the SaaS vendor cannot be used by any other third party. Which of the following would meet all of these conditions?

A. From the AWS Management Console, navigate to the Security Credentials page and retrieve the access and secret key for your account.
B. Create an IAM user within the enterprise account assign a user policy to the IAM user that allows only the actions required by the SaaS application create a new access and secret key for the user and provide these credentials to the SaaS provider.
C. Create an IAM role for cross-account access allows the SaaS provider's account to assume the role and assign it a policy that allows only the actions required by the SaaS application.

D. Create an IAM role for EC2 instances, assign it a policy that allows only the actions required tor the Saas application to work, provide the role ARM to the SaaS provider to use when launching their application instances.

Answer: C

Explanation:

Granting Cross-account Permission to objects It Does Not OwnIn this example scenario, you own a bucket and you have enabled other AWS accounts to upload objects. That is, your bucket can have objects that other AWS accounts own.

Now, suppose as a bucket owner, you need to grant cross-account permission on objects, regardless of who the owner is, to a user in another account. For example, that user could be a billing application that needs to access object metadata. There are two core issues:

- The bucket owner has no permissions on those objects created by other AWS accounts. So for the bucket owner to grant permissions on objects it does not own, the object owner, the AWS account that created the objects, must first grant permission to the bucket owner. The bucket owner can then delegate those permissions.
- Bucket owner account can delegate permissions to users in its own account but it cannot delegate permissions to other AWS accounts, because cross-account delegation is not supported.

In this scenario, the bucket owner can create an AWS Identity and Access Management (IAM) role with permission to access objects, and grant another AWS account permission to assume the role temporarily enabling it to access objects in the bucket.

Background: Cross-Account Permissions and Using IAM RolesIAM roles enable several scenarios to delegate access to your resources, and cross-account access is one of the key scenarios. In this example, the bucket owner, Account A, uses an IAM role to temporarily delegate object access cross-account to users in another AWS account, Account C. Each IAM role you create has two policies attached to it:

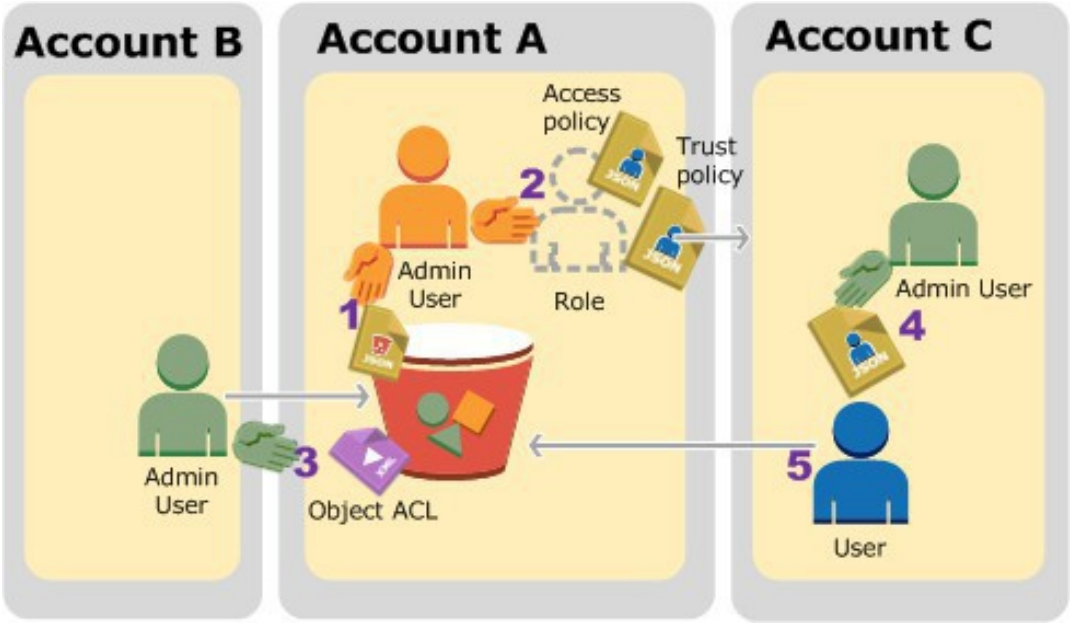
- A trust policy identifying another AWS account that can assume the role.
- An access policy defining what permissions—for example, s3:GetObject—are allowed when someone assumes the role. For a list of permissions you can specify in a policy, see Specifying Permissions in a Policy.

The AWS account identified in the trust policy then grants its user permission to assume the role. The user can then do the following to access objects:

- Assume the role and, in response, get temporary security credentials.
- Using the temporary security credentials, access the objects in the bucket.

For more information about IAM roles, go to Roles (Delegation and Federation) in IAM User Guide.

The following is a summary of the walkthrough steps:



access-policy-ex4

Account A administrator user attaches a bucket policy granting Account B conditional permission to upload objects.

Account A administrator creates an IAM role, establishing trust with Account C, so users in that account can access Account A. The access policy attached to the role limits what user in Account C can do when the user accesses Account A.

Account B administrator uploads an object to the bucket owned by Account A, granting full-control permission to the bucket owner.

Account C administrator creates a user and attaches a user policy that allows the user to assume the role.

User in Account C first assumes the role, which returns the user temporary security credentials. Using those temporary credentials, the user then accesses objects in the bucket.

For this example, you need three accounts. The following table shows how we refer to these accounts and the administrator users in these accounts. Per IAM guidelines (see About Using an Administrator User to Create Resources and Grant Permissions) we do not use the account root credentials in this walkthrough. Instead, you create an administrator user in each account and use those credentials in creating resources and granting them permissions

AWS Account ID
Account Referred To As
Administrator User in the Account
1111-1111-1111

Account A

AccountAadmin
2222-2222-2222

Account B

AccountBadmin
3333-3333-3333

Account C

AccountCadmin

Question No : 55 - (Topic 1)

You are developing a new mobile application and are considering storing user preferences in AWS.2w This would provide a more uniform cross-device experience to users using multiple mobile devices to access the application. The preference data for each user is estimated to be 50KB in size Additionally 5 million customers are expected to use the application on a regular basis. The solution needs to be cost-effective, highly available, scalable and secure, how would you design a solution to meet the above requirements?

A. Setup an RDS MySQL instance in 2 availability zones to store the user preference data. Deploy a public facing application on a server in front of the database to manage security and access credentials

B. Setup a DynamoDB table with an item for each user having the necessary attributes to hold the user preferences. The mobile application will query the user preferences directly from the DynamoDB table. Utilize STS. Web Identity Federation, and DynamoDB Fine Grained Access Control to authenticate and authorize access.

C. Setup an RDS MySQL instance with multiple read replicas in 2 availability zones to store the user preference data .The mobile application will query the user preferences from the read replicas. Leverage the MySQL user management and access privilege system to manage security and access credentials.

D. Store the user preference data in S3 Setup a DynamoDB table with an item for each user and an item attribute pointing to the user' S3 object. The mobile application will retrieve the S3 URL from DynamoDB and then access the S3 object directly utilize STS, Web identity Federation, and S3 ACLs to authenticate and authorize access.

Answer: B

Question No : 56 - (Topic 1)

You have recently joined a startup company building sensors to measure street noise and air quality in urban areas. The company has been running a pilot deployment of around 100 sensors for 3 months each sensor uploads 1KB of sensor data every minute to a backend hosted on AWS.

During the pilot, you measured a peak or 10 IOPS on the database, and you stored an average of 3GB of sensor data per month in the database.

The current deployment consists of a load-balanced auto scaled Ingestion layer using EC2 instances and a PostgreSQL RDS database with 500GB standard storage.

The pilot is considered a success and your CEO has managed to get the attention or some potential investors. The business plan requires a deployment of at least 100K sensors which needs to be supported by the backend. You also need to store sensor data for at least two years to be able to compare year over year Improvements.

To secure funding, you have to make sure that the platform meets these requirements and leaves room for further scaling. Which setup win meet the requirements?

A. Add an SQS queue to the ingestion layer to buffer writes to the RDS instance
B. Ingest data into a DynamoDB table and move old data to a Redshift cluster
C. Replace the RDS instance with a 6 node Redshift cluster with 96TB of storage
D. Keep the current architecture but upgrade RDS storage to 3TB and 10K provisioned IOPS

Answer: C

Question No : 57 - (Topic 1)

A large real-estate brokerage is exploring the option o(adding a cost-effective location based alert to their existing mobile application The application backend infrastructure currently runs on AWS Users who opt in to this service will receive alerts on their mobile device regarding real-estate otters in proximity to their location. For the alerts to be relevant delivery time needs to be in the low minute count the existing mobile app has 5 million users across the us Which one of the following architectural suggestions would you make to the customer?

A. The mobile application will submit its location to a web service endpoint utilizing Elastic Load Balancing and EC2 instances: DynamoDB will be used to store and retrieve relevant otters EC2 instances will communicate with mobile earners/device providers to push alerts back to mobile application.
B. Use AWS DirectConnect or VPN to establish connectivity with mobile carriers EC2 instances will receive the mobile applications ' location through carrier connection: ROS will be used to store and relevant relevant offers EC2 instances will communicate with mobile carriers to push alerts back to the mobile application
C. The mobile application will send device location using SQS. EC2 instances will retrieve the relevant others from DynamoDB AWS Mobile Push will be used to send offers to the mobile application
D. The mobile application will send device location using AWS Mobile Push EC2 instances will retrieve the relevant offers from DynamoDB EC2 instances will communicate with mobile carriers/device providers to push alerts back to the mobile application.

Answer: A

Question No : 58 - (Topic 1)

Your startup wants to implement an order fulfillment process for selling a personalized gadget that needs an average of 3-4 days to produce with some orders taking up to 6 months you expect 10 orders per day on your first day. 1000 orders per day after 6 months and 10,000 orders after 12 months.

Orders coming in are checked for consistency men dispatched to your manufacturing plant for production quality control packaging shipment and payment processing If the product does not meet the quality standards at any stage of the process employees may force the process to repeat a step Customers are notified via email about order status and any critical issues with their orders such as payment failure.

Your case architecture includes AWS Elastic Beanstalk for your website with an RDS MySQL instance for customer data and orders.

How can you implement the order fulfillment process while making sure that the emails are delivered reliably?

A. Add a business process management application to your Elastic Beanstalk app servers and re-use the ROS database for tracking order status use one of the Elastic Beanstalk instances to send emails to customers.
B. Use SWF with an Auto Scaling group of activity workers and a decider instance in another Auto Scaling group with min/max=1 Use the decider instance to send emails to customers.
C. Use SWF with an Auto Scaling group of activity workers and a decider instance in another Auto Scaling group with min/max=1 use SES to send emails to customers.
D. Use an SQS queue to manage all process tasks Use an Auto Scaling group of EC2 Instances that poll the tasks and execute them. Use SES to send emails to customers.

Answer: C

Question No : 59 - (Topic 1)

You are running a successful multitier web application on AWS and your marketing department has asked you to add a reporting tier to the application. The reporting tier will aggregate and publish status reports every 30 minutes from user-generated information that is being stored in your web application s database. You are currently running a Multi-

AZ RDS MySQL instance for the database tier. You also have implemented Elasticache as a database caching layer between the application tier and database tier. Please select the answer that will allow you to successfully implement the reporting tier with as little impact as possible to your database.

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

Answer: C

Explanation:

Explaination:

Amazon RDS allows you to use read replicas with Multi-AZ deployments. In Multi-AZ deployments for MySQL, Oracle, SQL Server, and PostgreSQL, the data in your primary DB Instance is synchronously replicated to to a standby instance in a different Availability Zone (AZ). Because of their synchronous replication, Multi-AZ deployments for these engines offer greater data durability benefits than do read replicas. (In all Amazon RDS for Aurora deployments, your data is automatically replicated across 3 Availability Zones.)
You can use Multi-AZ deployments and read replicas in conjunction to enjoy the complementary benefits of each. You can simply specify that a given Multi-AZ deployment is the source DB Instance for your Read replicas. That way you gain both the data durability and availability benefits of Multi-AZ deployments and the read scaling benefits of read replicas.
Note that for Multi-AZ deployments, you have the option to create your read replica in an AZ other than that of the primary and the standby for even more redundancy. You can identify the AZ corresponding to your standby by looking at the "Secondary Zone" field of your DB Instance in the AWS Management Console.

Question No : 60 - (Topic 1)

You are designing Internet connectivity for your VPC. The Web servers must be available on the Internet. The application must have a highly available architecture.

Which alternatives should you consider? (Choose 2 answers)

A. Configure a NAT instance in your VPC Create a default route via the NAT instance and associate it with all subnets Configure a DNS A record that points to the NAT instance public IP address.
B. Configure a CloudFront distribution and configure the origin to point to the private IP addresses of your Web servers Configure a Route53 CNAME record to your CloudFront distribution.
C. Place all your web servers behind ELB Configure a Route53 CNMIE to point to the ELB DNS name.
D. Assign EIPs to all web servers. Configure a Route53 record set with all EIPs. With health checks and DNS failover.
E. Configure ELB with an EIP Place all your Web servers behind ELB Configure a Route53 A record that points to the EIP.

Answer: C,D

Question No : 61 - (Topic 1)

You are designing an SSUTLS solution that requires HTTPS clients to be authenticated by the Web server using client certificate authentication. The solution must be resilient.

Which of the following options would you consider for configuring the web server infrastructure? (Choose 2 answers)

A. Configure ELB with TCP listeners on TCP/443. And place the Web servers behind it.
B. Configure your Web servers with EIPs. Place the Web servers in a Route53 Record Set and configure health checks against all Web servers.
C. Configure ELB with HTTPS listeners, and place the Web servers behind it.
D. Configure your web servers as the origins for a CloudFront distribution. Use custom SSL certificates on your CloudFront distribution.

Answer: A,B

Question No : 62 - (Topic 1)

Your firm has uploaded a large amount of aerial image data to S3 In the past, in your on-premises environment, you used a dedicated group of servers to oaten process this data and used Rabbit MQ - An open source messaging system to get job information to the servers. Once processed the data would go to tape and be shipped offsite. Your manager told you to stay with the current design, and leverage AWS archival storage and messaging services to minimize cost. Which is correct?

A. Use SQS for passing job messages use Cloud Watch alarms to terminate EC2 worker instances when they become idle. Once data is processed, change the storage class of the S3 objects to Reduced Redundancy Storage.
B. Setup Auto-Scaled workers triggered by queue depth that use spot instances to process messages in SOS Once data is processed,
C. Change the storage class of the S3 objects to Reduced Redundancy Storage. Setup Auto-Scaled workers triggered by queue depth that use spot instances to process messages in SQS Once data is processed, change the storage class of the S3 objects to Glacier.
D. Use SNS to pass job messages use Cloud Watch alarms to terminate spot worker instances when they become idle. Once data is processed, change the storage class of the S3 object to Glacier.

Answer: D

Question No : 63 - (Topic 1)

You are designing an intrusion detection prevention (IDS/IPS) solution for a customer web application in a single VPC. You are considering the options for implementing IOS IPS protection for traffic coming from the Internet.

Which of the following options would you consider? (Choose 2 answers)

A. Implement IDS/IPS agents on each Instance running In VPC
B. Configure an instance in each subnet to switch its network interface card to promiscuous mode and analyze network traffic.
C. Implement Elastic Load Balancing with SSL listeners In front of the web applications
D. Implement a reverse proxy layer in front of web servers and configure IDS/IPS agents on each reverse proxy server.

Answer: B,D

Question No : 64 - (Topic 1)

An AWS customer is deploying an application mat is composed of an AutoScaling group of EC2 Instances.

The customers security policy requires that every outbound connection from these instances to any other service within the customers

Virtual Private Cloud must be authenticated using a unique x 509 certificate that contains the specific instance-id.

In addition an x 509 certificates must Designed by the customer's Key management service in order to be trusted for authentication.

Which of the following configurations will support these requirements?

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

Answer: A

Question No : 65 - (Topic 1)

A newspaper organization has a on-premises application which allows the public to search its back catalogue and retrieve individual newspaper pages via a website written in Java They have scanned the old newspapers into JPEGs (approx 17TB) and used Optical Character Recognition (OCR) to populate a commercial search product. The hosting platform and software are now end of life and the organization wants to migrate Its archive to AWS and produce a cost efficient architecture and still be designed for availability and durability. Which is the most appropriate?

A. Use S3 with reduced redundancy lo store and serve the scanned files, install the commercial search application on EC2 Instances and configure with auto-scaling and an Elastic Load Balancer.
B. Model the environment using CloudFormation use an EC2 instance running Apache webserver and an open source search application, stripe multiple standard EBS volumes together to store the JPEGs and search index.
C. Use S3 with standard redundancy to store and serve the scanned files, use CloudSearch for query processing, and use Elastic Beanstalk to host the website across multiple availability zones.

D. Use a single-AZ RDS MySQL instance lo store the search index 33d the JPEG images use an EC2 instance to serve the website and translate user queries into SQL.
E. Use a CloudFront download distribution to serve the JPEGs to the end users and Install the current commercial search product, along with a Java Container Tor the website on EC2 instances and use Route53 with DNS round-robin.

Answer: C

Explanation:

Explaination:

There is no such thing as "Most appropriate" without knowing all your goals. I find your scenarios very fuzzy, since you can obviously mix-n-match between them. I think you should decide by layers instead:

Load Balancer Layer: ELB or just DNS, or roll-your-own. (Using DNS+EIPs is slightly cheaper, but less reliable than ELB.)

Storage Layer for 17TB of Images: This is the perfect use case for S3. Off-load all the web requests directly to the relevant JPEGs in S3. Your EC2 boxes just generate links to them.

> If your app already serves it's own images (not links to images), you might start with EFS. But more than likely, you can just setup a web server to re-write or re-direct all JPEG links to S3 pretty easily.
> If you use S3, don't serve directly from the bucket - Serve via a CNAME in domain you control. That way, you can switch in CloudFront easily.
> EBS will be way more expensive, and you'll need 2x the drives if you need 2 boxes. Yuck.
> Consider a smaller storage format. For example, JPEG200 or WebP or other tools might make for smaller images. There is also the DejaVu format from a while back.

Cache Layer: Adding CloudFront in front of S3 will help people on the other side of the world -- well, possibly. Typical archives follow a power law. The long tail of requests means that most JPEGs won't be requested enough to be in the cache. So you are only speeding up the most popular objects. You can always wait, and switch in CF later after you know your costs better. (In some cases, it can actually lower costs.)
You can also put CloudFront in front of your app, since your archive search results should be fairly static. This will also allow you to run with a smaller instance type, since CF will handle much of the load if you do it right.

Database Layer: A few options:

> Use whatever your current server does for now, and replace with something else down the road. Don't under-estimate this approach, sometimes it's better to start now and optimize later.
> Use RDS to run MySQL/Postgres
> I'm not as familiar with ElasticSearch / Cloudsearch, but obviously Cloudsearch will be less maintenance+setup.

App Layer:

> When creating the app layer from scratch, consider CloudFormation and/or OpsWorks. It's extra stuff to learn, but helps down the road.
> Java+Tomcat is right up the alley of ElasticBeanstalk. (Basically EC2 + Autoscale + ELB).

Preventing Abuse: When you put something in a public S3 bucket, people will hot-link it from their web pages. If you want to prevent that, your app on the EC2 box can generate signed links to S3 that expire in a few hours. Now everyone will be forced to go thru the app, and the app can apply rate limiting, etc.

Saving money: If you don't mind having downtime:

run everything in one AZ (both DBs and EC2s). You can always add servers and AZs down the road, as long as it's architected to be stateless. In fact, you should use multiple regions if you want it to be really robust.

use Reduced Redundancy in S3 to save a few hundred bucks per month (Someone will have to "go fix it" every time it breaks, including having an off-line copy to repair S3.)

Buy Reserved Instances on your EC2 boxes to make them cheaper. (Start with the RI market and buy a partially used one to get started.) It's just a coupon saying "if you run this type of box in this AZ, you will save on the per-hour costs." You can get 1/2 to 1/3 off easily.

Rewrite the application to use less memory and CPU - that way you can run on fewer/smaller boxes. (May or may not be worth the investment.)

If your app will be used very infrequently, you will save a lot of money by using Lambda. I'd be worried that it would be quite slow if you tried to run a Java application on it though..

We're missing some information like load, latency expectations from search, indexing speed, size of the search index, etc. But with what you've given us, I would go with S3 as the storage for the files (S3 rocks. It is really, really awesome). If you're stuck with the commercial search application, then on EC2 instances with autoscaling and an ELB. If you are allowed an alternative search engine, Elasticsearch is probably your best bet. I'd run it on EC2 instead of the AWS Elasticsearch service, as IMHO it's not ready yet. Don't autoscale Elasticsearch automatically though, it'll cause all sorts of issues. I have zero experience with CloudSearch so ic an't comment on that. Regardless of which option, I'd use CloudFormation for all of it.

Question No : 66 - (Topic 1)

To serve Web traffic for a popular product your chief financial officer and IT director have purchased 10 ml large heavy utilization Reserved Instances (RIs) evenly spread across two availability zones: Route 53 is used to deliver the traffic to an Elastic Load Balancer (ELB). After several months, the product grows even more popular and you need additional capacity As a result, your company purchases two C3.2xlarge medium utilization Ris You register the two c3 2xlarge instances with your ELB and quickly find that the ml large instances are at 100% of capacity and the c3 2xlarge instances have significant capacity that's unused Which option is the most cost effective and uses EC2 capacity most effectively?

A. Use a separate ELB for each instance type and distribute load to ELBs with Route 53 weighted round robin
B. Configure Autoscaning group and Launch Configuration with ELB to add up to 10 more on-demand mi large instances when triggered by Cloudwatch shut off c3 2xiarge instances
C. Route traffic to EC2 ml large and c3 2xlarge instances directly using Route 53 latency based routing and health checks shut off ELB
D. Configure ELB with two c3 2xiarge Instances and use on-demand Autoscailng group for up to two additional c3.2xlarge instances Shut on mi .large instances.

Answer: D

Question No : 67 - (Topic 1)

You are migrating a legacy client-server application to AWS. The application responds to a specific DNS domain (e.g. www.example.com) and has a 2-tier architecture, with multiple application servers and a database server. Remote clients use TCP to connect to the application servers. The application servers need to know the IP address of the clients in order to function properly and are currently taking that information from the TCP socket. A Multi-AZ RDS MySQL instance will be used for the database.

During the migration you can change the application code, but you have to file a change request.

How would you implement the architecture on AWS in order to maximize scalability and high availability?

A. File a change request to implement Alias Resource support in the application. Use Route 53 Alias Resource Record to distribute load on two application servers in different AZs.
B. File a change request to implement Latency Based Routing support in the application. Use Route 53 with Latency Based Routing enabled to distribute load on two application servers in different AZs.
C. File a change request to implement Cross-Zone support in the application. Use an ELB with a TCP Listener and Cross-Zone Load Balancing enabled, two application servers in different AZs.
D. File a change request to implement Proxy Protocol support in the application. Use an ELB with a TCP Listener and Proxy Protocol enabled to distribute load on two application servers in different AZs.

Answer: D

Question No : 68 - (Topic 1)

You've been brought in as solutions architect to assist an enterprise customer with their migration of an e-commerce platform to Amazon Virtual Private Cloud (VPC) The previous architect has already deployed a 3-tier VPC.

The configuration is as follows:

VPC: vpc-2f8bc447

IGW: igw-2d8bc445

NACL: ad-208bc448

Subnets and Route Tables:

Web servers: subnet-258bc44d

Application servers: subnet-248bc44c

Database servers: subnet-9189c6f9

Route Tables:

rrb-218bc449

rtb-238bc44b

Associations:

subnet-258bc44d : rtb-218bc449

subnet-248bc44c : rtb-238bc44b

subnet-9189c6f9 : rtb-238bc44b

You are now ready to begin deploying EC2 instances into the VPC Web servers must have direct access to the internet Application and database servers cannot have direct access to the internet.

Which configuration below will allow you the ability to remotely administer your application and database servers, as well as allow these servers to retrieve updates from the Internet?

A. Create a bastion and NAT instance in subnet-258bc44d, and add a route from rtb-238bc44b to the NAT instance.
B. B. Add a route from rtb-238bc44b to igw-2d8bc445 and add a bastion and NAT instance within subnet-248bc44c.
C. C. Create a bastion and NAT instance in subnet-248bc44c, and add a route from rtb-238bc44b to subnet-258bc44d.
D. D. Create a bastion and NAT instance in subnet-258bc44d, add a route from rtb-238bc44b to Igw-2d8bc445, and a new NACL that allows access between subnet-258bc44d and subnet-248bc44c.

Answer: A

Question No : 69 - (Topic 1)

You've been hired to enhance the overall security posture for a very large e-commerce site They have a well architected multi-tier application running in a VPC that uses ELBs in front of both the web and the app tier with static assets served directly from S3 They are using a combination of RDS and DynamoOB for their dynamic data and then archiving nightly into S3 for further processing with EMR They are concerned because they found questionable log entries and suspect someone is attempting to gain unauthorized access.

Which approach provides a cost effective scalable mitigation to this kind of attack?

A. Recommend that they lease space at a DirectConnect partner location and establish a 1G DirectConnect connection to theirvPC they would then establish Internet connectivity into their space, filter the traffic in hardware Web Application Firewall (WAF). And then pass the traffic through the DirectConnect connection into their application running in their VPC.
B. Add previously identified hostile source IPs as an explicit INBOUND DENY NACL to the web tier subnet.
C. Add a WAF tier by creating a new ELB and an AutoScaling group of EC2 Instances running a host-based WAF They would redirect Route 53 to resolve to the new WAF tier ELB The WAF tier would their pass the traffic to the current web tier The web tier Security Groups would be updated to only allow traffic from the WAF tier Security Group
D. Remove all but TLS 1 2 from the web tier ELB and enable Advanced Protocol Filtering This will enable the ELB itself to perform WAF functionality.

Answer: C

Question No : 70 - (Topic 1)

Your system recently experienced down time during the troubleshooting process. You found that a new administrator mistakenly terminated several production EC2 instances.

Which of the following strategies will help prevent a similar situation in the future?

The administrator still must be able to:

- launch, start stop, and terminate development resources.

- launch and start production instances.

A. Create an IAM user, which is not allowed to terminate instances by leveraging production EC2 termination protection.
B. Leverage resource based tagging along with an IAM user, which can prevent specific users from terminating production EC2 resources.
C. Leverage EC2 termination protection and multi-factor authentication, which together require users to authenticate before terminating EC2 instances
D. Create an IAM user and apply an IAM role which prevents users from terminating production EC2 instances.

Answer: B

Explanation:

Working with volumes

When an API action requires a caller to specify multiple resources, you must create a policy statement that allows users to access all required resources. If you need to use a Condition element with one or more of these resources, you must create multiple statements as shown in this example.

The following policy allows users to attach volumes with the tag "volume_user=iam-user-name" to instances with the tag "department=dev", and to detach those volumes from those instances. If you attach this policy to an IAM group, the aws:username policy variable gives each IAM user in the group permission to attach or detach volumes from the instances with a tag named volume_user that has his or her IAM user name as a value.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Allow",
"Action": [
"ec2:AttachVolume",
"ec2:DetachVolume"
],
"Resource": "arn:aws:ec2:us-east-1:123456789012:instance/*",
```

```
"Condition": {
"StringEquals": {
"ec2:ResourceTag/department": "dev"
}
}
},
{
"Effect": "Allow",
"Action": [
"ec2:AttachVolume",
"ec2:DetachVolume"
],
"Resource": "arn:aws:ec2:us-east-1:123456789012:volume/*",
"Condition": {
"StringEquals": {
"ec2:ResourceTag/volume_user": "${aws:username}"
}
}
}
]
}
```

Launching instances (RunInstances)

The RunInstances API action launches one or more instances. RunInstances requires an AMI and creates an instance; and users can specify a key pair and security group in the request. Launching into EC2-VPC requires a subnet, and creates a network interface. Launching from an Amazon EBS-backed AMI creates a volume. Therefore, the user must have permission to use these Amazon EC2 resources. The caller can also configure the instance using optional parameters to RunInstances, such as the instance type and a subnet. You can create a policy statement that requires users to specify an optional parameter, or restricts users to particular values for a parameter. The examples in this section demonstrate some of the many possible ways that you can control the configuration of an instance that a user can launch.

Note that by default, users don't have permission to describe, start, stop, or terminate the resulting instances. One way to grant the users permission to manage the resulting instances is to create a specific tag for each instance, and then create a statement that enables them to manage instances with that tag. For more information, see 2: Working with instances.

a. AMI

The following policy allows users to launch instances using only the AMIs that have the

specified tag, "department=dev", associated with them. The users can't launch instances using other AMIs because the Condition element of the first statement requires that users specify an AMI that has this tag. The users also can't launch into a subnet, as the policy does not grant permissions for the subnet and network interface resources. They can, however, launch into EC2-Classic. The second statement uses a wildcard to enable users to create instance resources, and requires users to specify the key pair project_keypair and the security group sg-1a2b3c4d. Users are still able to launch instances without a key pair.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-*"
],
"Condition": {
"StringEquals": {
"ec2:ResourceTag/department": "dev"
}
}
},
{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:key-pair/project_keypair",
"arn:aws:ec2:region:account:security-group/sg-1a2b3c4d"
]
}
]
}
```

Alternatively, the following policy allows users to launch instances using only the specified AMIs, ami-9e1670f7 and ami-45cf5c3c. The users can't launch an instance using other AMIs (unless another statement grants the users permission to do so), and the users can't launch an instance into a subnet.

```
{
"Version": "2012-10-17",
"Statement": [{
```

```
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-9e1670f7",
"arn:aws:ec2:region::image/ami-45cf5c3c",
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:key-pair/*",
"arn:aws:ec2:region:account:security-group/*"
]
}
]
}
```

Alternatively, the following policy allows users to launch instances from all AMIs owned by Amazon. The Condition element of the first statement tests whether ec2:Owner is amazon. The users can't launch an instance using other AMIs (unless another statement grants the users permission to do so). The users are able to launch an instance into a subnet.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-*"
],
"Condition": {
"StringEquals": {
"ec2:Owner": "amazon"
}
}
},
{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:subnet/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:network-interface/*",
"arn:aws:ec2:region:account:key-pair/*",
```

"arn:aws:ec2:region:account:security-group/*"
]
}
]
}

b. Instance type

The following policy allows users to launch instances using only the t2.micro or t2.small instance type, which you might do to control costs. The users can't launch larger instances because the Condition element of the first statement tests whether ec2:InstanceType is either t2.micro or t2.small.

{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region:account:instance/*"
],
"Condition": {
"StringEquals": {
"ec2:InstanceType": ["t2.micro", "t2.small"]
}
}
},
{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-*",
"arn:aws:ec2:region:account:subnet/*",
"arn:aws:ec2:region:account:network-interface/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:key-pair/*",
"arn:aws:ec2:region:account:security-group/*"
]
}
]
}

Alternatively, you can create a policy that denies users permission to launch any instances except t2.micro and t2.small instance types.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Deny",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region:account:instance/*"
],
"Condition": {
"StringNotEquals": {
"ec2:InstanceType": ["t2.micro", "t2.small"]
}
}
},
{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-*",
"arn:aws:ec2:region:account:network-interface/*",
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:subnet/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:key-pair/*",
"arn:aws:ec2:region:account:security-group/*"
]
}
]
}
```

c. Subnet

The following policy allows users to launch instances using only the specified subnet, subnet-12345678. The group can't launch instances into any another subnet (unless another statement grants the users permission to do so). Users are still able to launch instances into EC2-Classic.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
```

```
"arn:aws:ec2:region:account:subnet/subnet-12345678",
"arn:aws:ec2:region:account:network-interface/*",
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region::image/ami-*",
"arn:aws:ec2:region:account:key-pair/*",
"arn:aws:ec2:region:account:security-group/*"
]
}
]
}
```

Alternatively, you could create a policy that denies users permission to launch an instance into any other subnet. The statement does this by denying permission to create a network interface, except where subnet subnet-12345678 is specified. This denial overrides any other policies that are created to allow launching instances into other subnets. Users are still able to launch instances into EC2-Classic.

```
{
"Version": "2012-10-17",
"Statement": [{
"Effect": "Deny",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region:account:network-interface/*"
],
"Condition": {
"ArnNotEquals": {
"ec2:Subnet": "arn:aws:ec2:region:account:subnet/subnet-12345678"
}
}
},
{
"Effect": "Allow",
"Action": "ec2:RunInstances",
"Resource": [
"arn:aws:ec2:region::image/ami-*",
"arn:aws:ec2:region:account:network-interface/*",
"arn:aws:ec2:region:account:instance/*",
"arn:aws:ec2:region:account:subnet/*",
"arn:aws:ec2:region:account:volume/*",
"arn:aws:ec2:region:account:key-pair/*",
```

"arn:aws:ec2:region:account:security-group/*"
]
}
]
}

Question No : 71 - (Topic 1)

You are designing a photo sharing mobile app the application will store all pictures in a single Amazon S3 bucket.

Users will upload pictures from their mobile device directly to Amazon S3 and will be able to view and download their own pictures directly from Amazon S3.

You want to configure security to handle potentially millions of users in the most secure manner possible. What should your server-side application do when a new user registers on the photo-sharing mobile application?

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

Answer: B

Question No : 72 - (Topic 1)

Your customer wishes to deploy an enterprise application to AWS which will consist of several web servers, several application servers and a small (50GB) Oracle database information is stored, both in the database and the file systems of the various servers. The backup system must support database recovery whole server and whole disk restores, and individual file restores with a recovery time of no more than two hours. They have chosen to use RDS Oracle as the database

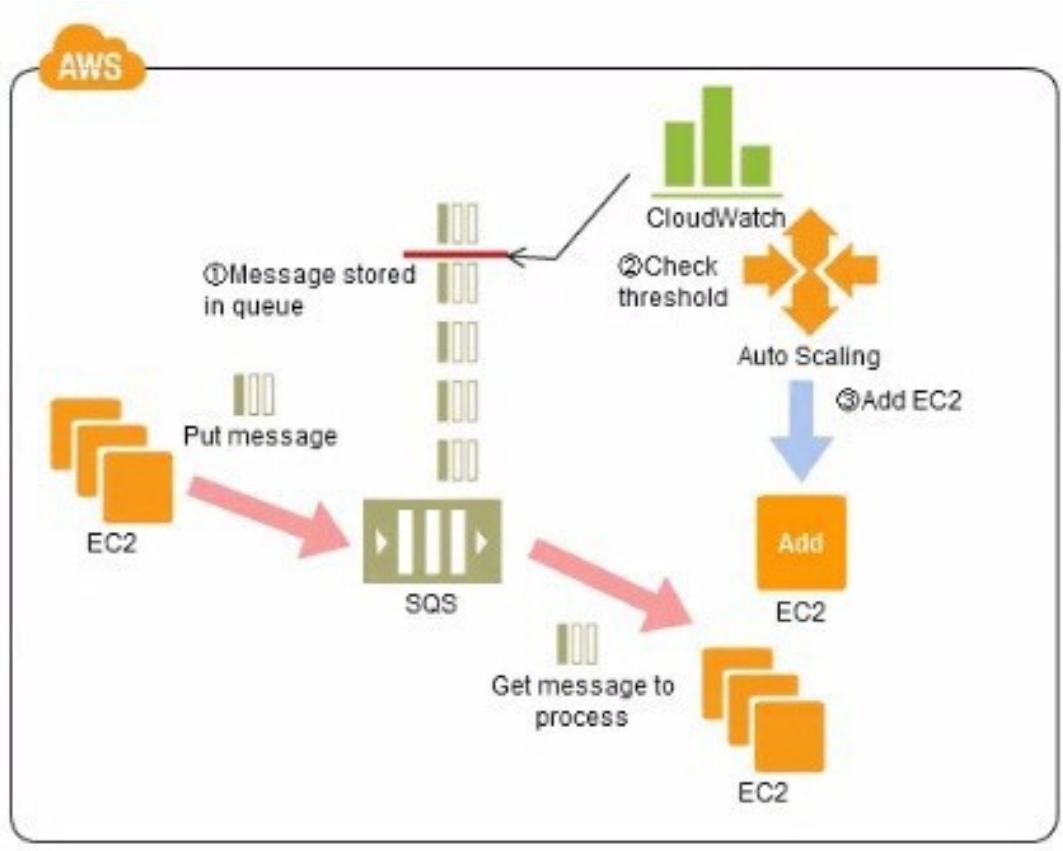
Which backup architecture will meet these requirements?

A. Backup RDS using automated daily DB backups Backup the EC2 instances using AMIs and supplement with file-level backup to S3 using traditional enterprise backup software to provide file level restore
B. Backup RDS using a Multi-AZ Deployment Backup the EC2 instances using Amis, and supplement by copying file system data to S3 to provide file level restore.
C. Backup RDS using automated daily DB backups Backup the EC2 instances using EBS snapshots and supplement with file-level backups to Amazon Glacier using traditional enterprise backup software to provide file level restore
D. Backup RDS database to S3 using Oracle RMAN Backup the EC2 instances using Amis, and supplement with EBS snapshots for individual volume restore.

Answer: A

Explanation: Point-In-Time RecoveryIn addition to the daily automated backup, Amazon RDS archives database change logs. This enables you to recover your database to any point in time during the backup retention period, up to the last five minutes of database usage.
Amazon RDS stores multiple copies of your data, but for Single-AZ DB instances these copies are stored in a single availability zone. If for any reason a Single-AZ DB instance becomes unusable, you can use point-in-time recovery to launch a new DB instance with the latest restorable data. For more information on working with point-in-time recovery, go to Restoring a DB Instance to a Specified Time.
Note
Multi-AZ deployments store copies of your data in different Availability Zones for greater levels of data durability. For more information on Multi-AZ deployments, see High Availability (Multi-AZ).

Question No : 73 - (Topic 1)



Refer to the architecture diagram above of a batch processing solution using Simple Queue Service (SQS) to set up a message queue between EC2 instances which are used as batch processors Cloud Watch monitors the number of Job requests (queued messages) and an Auto Scaling group adds or deletes batch servers automatically based on parameters set in Cloud Watch alarms. You can use this architecture to implement which of the following features in a cost effective and efficient manner?

A. Reduce the overall lime for executing jobs through parallel processing by allowing a busy EC2 instance that receives a message to pass it to the next instance in a daisy-chain setup.
B. Implement fault tolerance against EC2 instance failure since messages would remain in SQS and worn can continue with recovery of EC2 instances implement fault tolerance against SQS failure by backing up messages to S3.
C. Implement message passing between EC2 instances within a batch by exchanging messages through SQS.
D. Coordinate number of EC2 instances with number of job requests automatically thus Improving cost effectiveness.
E. Handle high priority jobs before lower priority jobs by assigning a priority metadata field to SQS messages.

Answer: D
Reference:

There are cases where a large number of batch jobs may need processing, and where the

the jobs may need to be re-prioritized.

For example, one such case is one where there are differences between different levels of services for unpaid users versus subscriber users (such as the time until publication) in services enabling, for example, presentation files to be uploaded for publication from a web browser. When the user uploads a presentation file, the conversion processes, for example, for publication are performed as batch processes on the system side, and the file is published after the conversion. Is it then necessary to be able to assign the level of priority to the batch processes for each type of subscriber.

Explanation of the Cloud Solution/Pattern A queue is used in controlling batch jobs. The queue need only be provided with priority numbers. Job requests are controlled by the queue, and the job requests in the queue are processed by a batch server. In Cloud computing, a highly reliable queue is provided as a service, which you can use to structure a highly reliable batch system with ease. You may prepare multiple queues depending on priority levels, with job requests put into the queues depending on their priority levels, to apply prioritization to batch processes. The performance (number) of batch servers corresponding to a queue must be in accordance with the priority level thereof.

Implementation In AWS, the queue service is the Simple Queue Service (SQS). Multiple SQS queues may be prepared to prepare queues for individual priority levels (with a priority queue and a secondary queue). Moreover, you may also use the message Delayed Send function to delay process execution.

Use SQS to prepare multiple queues for the individual priority levels.

Place those processes to be executed immediately (job requests) in the high priority queue.

Prepare numbers of batch servers, for processing the job requests of the queues, depending on the priority levels.

Queues have a message "Delayed Send" function. You can use this to delay the time for starting a process.

Configuration 2XNdewVsgellO3x8-96155.png

Benefits You can increase or decrease the number of servers for processing jobs to change automatically the processing speeds of the priority queues and secondary queues.

You can handle performance and service requirements through merely increasing or decreasing the number of EC2 instances used in job processing.

Even if an EC2 were to fail, the messages (jobs) would remain in the queue service, enabling processing to be continued immediately upon recovery of the EC2 instance, producing a system that is robust to failure.

Cautions Depending on the balance between the number of EC2 instances for performing the processes and the number of messages that are queued, there may be cases where processing in the secondary queue may be completed first, so you need to monitor the

processing speeds in the primary queue and the secondary queue.

Question No : 74 - (Topic 1)

You would like to create a mirror image of your production environment in another region for disaster recovery purposes. Which of the following AWS resources do not need to be recreated in the second region? (Choose 2 answers)

A. Route 53 Record Sets
B. IM1 Roles
C. Elastic IP Addresses (EIP)
D. EC2 Key Pairs
E. Launch configurations
F. Security Groups

Answer: A,C
Reference: http://ltech.com/wp-content/themes/optimize/download/AWS_Disaster_Recovery.pdf (page 6)

Question No : 75 - (Topic 1)

You deployed your company website using Elastic Beanstalk and you enabled log file rotation to S3. An Elastic Map Reduce job is periodically analyzing the logs on S3 to build a usage dashboard that you share with your CIO.

You recently improved overall performance of the website using Cloud Front for dynamic content delivery and your website as the origin.

After this architectural change, the usage dashboard shows that the traffic on your website dropped by an order of magnitude. How do you fix your usage dashboard'?

A. Enable Cloud Front to deliver access logs to S3 and use them as input of the Elastic Map Reduce job.
B. Turn on Cloud Trail and use trail log tiles on S3 as input of the Elastic Map Reduce job

C. Change your log collection process to use Cloud Watch ELB metrics as input of the Elastic Map Reduce job
D. Use Elastic Beanstalk "Rebuild Environment" option to update log delivery to the Elastic Map Reduce job.
E. Use Elastic Beanstalk 'Restart App server(s)" option to update log delivery to the Elastic Map Reduce job.

Answer: D

Question No : 76 - (Topic 1)

You require the ability to analyze a customer's clickstream data on a website so they can do behavioral analysis. Your customer needs to know what sequence of pages and ads their customer clicked on. This data will be used in real time to modify the page layouts as customers click through the site to increase stickiness and advertising click-through. Which option meets the requirements for captioning and analyzing this data?

A. Log clicks in weblogs by URL store to Amazon S3, and then analyze with Elastic MapReduce
B. Push web clicks by session to Amazon Kinesis and analyze behavior using Kinesis workers
C. Write click events directly to Amazon Redshift and then analyze with SQL
D. Publish web clicks by session to an Amazon SQS queue men periodically drain these events to Amazon RDS and analyze with sol

Answer: B
Reference: http://www.slideshare.net/AmazonWebServices/aws-webcast-introduction-to-amazon-kinesis

Question No : 77 - (Topic 1)

You are designing a social media site and are considering how to mitigate distributed denial-of-service (DDoS) attacks. Which of the below are viable mitigation techniques? (Choose 3 answers)

A. Add multiple elastic network interfaces (ENIs) to each EC2 instance to increase the network bandwidth.
B. Use dedicated instances to ensure that each instance has the maximum performance

possible.

C. Use an Amazon CloudFront distribution for both static and dynamic content.

D. Use an Elastic Load Balancer with auto scaling groups at the web. App and Amazon Relational Database Service (RDS) tiers

E. Add alert Amazon CloudWatch to look for high Network in and CPU utilization.

F. Create processes and capabilities to quickly add and remove rules to the instance OS firewall.

Answer: C,E,F

Question No : 78 - (Topic 1)

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

Which two approaches can satisfy these objectives? (Choose 2 answers)

A. Develop an identity broker that authenticates against IAM security Token service to assume a IAM role in order to get temporary AWS security credentials The application calls the identity broker to get AWS temporary security credentials with access to the appropriate S3 bucket.

B. The application authenticates against LDAP and retrieves the name of an IAM role associated with the user. The application then calls the IAM Security Token Service to assume that IAM role The application can use the temporary credentials to access the appropriate S3 bucket.

C. Develop an identity broker that authenticates against LDAP and then calls IAM Security Token Service to get IAM federated user credentials The application calls the identity broker to get IAM federated user credentials with access to the appropriate S3 bucket.

D. The application authenticates against LDAP the application then calls the AWS identity and Access Management (IAM) Security service to log in to IAM using the LDAP credentials the application can use the IAM temporary credentials to access the appropriate S3 bucket.

E. The application authenticates against IAM Security Token Service using the LDAP credentials the application uses those temporary AWS security credentials to access the appropriate S3 bucket.

Answer: B,C

Question No : 79 - (Topic 1)

You have a periodic Image analysis application that gets some files In Input analyzes them and tor each file writes some data in output to a ten file the number of files in input per day is high and concentrated in a few hours of the day.

Currently you have a server on EC2 with a large EBS volume that hosts the input data and the results it takes almost 20 hours per day to complete the process

What services could be used to reduce the elaboration time and improve the availability of the solution?

A. S3 to store I/O files. SQS to distribute elaboration commands to a group of hosts working in parallel. Auto scaling to dynamically size the group of hosts depending on the length of the SQS queue
B. EBS with Provisioned IOPS (PIOPS) to store I/O files. SNS to distribute elaboration commands to a group of hosts working in parallel Auto Scaling to dynamically size the group of hosts depending on the number of SNS notifications
C. S3 to store I/O files, SNS to distribute evaporation commands to a group of hosts working in parallel. Auto scaling to dynamically size the group of hosts depending on the number of SNS notifications
D. EBS with Provisioned IOPS (PIOPS) to store I/O files SQS to distribute elaboration commands to a group of hosts working in parallel Auto Scaling to dynamically size the group ot hosts depending on the length of the SQS queue.

Answer: D

Explanation: Explaination:
Amazon EBS allows you to create storage volumes and attach them to Amazon EC2 instances. Once attached, you can create a file system on top of these volumes, run a database, or use them in any other way you would use a block device. Amazon EBS volumes are placed in a specific Availability Zone, where they are automatically replicated to protect you from the failure of a single component.
Amazon EBS provides three volume types: General Purpose (SSD), Provisioned IOPS (SSD), and Magnetic. The three volume types differ in performance characteristics and cost, so you can choose the right storage performance and price for the needs of your applications. All EBS volume types offer the same durable snapshot capabilities and are designed for 99.999% availability.

Question No : 80 - (Topic 1)

You are tasked with moving a legacy application from a virtual machine running Inside your datacenter to an Amazon VPC Unfortunately this app requires access to a number of on-premises services and no one who configured the app still works for your company. Even worse there's no documentation for it. What will allow the application running inside the VPC to reach back and access its internal dependencies without being reconfigured? (Choose 3 answers)

A. An AWS Direct Connect link between the VPC and the network housing the internal services.
B. An Internet Gateway to allow a VPN connection.
C. An Elastic IP address on the VPC instance
D. An IP address space that does not conflict with the one on-premises
E. Entries in Amazon Route 53 that allow the Instance to resolve its dependencies' IP addresses
F. A VM Import of the current virtual machine

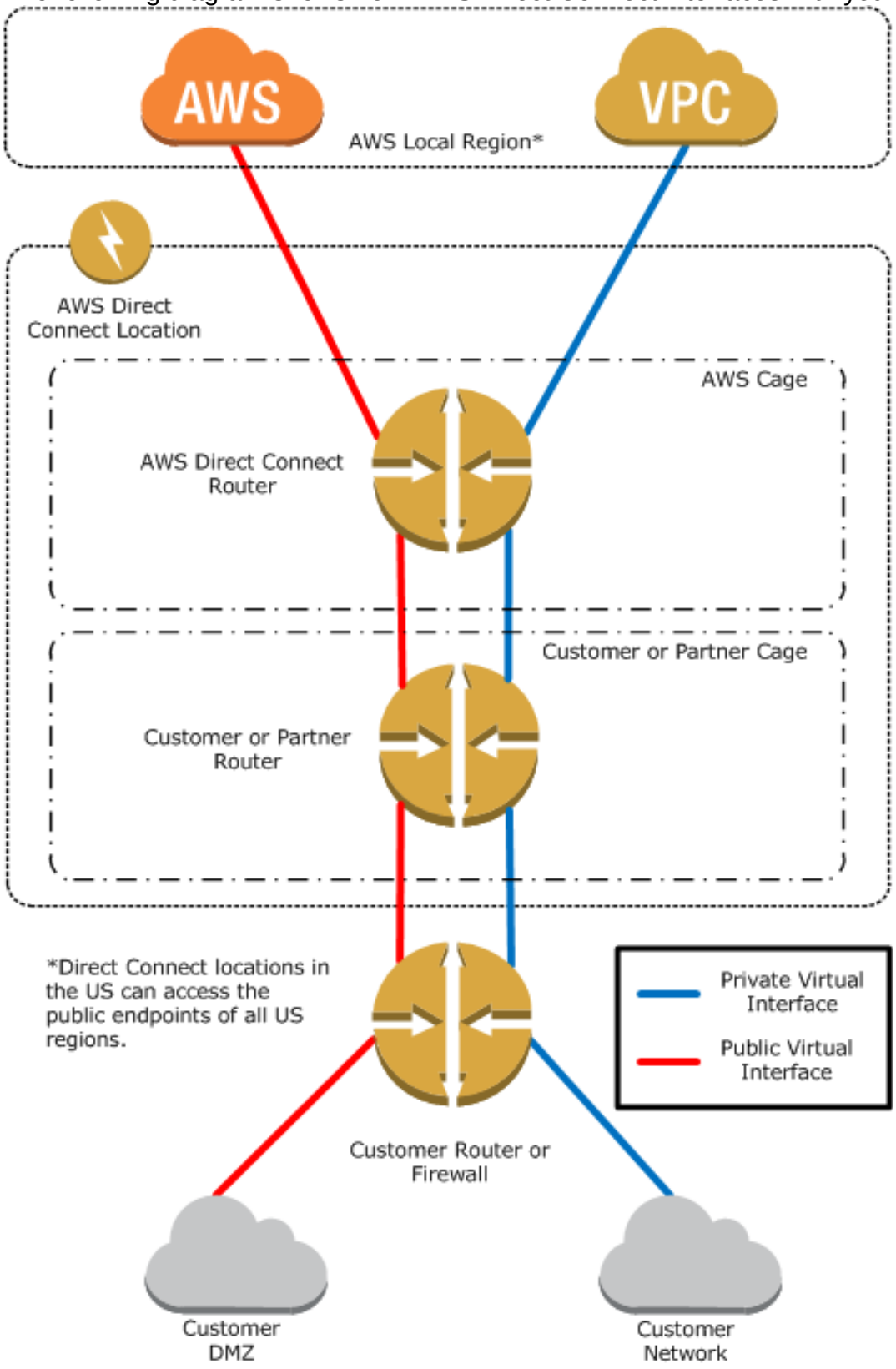
Answer: A,D,F

Explanation: AWS Direct Connect AWS Direct Connect makes it easy to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your datacenter, office, or colocation environment, which in many cases can reduce your network costs, increase bandwidth throughput, and provide a more consistent network experience than Internet-based connections.
AWS Direct Connect lets you establish a dedicated network connection between your network and one of the AWS Direct Connect locations. Using industry standard 802.1q VLANs, this dedicated connection can be partitioned into multiple virtual interfaces. This allows you to use the same connection to access public resources such as objects stored in Amazon S3 using public IP address space, and private resources such as Amazon EC2 instances running within an Amazon Virtual Private Cloud (VPC) using private IP space, while maintaining network separation between the public and private environments. Virtual interfaces can be reconfigured at any time to meet your changing needs.

What is AWS Direct Connect?AWS Direct Connect links your internal network to an AWS Direct Connect location over a standard 1 gigabit or 10 gigabit Ethernet fiber-optic cable. One end of the cable is connected to your router, the other to an AWS Direct Connect router. With this connection in place, you can create virtual interfaces directly to the AWS cloud (for example, to Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Simple Storage Service (Amazon S3)) and to Amazon Virtual Private Cloud (Amazon VPC), bypassing Internet service providers in your network path. An AWS Direct Connect location provides access to Amazon Web Services in the region it is associated with, as well as access to other US regions. For example, you can provision a single connection to any AWS Direct Connect location in the US and use it to access public AWS services in all US

Regions and AWS GovCloud (US).

The following diagram shows how AWS Direct Connect interfaces with your network.



AWS Direct Connect

RequirementsTo use AWS Direct Connect, your network must meet one of the following conditions:

Your network is colocated with an existing AWS Direct Connect location. For more

information on available AWS Direct Connect locations, go to http://aws.amazon.com/directconnect/.

You are working with an AWS Direct Connect partner who is a member of the AWS Partner Network (APN). For a list of AWS Direct Connect partners who can help you connect, go to http://aws.amazon.com/directconnect.

You are working with an independent service provider to connect to AWS Direct Connect.

In addition, your network must meet the following conditions:

Connections to AWS Direct Connect require single mode fiber, 1000BASE-LX (1310nm) for 1 gigabit Ethernet, or 10GBASE-LR (1310nm) for 10 gigabit Ethernet. Auto Negotiation for the port must be disabled. You must support 802.1Q VLANs across these connections.

Your network must support Border Gateway Protocol (BGP) and BGP MD5 authentication. Optionally, you may configure Bidirectional Forwarding Detection (BFD).

To connect to Amazon Virtual Private Cloud (Amazon VPC), you must first do the following:

Provide a private Autonomous System Number (ASN). Amazon allocates a private IP address in the 169.x.x.x range to you.

Create a virtual private gateway and attach it to your VPC. For more information about creating a virtual private gateway, see Adding a Hardware Virtual Private Gateway to Your VPC in the Amazon VPC User Guide.

To connect to public AWS products such as Amazon EC2 and Amazon S3, you need to provide the following:

A public ASN that you own (preferred) or a private ASN.

Public IP addresses (/31) (that is, one for each end of the BGP session) for each BGP session. If you do not have public IP addresses to assign to this connection, log on to AWS and then open a ticket with AWS Support.

The public routes that you will advertise over BGP.

Topic 2, Exam B

Question No : 81 - (Topic 2)

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

A. the checks may still be in progress on the volume
B. the check has passed
C. the check has failed

Answer: A

Question No : 82 - (Topic 2)

What does Amazon SWF stand for?

A. Simple Web Flow
B. Simple Work Flow
C. Simple Wireless Forms
D. Simple Web Form

Answer: B

Question No : 83 - (Topic 2)

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

A. secondary
B. backup
C. stand by
D. primary

Answer: D

Question No : 84 - (Topic 2)

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

A. DeleteOnTermination
B. RemoveOnDeletion
C. RemoveOnTermination
D. TerminateOnDeletion

Answer: A

Question No : 85 - (Topic 2)

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

A. Amazon Resource Number
B. Amazon Resource Nametag
C. Amazon Resource Name
D. Amazon Reesource Namespace

Answer: C

Question No : 86 - (Topic 2)

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

A. Under DB INSTANCE DETAILS
B. Under REVIEW
C. Under MANAGEMENT OPTIONS
D. Under ENGINE SELECTION

Answer: C

Question No : 87 - (Topic 2)

Does Amazon RDS allow direct host access via Telnet, Secure Shell (SSH), or Windows Remote Desktop Connection?

A. Yes
B. No
C. Depends on if it is in VPC or not

Answer: B

Question No : 88 - (Topic 2)

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

A. Depends on the instance type
B. FALSE
C. Depends on whether you use API call
D. TRUE

Answer: D

Question No : 89 - (Topic 2)

Amazon SWF is designed to help users...

A. Design graphical user interface interactions
B. Manage user identification and authorization
C. Store Web content
D. Coordinate synchronous and asynchronous tasks which are distributed and fault tolerant.

Answer: D

Question No : 90 - (Topic 2)

If I write the below command, what does it do?

ec2-run ami-e3a5408a -n 20 -g appserver

A. Start twenty instances as members of appserver group.
B. Creates 20 rules in the security group named appserver
C. Terminate twenty instances as members of appserver group.
D. Start 20 security groups

Answer: A

Question No : 91 - (Topic 2)

What are the Amazon EC2 API tools?

A. They don't exist. The Amazon EC2 AMI tools, instead, are used to manage permissions.

B. Command-line tools to the Amazon EC2 web service.
C. They are a set of graphical tools to manage EC2 instances.
D. They don't exist. The Amazon API tools are a client interface to Amazon Web Services.

Answer: B

Question No : 92 - (Topic 2)

What does Amazon S3 stand for?

A. Simple Storage Solution.
B. Storage Storage Storage (triple redundancy Storage).
C. Storage Server Solution.
D. Simple Storage Service.

Answer: D

Question No : 93 - (Topic 2)

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

A. OracleISAM
B. MSSQLDB
C. InnoDB
D. MyISAM

Answer: C

Question No : 94 - (Topic 2)

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

A. No
B. Only in VPC
C. Yes

Answer: C

Question No : 95 - (Topic 2)

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

A. REVIEW
B. DB INSTANCE DETAILS
C. MANAGEMENT OPTIONS
D. ADDITIONAL CONFIGURATION

Answer: D

Question No : 96 - (Topic 2)

What is Amazon Glacier?

A. You mean Amazon "Iceberg": it's a low-cost storage service.
B. A security tool that allows to "freeze" an EBS volume and perform computer forensics on it.
C. A low-cost storage service that provides secure and durable storage for data archiving and backup.
D. It's a security tool that allows to "freeze" an EC2 instance and perform computer forensics on it.

Answer: C

Question No : 97 - (Topic 2)

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

A. EBSConfig Service
B. AMIConfig Service
C. Ec2Config Service
D. Ec2-AMIConfig Service

Answer: C

Question No : 98 - (Topic 2)

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

A. Yes for all users
B. Yes for all users except root
C. No
D. Yes unless special permission granted

Answer: A

Question No : 99 - (Topic 2)

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

A. Yes but only in certain cases
B. No
C. Yes always

Answer: C

Question No : 100 - (Topic 2)

How many relational database engines does RDS currently support?

A. Three: MySQL, Oracle and Microsoft SQL Server.
B. Just two: MySQL and Oracle.
C. Five: MySQL, PostgreSQL, MongoDB, Cassandra and SQLite.
D. Just one: MySQL.

Answer: A

Question No : 101 - (Topic 2)

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

A. Raid 0
B. RAID 1+0 (RAID 10)
C. Raid 1
D. Raid

Answer: B

Question No : 102 - (Topic 2)

What is the minimum charge for the data transferred between Amazon RDS and Amazon EC2 Instances in the same Availability Zone?

A. USD 0.10 per GB
B. No charge. It is free.
C. USD 0.02 per GB
D. USD 0.01 per GB

Answer: B

Question No : 103 - (Topic 2)

What is the Reduced Redundancy option in Amazon S3?

A. Less redundancy for a lower cost.
B. It doesn't exist in Amazon S3, but in Amazon EBS.
C. It allows you to destroy any copy of your files outside a specific jurisdiction.
D. It doesn't exist at all

Answer: A

Question No : 104 - (Topic 2)

Amazon RDS automated backups and DB Snapshots are currently supported for only the _____ storage engine

A. InnoDB
B. MyISAM

Answer: A

Question No : 105 - (Topic 2)

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

A. Only for Oracle RDS types
B. Yes
C. Only if configured at launch
D. No

Answer: D

Question No : 106 - (Topic 2)

What does a "Domain" refer to in Amazon SWF?

A. A security group in which only tasks inside can communicate with each other
B. A special type of worker
C. A collection of related Workflows
D. The DNS record for the Amazon SWF service

Answer: C

Question No : 107 - (Topic 2)

Typically, you want your application to check whether a request generated an error before you spend any time processing results. The easiest way to find out if an error occurred is to look for an _____ node in the response from the Amazon RDS API.

A. Incorrect

B. Error
C. FALSE

Answer: B

Question No : 108 - (Topic 2)

What does the following command do with respect to the Amazon EC2 security groups?

ec2-create-group CreateSecurityGroup

A. Groups the user created security groups in to a new group for easy access.
B. Creates a new security group for use with your account.
C. Creates a new group inside the security group.
D. Creates a new rule inside the security group.

Answer: B

Question No : 109 - (Topic 2)

Is creating a Read Replica of another Read Replica supported?

A. Only in certain regions
B. Only with MSSQL based RDS
C. Only for Oracle RDS types
D. No

Answer: D

Question No : 110 - (Topic 2)

What will be the status of the snapshot until the snapshot is complete.

A. running
B. working
C. progressing
D. pending

Answer: D

Question No : 111 - (Topic 2)

What does the following command do with respect to the Amazon EC2 security groups?

ec2-revoke RevokeSecurityGroupIngress

A. Removes one or more security groups from a rule.
B. Removes one or more security groups from an Amazon EC2 instance.
C. Removes one or more rules from a security group.
D. Removes a security group from our account.

Answer: C

Question No : 112 - (Topic 2)

What is the maximum key length of a tag?

A. 512 Unicode characters
B. 64 Unicode characters
C. 256 Unicode characters
D. 128 Unicode characters

Answer: D

Question No : 113 - (Topic 2)

Disabling automated backups _____ disable the point-in-time recovery.

A. if configured to can
B. will never
C. will

Answer: C

Question No : 114 - (Topic 2)

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

A. Security Groups
B. IAM System
C. SSH keys
D. Windows passwords

Answer: B

Question No : 115 - (Topic 2)

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

A. Create a copy of the EBS volume (not a snapshot)
B. Store a snapshot of the volume
C. Download the content to an EC2 instance
D. Back up the data in to a physical disk

Answer: B

Question No : 116 - (Topic 2)

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

A. 3
B. 1
C. 5
D. 2

Answer: B

Question No : 117 - (Topic 2)

While signing in REST/ Query requests, for additional security, you should transmit your requests using Secure Sockets Layer (SSL) by using _____

A. HTTP
B. Internet Protocol Security(IPsec)
C. TLS (Transport Layer Security)
D. HTTPS

Answer: D

Question No : 118 - (Topic 2)

To view information about an Amazon EBS volume, open the Amazon EC2 console at https://console.aws.amazon.com/ec2/, click _____ in the Navigation pane.

A. EBS
B. Describe
C. Details
D. Volumes

Answer: D

Question No : 119 - (Topic 2)

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

A. 40
B. 20
C. 50
D. 10

Answer: D

Question No : 120 - (Topic 2)

Are Reserved Instances available for Multi-AZ Deployments?

A. Only for Cluster Compute instances
B. Yes for all instance types
C. Only for M3 instance types
D. No

Answer: B

Question No : 121 - (Topic 2)

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

A. Yes
B. Only with MSSQL based RDS
C. Only for Oracle RDS instances
D. No

Answer: D

Question No : 122 - (Topic 2)

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

A. Restart from beginning
B. You can resume them, if you flag the "resume on failure" option before uploading.
C. Resume on failure
D. Depends on the file size

Answer: C

Question No : 123 - (Topic 2)

Fill in the blanks: _____ let you categorize your EC2 resources in different ways, for example, by purpose, owner, or environment.

A. wildcards
B. pointers

C. Tags
D. special filters

Answer: C

Question No : 124 - (Topic 2)

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

A. 1,000 write capacity units
B. 100,000 write capacity units
C. Dynamic DB is designed to scale without limits, but if you go beyond 10,000 you have to contact AWS first.
D. 10,000 write capacity units

Answer: C

Question No : 125 - (Topic 2)

IAM provides several policy templates you can use to automatically assign permissions to the groups you create. The _____ policy template gives the Admins group permission to access all account resources, except your AWS account information

A. Read Only Access
B. Power User Access
C. AWS Cloud Formation Read Only Access
D. Administrator Access

Answer: D

Question No : 126 - (Topic 2)

While creating an Amazon RDS DB, your first task is to set up a DB _____ that controls what IP addresses or EC2 instances have access to your DB Instance.

A. Security Pool
B. Secure Zone

C. Security Token Pool
D. Security Group

Answer: D

Question No : 127 - (Topic 2)

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

A. By using the service specific console or API\CLI commands
B. None of these
C. Using Amazon EC2 API/CLI
D. using all these methods

Answer: A

Question No : 128 - (Topic 2)

What does the AWS Storage Gateway provide?

A. It allows to integrate on-premises IT environments with Cloud Storage.
B. A direct encrypted connection to Amazon S3.
C. It's a backup solution that provides an on-premises Cloud storage.
D. It provides an encrypted SSL endpoint for backups in the Cloud.

Answer: A

Question No : 129 - (Topic 2)

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

A. MakeSnapShot
B. FreshSnapshot
C. DeploySnapshot
D. CreateSnapshot

Answer: D

Question No : 130 - (Topic 2)

What does Amazon Elastic Beanstalk provide?

A. A scalable storage appliance on top of Amazon Web Services.
B. An application container on top of Amazon Web Services.
C. A service by this name doesn't exist.
D. A scalable cluster of EC2 instances.

Answer: B

Question No : 131 - (Topic 2)

What is the durability of S3 RRS?

A. 99.99%
B. 99.95%
C. 99.995%
D. 99.999999999%

Answer: A

Question No : 132 - (Topic 2)

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

A. 5GB
B. 1TB
C. 2TB
D. 500GB

Answer: B

Question No : 133 - (Topic 2)

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

A. No
B. Yes

Answer: A

Question No : 134 - (Topic 2)

Which service enables AWS customers to manage users and permissions in AWS?

A. AWS Access Control Service (ACS)
B. AWS Identity and Access Management (IAM)
C. AWS Identity Manager (AIM)

Answer: B

Question No : 135 - (Topic 2)

What is an isolated database environment running in the cloud (Amazon RDS) called?

A. DB Instance
B. DB Server
C. DB Unit
D. DB Volume

Answer: A

Question No : 136 - (Topic 2)

Amazon RDS DB snapshots and automated backups are stored in

A. Amazon S3
B. Amazon ECS Volume

C. Amazon RDS
D. Amazon EMR

Answer: A

Question No : 137 - (Topic 2)

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

A. security group
B. ACL
C. IAM
D. Private IP Addresses

Answer: A

Question No : 138 - (Topic 2)

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

A. Possible for EBS volumes
B. Reserved for the root device
C. Recommended for EBS volumes
D. Recommended for instance store volumes

Answer: B

Question No : 139 - (Topic 2)

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

A. BYOL and Enterprise License
B. BYOL and License Included
C. Enterprise License and License Included
D. Role based License and License Included

Answer: B

Question No : 140 - (Topic 2)

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

A. Prevents /dev/sdc from creating the instance.
B. Prevents /dev/sdc from deleting the instance.
C. Set the value of /dev/sdc to 'zero'.
D. Prevents /dev/sdc from attaching to the instance.

Answer: D

Question No : 141 - (Topic 2)

Every user you create in the IAM system starts with _____.

A. Partial permissions
B. Full permissions
C. No permissions

Answer: C

Question No : 142 - (Topic 2)

Can we attach an EBS volume to more than one EC2 instance at the same time?

A. No
B. Yes.
C. Only EC2-optimized EBS volumes.
D. Only in read mode.

Answer: A

Question No : 143 - (Topic 2)

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

A. Only for Oracle RDS types
B. Yes
C. Only if configured at launch
D. No

Answer: B

Question No : 144 - (Topic 2)

What does Amazon EC2 provide?

A. Virtual servers in the Cloud.
B. A platform to run code (Java, PHP, Python), paying on an hourly basis.
C. Computer Clusters in the Cloud.
D. Physical servers, remotely managed by the customer.

Answer: A

Question No : 145 - (Topic 2)

How many types of block devices does Amazon EC2 support A

A. 2
B. 3
C. 4
D. 1

Answer: A

Question No : 146 - (Topic 2)

What is Oracle SQL Developer?

A. An AWS developer who is an expert in Amazon RDS using both the Oracle and SQL Server DB engines

B. A graphical Java tool distributed without cost by Oracle.
C. It is a variant of the SQL Server Management Studio designed by Microsoft to support Oracle DBMS functionalities
D. A different DBMS released by Microsoft free of cost

Answer: B

Question No : 147 - (Topic 2)

You must assign each server to at least _____ security group

A. 3
B. 2
C. 4
D. 1

Answer: A

Question No : 148 - (Topic 2)

What happens to the I/O operations while you take a database snapshot?

A. I/O operations to the database are suspended for a few minutes while the backup is in progress.
B. I/O operations to the database are sent to a Replica (if available) for a few minutes while the backup is in progress.
C. I/O operations will be functioning normally
D. I/O operations to the database are suspended for an hour while the backup is in progress

Answer: A

Question No : 149 - (Topic 2)

If I want an instance to have a public IP address, which IP address should I use?

A. Elastic IP Address

B. Class B IP Address
C. Class A IP Address
D. Dynamic IP Address

Answer: A

Question No : 150 - (Topic 2)

What are the two permission types used by AWS?

A. Resource-based and Product-based
B. Product-based and Service-based
C. Service-based
D. User-based and Resource-based

Answer: D

Question No : 151 - (Topic 2)

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

A. can be configured to but by default does not
B. doesn't
C. does

Answer: C

Question No : 152 - (Topic 2)

True or False: When you perform a restore operation to a point in time or from a DB Snapshot, a new DB Instance is created with a new endpoint.

A. FALSE
B. TRUE

Answer: B

Question No : 153 - (Topic 2)

What does RRS stand for when talking about S3?

A. Redundancy Removal System
B. Relational Rights Storage
C. Regional Rights Standard
D. Reduced Redundancy Storage

Answer: D

Question No : 154 - (Topic 2)

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

A. FreeStorage
B. FreeStorageSpace
C. FreeStorageVolume
D. FreeDBStorageSpace

Answer: B

Question No : 155 - (Topic 2)

Changes to the backup window take effect _____.

A. from the next billing cycle
B. after 30 minutes
C. immediately
D. after 24 hours

Answer: C

Question No : 156 - (Topic 2)

While creating the snapshots using the command line tools, which command should I be

using?

A. ec2-deploy-snapshot
B. ec2-fresh-snapshot
C. ec2-create-snapshot
D. ec2-new-snapshot

Answer: C

Question No : 157 - (Topic 2)

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

A. Only for Oracle RDS instances
B. No
C. Yes
D. Only in VPC

Answer: B

Question No : 158 - (Topic 2)

All Amazon EC2 instances are assigned two IP addresses at launch, out of which one can only be reached from within the Amazon EC2 network?

A. Multiple IP address
B. Public IP address
C. Private IP address
D. Elastic IP Address

Answer: C

Question No : 159 - (Topic 2)

Can you create IAM security credentials for existing users?

A. Yes, existing users can have security credentials associated with their account.

B. No, IAM requires that all users who have credentials set up are not existing users
C. No, security credentials are created within GROUPS, and then users are associated to GROUPS at a later time.
D. Yes, but only IAM credentials, not ordinary security credentials.

Answer: A

Question No : 160 - (Topic 2)

IAM's Policy Evaluation Logic always starts with a default _____ for every request, except for those that use the AWS account's root security credentials b

A. Permit
B. Deny
C. Cancel

Answer: B

Question No : 161 - (Topic 2)

What are the initial settings of an user created security group?

A. Allow all inbound traffic and Allow no outbound traffic
B. Allow no inbound traffic and Allow no outbound traffic
C. Allow no inbound traffic and Allow all outbound traffic
D. Allow all inbound traffic and Allow all outbound traffic

Answer: C

Question No : 162 - (Topic 2)

True or False: Manually created DB Snapshots are deleted after the DB Instance is deleted.

A. TRUE
B. FALSE

Answer: A

Question No : 163 - (Topic 2)

Which is the default region in AWS?

A. eu-west-1
B. us-east-1
C. us-east-2
D. ap-southeast-1

Answer: B

Question No : 164 - (Topic 2)

Fill in the blanks: The base URI for all requests for instance metadata is _____

A. http://254.169.169.254/latest/
B. http://169.169.254.254/latest/
C. http://127.0.0.1/latest/
D. http://169.254.169.254/latest/

Answer: D

Question No : 165 - (Topic 2)

Groups can't _____.

A. be nested more than 3 levels
B. be nested at all
C. be nested more than 4 levels
D. be nested more than 2 levels

Answer: B

Question No : 166 - (Topic 2)

True or False: Automated backups are enabled by default for a new DB Instance.

A. TRUE
B. FALSE

Answer: A

Question No : 167 - (Topic 2)

True or False: When using IAM to control access to your RDS resources, the key names that can be used are case sensitive. For example,

aws:CurrentTime is NOT equivalent to AWS:currenttime.

A. TRUE
B. FALSE

Answer: A

Question No : 168 - (Topic 2)

Provisioned IOPS Costs: you are charged for the IOPS and storage whether or not you use them in a given month.

A. FALSE
B. TRUE

Answer: B

Question No : 169 - (Topic 2)

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

A. No

B. Only if they are moving into GovCloud
C. Yes
D. Only if they are moving to US East from another region

Answer: A

Question No : 170 - (Topic 2)

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

A. None of these.
B. Amazon Instance Storage
C. Amazon EBS
D. All of these

Answer: C

Question No : 171 - (Topic 2)

When should I choose Provisioned IOPS over Standard RDS storage?

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

Answer: A

Question No : 172 - (Topic 2)

EBS Snapshots occur _____

A. Asynchronously
B. Synchronously
C. Weekly

Answer: A

Question No : 173 - (Topic 2)

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

A. 5 minutes
B. 500 milliseconds.
C. 30 seconds
D. 1 minute

Answer: A

Question No : 174 - (Topic 2)

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

A. Data will be lost
B. Data persists
C. Data may persist however cannot be sure

Answer: B

Question No : 175 - (Topic 2)

If I modify a DB Instance or the DB parameter group associated with the instance, should I reboot the instance for the changes to take effect?

A. No
B. Yes

Answer: B

Topic 3, Exam C

Question No : 176 - (Topic 3)

Does Amazon Route 53 support NS Records?

A. Yes, it supports Name Service records.
B. No
C. It supports only MX records.
D. Yes, it supports Name Server records.

Answer: D

Question No : 177 - (Topic 3)

Within the IAM service a GROUP is regarded as a:

A. A collection of AWS accounts
B. It's the group of EC2 machines that gain the permissions specified in the GROUP.
C. There's no GROUP in IAM, but only USERS and RESOURCES.
D. A collection of users.

Answer: D

Question No : 178 - (Topic 3)

A company wants to implement their website in a virtual private cloud (VPC). The web tier will use an Auto Scaling group across multiple Availability Zones (AZs). The database will use Multi-AZ RDS MySQL and should not be publicly accessible. What is the minimum number of subnets that need to be configured in the VPC?

A. 1
B. 2
C. 3
D. 4

Answer: B

Question No : 179 - (Topic 3)

You need to configure an Amazon S3 bucket to serve static assets for your public-facing web application. Which methods ensure that all objects uploaded to the bucket are set to public read? Choose 2 answers

A. Set permissions on the object to public read during upload.
B. Configure the bucket ACL to set all objects to public read.
C. Configure the bucket policy to set all objects to public read.
D. Use AWS Identity and Access Management roles to set the bucket to public read.
E. Amazon S3 objects default to public read, so no action is needed.

Answer: B,C

Explanation: You must grant read permission on the specific objects to make them publicly accessible so that your users can view them on your website. You make objects publicly readable by using either the object ACL or by writing a bucket policy."
Source: https://aws.amazon.com/articles/5050

Question No : 180 - (Topic 3)

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

A. FetchFailure
B. DescriveFailure
C. DescribeEvents
D. FetchEvents

Answer: C

Question No : 181 - (Topic 3)

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

A. Only in GovCloud
B. Only for S3 not EC2
C. Yes
D. No

Answer: D

Question No : 182 - (Topic 3)

Which of the following are characteristics of Amazon VPC subnets? Choose 2 answers

A. Each subnet spans at least 2 Availability Zones to provide a high-availability environment.
B. Each subnet maps to a single Availability Zone.
C. CIDR block mask of/25 is the smallest range supported.
D. By default, all subnets can route between each other, whether they are private or public.

E. Instances in a private subnet can communicate with the Internet only if they have an Elastic IP.

Answer: B,D

Question No : 183 - (Topic 3)

If I modify a DB Instance or the DB parameter group associated with the instance, should I reboot the instance for the changes to take effect?

A. No
B. Yes

Answer: B

Question No : 184 - (Topic 3)

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

A. Use an IAM policy that references the LDAP account identifiers and the AWS credentials.
B. Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP.
C. Use AWS Security Token Service from an identity broker to issue short-lived AWS

credentials.
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.

Answer: B

Question No : 185 - (Topic 3)

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?

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.

Answer: D

Question No : 186 - (Topic 3)

The Amazon EC2 web service can be accessed using the _____ web services messaging protocol. This interface is described by a Web Services Description Language (WSDL) document.

A. SOAP
B. DCOM
C. CORBA
D. XML-RPC

Answer: A

Question No : 187 - (Topic 3)

What is a Security Group?

A. None of these.
B. A list of users that can access Amazon EC2 instances.
C. An Access Control List (ACL) for AWS resources.
D. A firewall for inbound traffic, built-in around every Amazon EC2 instance.

Answer: D

Question No : 188 - (Topic 3)

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

A. 30 minutes
B. 1 hour
C. 12 hours
D. 10 minutes

Answer: B

Question No : 189 - (Topic 3)

Which procedure for backing up a relational database on EC2 that is using a set of RAIDed EBS volumes for storage minimizes the time during which the database cannot be written to and results in a consistent backup?

A. 1. Detach EBS volumes, 2. Start EBS snapshot of volumes, 3. Re-attach EBS volumes
B. 1. Stop the EC2 Instance. 2. Snapshot the EBS volumes
C. 1. Suspend disk I/O, 2. Create an image of the EC2 Instance, 3. Resume disk I/O
D. 1. Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Resume disk I/O
E. 1. Suspend disk I/O, 2. Start EBS snapshot of volumes, 3. Wait for snapshots to complete, 4. Resume disk I/O

Answer: A
Reference: http://media.amazonwebservices.com/AWS_Storage_Options.pdf (page 11)

Question No : 190 - (Topic 3)

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

A. a file
B. a bucket or object
C. a bucket or file
D. a object or file

Answer: B

Question No : 191 - (Topic 3)

What does Amazon CloudFormation provide?

A. None of these.
B. The ability to setup Autoscaling for Amazon EC2 instances.
C. A template to map network resources for Amazon Web Services.
D. A templated resource creation for Amazon Web Services.

Answer: D

Question No : 192 - (Topic 3)

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

A. Amazon EBS-backed instances can be stopped and restarted.
B. Instance-store backed instances can be stopped and restarted.
C. Auto scaling requires using Amazon EBS-backed instances.
D. Virtual Private Cloud requires EBS backed instances.

Answer: A
Reference:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ComponentsAMIs.html#storage-for-the-root-device

Question No : 193 - (Topic 3)

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

A. A single facility in eu-west-1 and a single facility in eu-central-1
B. A single facility in eu-west-1 and a single facility in us-east-1
C. Multiple facilities in eu-west-1
D. A single facility in eu-west-1

Answer: C

Question No : 194 - (Topic 3)

When using the following AWS services, which should be implemented in multiple Availability Zones for high availability solutions? Choose 2 answers

A. Amazon DynamoDB
B. Amazon Elastic Compute Cloud (EC2)
C. Amazon Elastic Load Balancing
D. Amazon Simple Notification Service (SNS)
E. Amazon Simple Storage Service (S3)

Answer: B,C

Question No : 195 - (Topic 3)

What is the command line instruction for running the remote desktop client in Windows?

A. desk.cpl
B. mstsc

Answer: B

Question No : 196 - (Topic 3)

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

Choose 2 answers

A. Use AWS Consolidated Billing and disable AWS root account access for the child accounts.
B. Enable IAM cross-account access for all corporate IT administrators in each child account.
C. Create separate VPCs for each division within the corporate IT AWS account.
D. Use AWS Consolidated Billing to link the divisions' accounts to a parent corporate account.
E. Write all child AWS CloudTrail and Amazon CloudWatch logs to each child account's Amazon S3 'Log' bucket.

Answer: D,E

Question No : 197 - (Topic 3)

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

A. policy
B. permission
C. Role
D. resource

Answer: A

Question No : 198 - (Topic 3)

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

A. 10 GB per DB
B. 100 GB per DB
C. 2 TB per DB

D. 1TB per DB

Answer: A

Question No : 199 - (Topic 3)

Fill in the blanks: _____ is a durable, block-level storage volume that you can attach to a single, running Amazon EC2 instance.

A. Amazon S3
B. Amazon EBS
C. None of these
D. All of these

Answer: B

Question No : 200 - (Topic 3)

Is creating a Read Replica of another Read Replica supported?

A. Only in VPC
B. Yes
C. Only in certain regions
D. No

Answer: D

Question No : 201 - (Topic 3)

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?

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.

Answer: D

Question No : 202 - (Topic 3)

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

A. Amazon EC2 placement groups
B. Enhanced networking
C. Amazon PV AMI
D. Amazon HVM AMI
E. Amazon Linux
F. Amazon VPC

Answer: A,B,E

Question No : 203 - (Topic 3)

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

A. Yes always
B. No
C. Yes but only if they are using two factor authentication
D. Yes but only in VPC

Answer: A

Question No : 204 - (Topic 3)

Can the string value of 'Key' be prefixed with laws?

A. No
B. Only for EC2 not S3
C. Yes
D. Only for S3 not EC

Answer: A

Question No : 205 - (Topic 3)

Does Route 53 support MX Records?

A. Yes.
B. It supports CNAME records, but not MX records.
C. No
D. Only Primary MX records. Secondary MX records are not supported.

Answer: A

Question No : 206 - (Topic 3)

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

A. The remaining Read Replicas will still replicate from the older master DB Instance
B. The remaining Read Replicas will be deleted
C. The remaining Read Replicas will be combined to one read replica

Answer: A

Question No : 207 - (Topic 3)

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

A. 120 seconds
B. 1 hour
C. 10 minutes
D. 12 hours

Answer: B

Question No : 208 - (Topic 3)

What does Amazon Route53 provide?

A. A global Content Delivery Network.
B. None of these.
C. A scalable Domain Name System.
D. An SSH endpoint for Amazon EC2.

Answer: C

Question No : 209 - (Topic 3)

MySQL installations default to port _____.

A. 3306
B. 443
C. 80
D. 1158

Answer: A

Question No : 210 - (Topic 3)

Can I use Provisioned IOPS with VPC?

A. Only Oracle based RDS
B. No
C. Only with MSSQL based RDS
D. Yes for all RDS instances

Answer: D

Question No : 211 - (Topic 3)

If you have chosen Multi-AZ deployment, in the event of a planned or unplanned outage of your primary DB Instance, Amazon RDS automatically switches to the standby replica. The

automatic failover mechanism simply changes the _____ record of the main DB Instance to point to the standby DB Instance.

A. DNAME
B. CNAME
C. TXT
D. MX

Answer: B

Question No : 212 - (Topic 3)

You are configuring your company's application to use Auto Scaling and need to move user state information. Which of the following AWS services provides a shared data store with durability and low latency?

A. AWS ElastiCache Memcached
B. Amazon Simple Storage Service
C. Amazon EC2 instance storage\
D. Amazon DynamoDB

Answer: D
Reference: https://d36cz9buwru1tt.cloudfront.net/AWS_Overview.pdf (page 13, aws storage gateway)

Question No : 213 - (Topic 3)

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

A. Only if the tag "VPC_Change_Group" is true
B. Yes. You can.
C. No. You cannot.
D. Only if the tag "VPC Change Group" is true

Answer: B

Question No : 214 - (Topic 3)

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

A. Yes completely
B. Yes but only for certain situations
C. Not in any circumstance

Answer: B

Question No : 215 - (Topic 3)

Which Amazon service can I use to define a virtual network that closely resembles a traditional data center?

A. Amazon VPC
B. Amazon ServiceBus
C. Amazon EMR
D. Amazon RDS

Answer: A

Question No : 216 - (Topic 3)

Is there a limit to the number of groups you can have?

A. Yes for all users
B. Yes for all users except root
C. No
D. Yes unless special permission granted

Answer: A

Question No : 217 - (Topic 3)

What are the four levels of AWS Premium Support?

A. Basic, Developer, Business, Enterprise
B. Basic, Startup, Business, Enterprise
C. Free, Bronze, Silver, Gold
D. All support is free

Answer: A

Question No : 218 - (Topic 3)

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

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

Answer: C

Question No : 219 - (Topic 3)

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

A. SQL Server
B. MySQL
C. Oracle

Answer: A

Question No : 220 - (Topic 3)

How are the EBS snapshots saved on Amazon S3?

A. Exponentially
B. Incrementally
C. EBS snapshots are not stored in the Amazon S3

D. Decrementally

Answer: B

Question No : 221 - (Topic 3)

A Provisioned IOPS volume must be at least _____ GB in size

A. 1
B. 50
C. 20
D. 10

Answer: D

Question No : 222 - (Topic 3)

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?

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

Answer: B
Reference: http://aws.amazon.com/ec2/purchasing-options/spot-instances/

Question No : 223 - (Topic 3)

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

A. Yes, You can.
B. No. You cannot
C. Depends on the state of the interface at the time

Answer: B

Question No : 224 - (Topic 3)

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

A. user
B. AWS Account
C. Group
D. Role

Answer: A

Question No : 225 - (Topic 3)

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

A. always
B. in some circumstances
C. never

Answer: C

Question No : 226 - (Topic 3)

Does Dynamic DB support in-place atomic updates?

A. It is not defined
B. No

C. Yes
D. It does support in-place non-atomic updates

Answer: C

Question No : 227 - (Topic 3)

Select the incorrect statement

A. In Amazon EC2, the private IP addresses only returned to Amazon EC2 when the instance is stopped or terminated
B. In Amazon VPC, an instance retains its private IP addresses when the instance is stopped.
C. In Amazon VPC, an instance does NOT retain its private IP addresses when the instance is stopped.
D. In Amazon EC2, the private IP address is associated exclusively with the instance for its lifetime

Answer: C

Question No : 228 - (Topic 3)

What is the charge for the data transfer incurred in replicating data between your primary and standby?

A. Same as the standard data transfer charge
B. Double the standard data transfer charge
C. No charge. It is free
D. Half of the standard data transfer charge

Answer: C

Question No : 229 - (Topic 3)

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

A. FALSE
B. TRUE

Answer: A

Question No : 230 - (Topic 3)

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

A. Depends on the RDMS used
B. TRUE
C. FALSE

Answer: B

Question No : 231 - (Topic 3)

Is it possible to access your EBS snapshots?

A. Yes, through the Amazon S3 APIs.
B. Yes, through the Amazon EC2 APIs.
C. No, EBS snapshots cannot be accessed; they can only be used to create a new EBS volume.
D. EBS doesn't provide snapshots.

Answer: B

Question No : 232 - (Topic 3)

In regards to IAM you can edit user properties later, but you cannot use the console to change the _____.

A. user name
B. password
C. default group

Answer: A

Question No : 233 - (Topic 3)

If I scale the storage capacity provisioned to my DB Instance by mid of a billing month, how will I be charged?

A. You will be charged for the highest storage capacity you have used
B. On a proration basis
C. You will be charged for the lowest storage capacity you have used

Answer: B

Question No : 234 - (Topic 3)

A customer wants to leverage Amazon Simple Storage Service (S3) and Amazon Glacier as part of their backup and archive infrastructure. The customer plans to use third-party software to support this integration. Which approach will limit the access of the third party software to only the Amazon S3 bucket named "company-backup"?

A. A custom bucket policy limited to the Amazon S3 API in thee Amazon Glacier archive "company-backup"
B. A custom bucket policy limited to the Amazon S3 API in "company-backup"
C. A custom IAM user policy limited to the Amazon S3 API for the Amazon Glacier archive "company-backup".
D. A custom IAM user policy limited to the Amazon S3 API in "company-backup".

Answer: D

Question No : 235 - (Topic 3)

What does Amazon Elastic Beanstalk provide?

A. An application container on top of Amazon Web Services.
B. A scalable storage appliance on top of Amazon Web Services.
C. A scalable cluster of EC2 instances.
D. A service by this name doesn't exist.

Answer: C

Question No : 236 - (Topic 3)

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?

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.
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.

Answer: B

Explanation: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_ACLs.html

Question No : 237 - (Topic 3)

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

A. No
B. Yes
C. Only in VPC

Answer: B

Question No : 238 - (Topic 3)

What happens when you create a topic on Amazon SNS?

A. The topic is created, and it has the name you specified for it.
B. An ARN (Amazon Resource Name) is created.

C. You can create a topic on Amazon SQS, not on Amazon SNS.
D. This question doesn't make sense.

Answer: B

Question No : 239 - (Topic 3)

What does the "Server Side Encryption" option on Amazon S3 provide?

A. It provides an encrypted virtual disk in the Cloud.
B. It doesn't exist for Amazon S3, but only for Amazon EC2.
C. It encrypts the files that you send to Amazon S3, on the server side.
D. It allows to upload files using an SSL endpoint, for a secure transfer.

Answer: A

Question No : 240 - (Topic 3)

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

A. Only in certain regions
B. Only in VPC
C. Yes
D. No

Answer: A

Question No : 241 - (Topic 3)

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

A. release level
B. minor version
C. version number
D. major version

Answer: D

Question No : 242 - (Topic 3)

Select the correct statement:

A. You don't need not specify the resource identifier while stopping a resource
B. You can terminate, stop, or delete a resource based solely on its tags
C. You can't terminate, stop, or delete a resource based solely on its tags
D. You don't need to specify the resource identifier while terminating a resource

Answer: C

Question No : 243 - (Topic 3)

What does Amazon SES stand for?

A. Simple Elastic Server
B. Simple Email Service
C. Software Email Solution
D. Software Enabled Server

Answer: B

Question No : 244 - (Topic 3)

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

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

Answer: D
Reference: http://aws.amazon.com/ec2/faqs/ (enhanced networking)

Question No : 245 - (Topic 3)

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?

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.

Answer: D

Explanation: http://docs.aws.amazon.com/cli/latest/reference/ec2/authorize-security-group-ingress.html

Question No : 246 - (Topic 3)

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

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

Answer: C,D,E

Question No : 247 - (Topic 3)

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

A. storage-overflow

B. storage-full
C. storage-exceed
D. storage-overage

Answer: B

Question No : 248 - (Topic 3)

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

A. 5
B. 2
C. 1
D. 3

Answer: C

Question No : 249 - (Topic 3)

What does Amazon RDS stand for?

A. Regional Data Server.
B. Relational Database Service.
C. Nothing.
D. Regional Database Service.

Answer: B

Question No : 250 - (Topic 3)

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

A. Write Lag
B. Read Replica

C. Replica Lag
D. Single Replica

Answer: C

Question No : 251 - (Topic 3)

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

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.

Answer: A
Explanation: 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.
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-creating-snapshot.html

Question No : 252 - (Topic 3)

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

A. Both A and B
B. None of these
C. VPC Addresses
D. EC2 Addresses

Answer: A

Question No : 253 - (Topic 3)

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

A. TRUE
B. FALSE

Answer: B

Question No : 254 - (Topic 3)

Amazon RDS automated backups and DB Snapshots are currently supported for only the _____ storage engine

A. MyISAM
B. InnoDB

Answer: B

Question No : 255 - (Topic 3)

You launch an Amazon EC2 instance without an assigned AVVS identity and Access Management (IAM) role. Later, you decide that the instance should be running with an IAM role. Which action must you take in order to have a running Amazon EC2 instance with an IAM role assigned to it?

A. Create an image of the instance, and register the image with an IAM role assigned and an Amazon EBS volume mapping.
B. Create a new IAM role with the same permissions as an existing IAM role, and assign it to the running instance.
C. Create an image of the instance, add a new IAM role with the same permissions as the desired IAM role, and deregister the image with the new role assigned.
D. Create an image of the instance, and use this image to launch a new instance with the desired IAM role assigned.

Answer: D
Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/roles-usingrole-ec2instance.html

Question No : 256 - (Topic 3)

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

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

Answer: A,B

Question No : 257 - (Topic 3)

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

A. Amazon Instance Storage
B. Amazon EBS
C. You can't run a database inside an Amazon instance.
D. Amazon S3

Answer: B

Question No : 258 - (Topic 3)

A client application requires operating system privileges on a relational database server. What is an appropriate configuration for a highly available database architecture?

A. A standalone Amazon EC2 instance
B. Amazon RDS in a Multi-AZ configuration
C. Amazon EC2 instances in a replication configuration utilizing a single Availability Zone
D. Amazon EC2 instances in a replication configuration utilizing two different Availability

Zones

Answer: D

Explanation: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html

Question No : 259 - (Topic 3)

_____ embodies the "share-nothing" architecture and essentially involves breaking a large database into several smaller databases. Common ways to split a database include 1) splitting tables that are not joined in the same query onto different hosts or 2) duplicating a table across multiple hosts and then using a hashing algorithm to determine which host receives a given update.

A. Sharding
B. Failure recovery
C. Federation
D. DDL operations

Answer: A

Question No : 260 - (Topic 3)

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?

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

Answer: A

Question No : 261 - (Topic 3)

Through which of the following interfaces is AWS Identity and Access Management available?

A) AWS Management Console

B) Command line interface (CLI)

C) IAM Query API

D) Existing libraries

A. Only through Command line interface (CLI)
B. A, B and C
C. A and C
D. All of the above

Answer: D

Question No : 262 - (Topic 3)

In AWS, which security aspects are the customer's responsibility? Choose 4 answers

A. Security Group and ACL (Access Control List) settings
B. Decommissioning storage devices
C. Patch management on the EC2 instance's operating system
D. Life-cycle management of IAM credentials
E. Controlling physical access to compute resources
F. Encryption of EBS (Elastic Block Storage) volumes

Answer: A,C,D,F
nce: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

Question No : 263 - (Topic 3)

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

A. Amazon Cloud Watch

B. Status of the Amazon RDS DB
C. AWS Service Health Dashboard
D. AWS Cloud Monitor

Answer: C

Question No : 264 - (Topic 3)

You are using an m1.small EC2 Instance with one 300 GB EBS volume to host a relational database. You determined that write throughput to the database needs to be increased. Which of the following approaches can help achieve this? Choose 2 answers

A. Use an array of EBS volumes.
B. Enable Multi-AZ mode.
C. Place the instance in an Auto Scaling Groups
D. Add an EBS volume and place into RAID 5.
E. Increase the size of the EC2 Instance.
F. Put the database behind an Elastic Load Balancer.

Answer: D,E

Question No : 265 - (Topic 3)

After launching an instance that you intend to serve as a NAT (Network Address Translation) device in a public subnet you modify your route tables to have the NAT device be the target of internet bound traffic of your private subnet. When you try and make an outbound connection to the internet from an instance in the private subnet, you are not successful. Which of the following steps could resolve the issue?

A. Disabling the Source/Destination Check attribute on the NAT instance
B. Attaching an Elastic IP address to the instance in the private subnet
C. Attaching a second Elastic Network Interface (ENI) to the NAT instance, and placing it in the private subnet
D. Attaching a second Elastic Network Interface (ENI) to the instance in the private subnet, and placing it in the public subnet

Answer: A
Reference:
http://docs.aws.amazon.com/workspaces/latest/adminguide/gsg_create_vpc.html

Question No : 266 - (Topic 3)

Will I be alerted when automatic failover occurs?

A. Only if SNS configured
B. No
C. Yes
D. Only if Cloudwatch configured

Answer: C

Question No : 267 - (Topic 3)

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

Choose 3 answers

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

Answer: A,B,E
Reference: http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingKMSEncryption.html

Question No : 268 - (Topic 3)

What is a placement group?

A. A collection of Auto Scaling groups in the same region
B. A feature that enables EC2 instances to interact with each other via high bandwidth, low latency connections
C. A collection of authorized CloudFront edge locations for a distribution
D. A collection of Elastic Load Balancers in the same Region or Availability Zone

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

Question No : 269 - (Topic 3)

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

A. Select public for all the accounts and check mark those accounts with whom you want to expose the snapshots and click save.
B. SelectPrivate, enter the IDs of those AWS accounts, and clickSave.
C. SelectPublic, enter the IDs of those AWS accounts, and clickSave.
D. SelectPublic, mark the IDs of those AWS accounts as private, and clickSave.

Answer: C

Question No : 270 - (Topic 3)

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

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

Answer: A

Question No : 271 - (Topic 3)

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

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

Answer: A

Question No : 272 - (Topic 3)

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

A. No. You cannot.
B. Yes. You can.
C. Only if you are the root user
D. Only if the tag "VPC_Change_Group" is true

Answer: C

Question No : 273 - (Topic 3)

You can use _____ and _____ to help secure the instances in your VPC.

A. security groups and multi-factor authentication
B. security groups and 2-Factor authentication
C. security groups and biometric authentication
D. security groups and network ACLs

Answer: D

Question No : 274 - (Topic 3)

Will I be charged if the DB instance is idle?

A. No

B. Yes
C. Only is running in GovCloud
D. Only if running in VPC

Answer: B

Question No : 275 - (Topic 3)

What does Amazon CloudFormation provide?

A. The ability to setup Autoscaling for Amazon EC2 instances.
B. None of these.
C. A templated resource creation for Amazon Web Services.
D. A template to map network resources for Amazon Web Services.

Answer: D

Question No : 276 - (Topic 3)

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

A. Yes
B. Only in certain regions
C. Only in VPC
D. No

Answer: A

Question No : 277 - (Topic 3)

Please select the Amazon EC2 resource which cannot be tagged.

A. images (AMIs, kernels, RAM disks)
B. Amazon EBS volumes
C. Elastic IP addresses
D. VPCs

Answer: C

Question No : 278 - (Topic 3)

Is there any way to own a direct connection to Amazon Web Services?

A. You can create an encrypted tunnel to VPC, but you don't own the connection.
B. Yes, it's called Amazon Dedicated Connection.
C. No, AWS only allows access from the public Internet.
D. Yes, it's called Direct Connect.

Answer: D

Question No : 279 - (Topic 3)

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

A. Memory Utilization of an EC2 instance
B. CPU Utilization of an EC2 instance
C. Disk usage activity of an EC2 instance
D. Data transfer of an EC2 instance

Answer: A
Reference: http://aws.amazon.com/cloudwatch/

Question No : 280 - (Topic 3)

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

A. No
B. Yes

Answer: A

Question No : 281 - (Topic 3)

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

A. is not currently
B. is as of 2013
C. is planned to be in 2014
D. will never be

Answer: A

Question No : 282 - (Topic 3)

How can you secure data at rest on an EBS volume?

A. Attach the volume to an instance using EC2's SSL interface.
B. Write the data randomly instead of sequentially.
C. Encrypt the volume using the S3 server-side encryption service.
D. Create an IAM policy that restricts read and write access to the volume.
E. Use an encrypted file system on top of the EBS volume.

Answer: E
Reference: https://aws.amazon.com/blogs/aws/protect-your-data-with-new-ebs-encryption/

Question No : 283 - (Topic 3)

Amazon EC2 provides a repository of public data sets that can be seamlessly integrated into AWS cloud-based applications.What is the monthly charge for using the public data sets?

A. A 1 time charge of 10$ for all the datasets.
B. 1$ per dataset per month
C. 10$ per month for all the datasets
D. There is no charge for using the public data sets

Answer: D

Question No : 284 - (Topic 3)

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?

A. Deploy 6 EC2 instances in one availability zone and use Amazon Elastic Load Balancer.
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.

Answer: C

Explanation: A load balancer accepts incoming traffic from clients and routes requests to its registered EC2 instances in one or more Availability
Zones.http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/how-elb-works.html
Updated Security Whitepaper link:https://d0.awsstatic.com/whitepapers/aws-security-whitepaper.pdf

Question No : 285 - (Topic 3)

What is the charge for the data transfer incurred in replicating data between your primary and standby?

A. No charge. It is free.
B. Double the standard data transfer charge
C. Same as the standard data transfer charge
D. Half of the standard data transfer charge

Answer: C

Question No : 286 - (Topic 3)

What is the default maximum number of MFA devices in use per AWS account (at the root account level)?

A. 1
B. 5
C. 15
D. 10

Answer: A

Question No : 287 - (Topic 3)

Security groups act like a firewall at the instance level, whereas _____ are an additional layer of security that act at the subnet level.

A. DB Security Groups
B. VPC Security Groups
C. network ACLs

Answer: C

Question No : 288 - (Topic 3)

You run an ad-supported photo sharing website using S3 to serve photos to visitors of your site. At some point you find out that other sites have been linking to the photos on your site, causing loss to your business. What is an effective method to mitigate this?

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

Answer: A

Question No : 289 - (Topic 3)

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

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

Answer: A

Question No : 290 - (Topic 3)

When using consolidated billing there are two account types. What are they?

A. Paying account and Linked account
B. Parent account and Child account
C. Main account and Sub account.
D. Main account and Secondary account.

Answer: A

Question No : 291 - (Topic 3)

What is an isolated database environment running in the cloud (Amazon RDS) called?

A. DB Instance
B. DB Unit
C. DB Server
D. DB Volume

Answer: A

Question No : 292 - (Topic 3)

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

A. Allow no inbound traffic, Allow all outbound traffic and Allow instances associated with this security group to talk to each other
B. Allow all inbound traffic, Allow no outbound traffic and Allow instances associated with this security group to talk to each other
C. Allow no inbound traffic, Allow all outbound traffic and Does NOT allow instances associated with this security group to talk to each other
D. Allow all inbound traffic, Allow all outbound traffic and Does NOT allow instances associated with this security group to talk to each other

Answer: A

Question No : 293 - (Topic 3)

Which of the following features ensures even distribution of traffic to Amazon EC2 instances in multiple Availability Zones registered with a load balancer?

A. Elastic Load Balancing request routing
B. An Amazon Route 53 weighted routing policy
C. Elastic Load Balancing cross-zone load balancing
D. An Amazon Route 53 latency routing policy

Answer: C

Explanation: If cross-zone load balancing is disabled, the load balancer node selects the instance from the same Availability Zone that it is in. If cross-zone load balancing is enabled, the load balancer node selects the instance regardless of Availability Zone. http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/how-elb-works.html#request-routing

Question No : 294 - (Topic 3)

What does Amazon EBS stand for?

A. Elastic Block Storage
B. Elastic Business Server
C. Elastic Blade Server
D. Elastic Block Store

Answer: D

Question No : 295 - (Topic 3)

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

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

Answer: A

Question No : 296 - (Topic 3)

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

A. bulk copy
B. group copy
C. dual copy
D. mass copy

Answer: A

Question No : 297 - (Topic 3)

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

A. Only via API
B. Only via Console
C. Yes
D. No

Answer: C

Question No : 298 - (Topic 3)

Which of the following items are required to allow an application deployed on an EC2 instance to write data to a DynamoDB table? Assume that no security keys are allowed to be stored on the EC2 instance. (Choose 2 answers)

A. Create an IAM Role that allows write access to the DynamoDB table.
B. Add an IAM Role to a running EC2 instance.
C. Create an IAM User that allows write access to the DynamoDB table.
D. Add an IAM User to a running EC2 instance.
E. Launch an EC2 Instance with the IAM Role included in the launch configuration.

Answer: A,E
Reference:
http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/TicTacToe.Phase3.html

Question No : 299 - (Topic 3)

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

A. 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.

Answer: A

Question No : 300 - (Topic 3)

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

A. 45
B. 35
C. 15
D. 5

Answer: B

Question No : 301 - (Topic 3)

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

A. Action
B. Value
C. Reset
D. Retrieve

Answer: A

Question No : 302 - (Topic 3)

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

A. TRUE
B. FALSE

Answer: A

Question No : 303 - (Topic 3)

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

A. private key
B. foreign key
C. public key
D. protected key

Answer: A

Question No : 304 - (Topic 3)

Which features can be used to restrict access to data in S3? Choose 2 answers

A. Set an S3 ACL on the bucket or the object.
B. Create a CloudFront distribution for the bucket.
C. Set an S3 bucket policy.
D. Enable IAM Identity Federation
E. Use S3 Virtual Hosting

Answer: A,C

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

Question No : 305 - (Topic 3)

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

A. block map
B. storage block
C. mapping device
D. block device

Answer: D

Question No : 306 - (Topic 3)

Can I attach more than one policy to a particular entity?

A. Yes always
B. Only if within GovCloud
C. No
D. Only if within VPC

Answer: A

Question No : 307 - (Topic 3)

You have an environment that consists of a public subnet using Amazon VPC and 3 instances that are running in this subnet. These three instances can successfully communicate with other hosts on the Internet. You launch a fourth instance in the same subnet, using the same AMI and security group configuration you used for the others, but find that this instance cannot be accessed from the internet. What should you do to enable Internet access?

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

Answer: B

Question No : 308 - (Topic 3)

Is there a limit to the number of groups you can have?

A. Yes for all users except root
B. No
C. Yes unless special permission granted
D. Yes for all users

Answer: D

Question No : 309 - (Topic 3)

How can the domain's zone apex, for example, "myzoneapexdomain.com", be pointed towards an Elastic Load Balancer?

A. By using an Amazon Route 53 Alias record
B. By using an AAAA record
C. By using an Amazon Route 53 CNAME record
D. By using an A record

Answer: A

Question No : 310 - (Topic 3)

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

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

Answer: C

Explanation: When you launch an instance into a VPC, a primary private IP address from the address range of the subnet is assigned to the default network interface (eth0) of the instance. If you don't specify a primary private IP address, we select an available IP address in the subnet range for you

Source: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-ip-addressing.html

Reply

Question No : 311 - (Topic 3)

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

A. 30 minutes
B. You always get instant responses (within a few seconds).
C. 10 minutes
D. 1 hour

Answer: D

Question No : 312 - (Topic 3)

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

A. user
B. AWS Account
C. resource
D. permission

Answer: B

Question No : 313 - (Topic 3)

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

A. SQL Server
B. MySQL
C. Oracle

Answer: A

Question No : 314 - (Topic 3)

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

A. TRUE
B. FALSE

Answer: A

Question No : 315 - (Topic 3)

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

A. No
B. Yes

Answer: A

Question No : 316 - (Topic 3)

What does Amazon ElastiCache provide?

A. A service by this name doesn't exist. Perhaps you mean Amazon CloudCache.
B. A virtual server with a huge amount of memory.
C. A managed In-memory cache service.
D. An Amazon EC2 instance with the Memcached software already pre-installed.

Answer: C

Question No : 317 - (Topic 3)

Please select the Amazon EC2 resource which can be tagged.

A. key pairs
B. Elastic IP addresses
C. placement groups
D. Amazon EBS snapshots

Answer: C

Question No : 318 - (Topic 3)

Are you able to integrate a multi-factor token service with the AWS Platform?

A. Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform.
B. No, you cannot integrate multi-factor token devices with the AWS platform.
C. Yes, you can integrate private multi-factor token devices to authenticate users to the AWS platform.

Answer: A

Question No : 319 - (Topic 3)

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

A. Data is automatically saved as an EBS snapshot.
B. Data is automatically saved as an EBS volume.
C. Data is unavailable until the instance is restarted.
D. Data is automatically deleted.

Answer: D

Question No : 320 - (Topic 3)

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

A. No
B. Yes
C. Only in VPC
D. Only in certain regions

Answer: B

Question No : 321 - (Topic 3)

Do the Amazon EBS volumes persist independently from the running life of an Amazon EC2 instance?

A. Only if instructed to when created
B. Yes
C. No

Answer: B

Question No : 322 - (Topic 3)

After creating a new IAM user which of the following must be done before they can successfully make API calls?

A. Add a password to the user.
B. Enable Multi-Factor Authentication for the user.
C. Assign a Password Policy to the user.
D. Create a set of Access Keys for the user.

Answer: A
Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_SettingUpUser.html

Question No : 323 - (Topic 3)

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

A. Virtual Private Network connection. AWS Directory Services, and ClassicLink
B. Virtual Private Network connection. AWS Directory Services, and Amazon Workspaces
C. AWS Directory Service, Amazon Workspaces, and AWS Identity and Access Management
D. Amazon Elastic Compute Cloud, and AWS Identity and Access Management

Answer: C

Explanation: https://aws.amazon.com/directoryservice/faqs/
AWS Directory Service enables your end users to use their existing corporate credentials

when accessing AWS applications, such as Amazon WorkSpaces, Amazon WorkDocs and Amazon WorkMail, as well as directory-aware Microsoft workloads, including SharePoint, custom .NET and SQL Server-based applications.Finally, you can use your existing corporate credentials to administer AWS resources via AWS Identity and Access Management (IAM) role-based access to the AWS Management Console, so you do not need to build out more identity federation infrastructure.

Question No : 324 - (Topic 3)

If I want my instance to run on a single-tenant hardware, which value do I have to set the instance's tenancy attribute to?

A. dedicated
B. isolated
C. one
D. reserved

Answer: A

Question No : 325 - (Topic 3)

Is decreasing the storage size of a DB Instance permitted?

A. Depends on the RDMS used
B. Yes
C. No

Answer: B

Question No : 326 - (Topic 3)

When should I choose Provisioned IOPS over Standard RDS storage?

A. If you use production online transaction processing (OLTP) workloads.

B. If you have batch-oriented workloads
C. If you have workloads that are not sensitive to consistent performance

Answer: A

Question No : 327 - (Topic 3)

Are you able to integrate a multi-factor token service with the AWS Platform?

A. Yes, you can integrate private multi-factor token devices to authenticate users to the AWS platform.
B. No, you cannot integrate multi-factor token devices with the AWS platform.
C. Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform.

Answer: C

Question No : 328 - (Topic 3)

The _____ service is targeted at organizations with multiple users or systems that use AWS products such as Amazon EC2, Amazon SimpleDB, and the AWS Management Console.

A. Amazon RDS
B. AWS Integrity Management
C. AWS Identity and Access Management
D. Amazon EMR

Answer: C

Question No : 329 - (Topic 3)

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

A. Only in VPC
B. No
C. Yes

Answer: C

Question No : 330 - (Topic 3)

Fill in the blanks: "To ensure failover capabilities, consider using a _____ for incoming traffic on a network interface".

A. primary public IP
B. secondary private IP
C. secondary public IP
D. add on secondary IP

Answer: B

Question No : 331 - (Topic 3)

What is the name of licensing model in which I can use your existing Oracle Database licenses to run Oracle deployments on Amazon RDS?

A. Bring Your Own License
B. Role Bases License
C. Enterprise License
D. License Included

Answer: A

Question No : 332 - (Topic 3)

Can we attach an EBS volume to more than one EC2 instance at the same time?

A. Yes.
B. No
C. Only EC2-optimized EBS volumes.
D. Only in read mode.

Answer: A

Question No : 333 - (Topic 3)

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

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.

Answer: C,E
Reference: http://api-portal.anypoint.mulesoft.com/amazon/api/amazon-s3-api/docs/concepts#DataConsistencyModel

Question No : 334 - (Topic 3)

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

A. Yes
B. Only in VPC
C. Only in certain regions
D. No

Answer: A

Question No : 335 - (Topic 3)

What's an ECU?

A. Extended Cluster User.
B. None of these.
C. Elastic Computer Usage.
D. Elastic Compute Unit.

Answer: D

Question No : 336 - (Topic 3)

How many Elastic IP by default in Amazon Account?

A. 1 Elastic IP
B. 3 Elastic IP
C. 5 Elastic IP
D. 0 Elastic IP

Answer: D

Question No : 337 - (Topic 3)

Is there a method in the IAM system to allow or deny access to a specific instance?

A. Only for VPC based instances
B. Yes
C. No

Answer: C

Question No : 338 - (Topic 3)

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

A. special filters
B. functions
C. tags
D. wildcards

Answer: C

Question No : 339 - (Topic 3)

Every user you create in the IAM system starts with _____.

A. full permissions
B. no permissions
C. partial permissions

Answer: B

Question No : 340 - (Topic 3)

Your application provides data transformation services. Files containing data to be transformed are first uploaded to Amazon S3 and then transformed by a fleet of spot EC2 instances. Files submitted by your premium customers must be transformed with the highest priority. How should you implement such a system?

A. Use a DynamoDB table with an attribute defining the priority level. Transformation instances will scan the table for tasks, sorting the results by priority level.
B. Use Route 53 latency based-routing to send high priority tasks to the closest transformation instances.
C. Use two SQS queues, one for high priority messages, the other for default priority. Transformation instances first poll the high priority queue; if there is no message, they poll the default priority queue.
D. Use a single SQS queue. Each message contains the priority level. Transformation instances poll high-priority messages first.

Answer: C

Question No : 341 - (Topic 3)

Without _____, you must either create multiple AWS accounts-each with its own billing and subscriptions to AWS products-or your employees must share the security credentials of a single AWS account.

A. Amazon RDS
B. Amazon Glacier
C. Amazon EMR
D. Amazon IAM

Answer: D

Question No : 342 - (Topic 3)

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

A. Remain as is
B. Terminate
C. Hibernate
D. Pause

Answer: B

Question No : 343 - (Topic 3)

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

A. ApplyNow
B. ApplySoon
C. ApplyThis
D. ApplyImmediately

Answer: D

Question No : 344 - (Topic 3)

You have decided to change the instance type for instances running in your application tier that is using Auto Scaling. In which area below would you change the instance type definition?

A. Auto Scaling policy
B. Auto Scaling group
C. Auto Scaling tags
D. Auto Scaling launch configuration

Answer: D

Explanation:
http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/WhatIsAutoScaling.html

Question No : 345 - (Topic 3)

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

A. Basic
B. Primary
C. Detailed
D. Local

Answer: A

Question No : 346 - (Topic 3)

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

A. Oracle Standard Edition
B. Oracle Express Edition
C. Oracle Enterprise Edition
D. None of these

Answer: C

Question No : 347 - (Topic 3)

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

A. FALSE
B. TRUE

Answer: A

Question No : 348 - (Topic 3)

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

A. Amazon Glacier multipart upload
B. AWS Storage Gateway
C. VM Import/Export
D. AWS Import/Export

Answer: A

Explanation: http://docs.aws.amazon.com/amazonglacier/latest/dev/uploading-archive-mpu.html

Question No : 349 - (Topic 3)

Amazon RDS supports SOAP only through _____.

A. HTTP or HTTPS
B. TCP/IP
C. HTTP
D. HTTPS

Answer: D

Question No : 350 - (Topic 3)

Which services allow the customer to retain full administrative privileges of the underlying EC2 instances? Choose 2 answers

A. Amazon Relational Database Service
B. Amazon Elastic Map Reduce
C. Amazon ElastiCache
D. Amazon DynamoDB
E. AWS Elastic Beanstalk

Answer: B,E

Question No : 351 - (Topic 3)

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

A. FALSE
B. TRUE

Answer: B

Question No : 352 - (Topic 3)

You have an EC2 Security Group with several running EC2 instances. You change the Security Group rules to allow inbound traffic on a new port and protocol, and launch several new instances in the same Security Group. The new rules apply:

A. Immediately to all instances in the security group.
B. Immediately to the new instances only.
C. Immediately to the new instances, but old instances must be stopped and restarted before the new rules apply.
D. To all instances, but it may take several minutes for old instances to see the changes.

Answer: A

Question No : 353 - (Topic 3)

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

A. Data is automatically saved in an EBS volume.
B. Data is unavailable until the instance is restarted.
C. Data will be deleted and will no longer be accessible.
D. Data is automatically saved as an EBS snapshot.

Answer: A

Explanation: See:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html#instance-store-lifetime
However, data in the instance store is lost under the following circumstances:
– The underlying disk drive fails– The instance stops– The instance terminates

Question No : 354 - (Topic 3)

Do the Amazon EBS volumes persist independently from the running life of an Amazon EC2 instance?

A. No
B. Only if instructed to when created
C. Yes

Answer: C

Question No : 355 - (Topic 3)

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

A. None of these.
B. Amazon Instance Storage
C. Any of these
D. Amazon EBS

Answer: D

Question No : 356 - (Topic 3)

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

A. FALSE

B. This is configurable
C. TRUE

Answer: C

Question No : 357 - (Topic 3)

Which DNS name can only be resolved within Amazon EC2?

A. Internal DNS name
B. External DNS name
C. Global DNS name
D. Private DNS name

Answer: A

Question No : 358 - (Topic 3)

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

A. Amazon VPC peering
B. Elastic IP Addresses
C. AWS Direct Connect
D. Amazon VPC virtual private gateway

Answer: C

Question No : 359 - (Topic 3)

Please select the most correct answer regarding the persistence of the Amazon Instance Store

A. The data on an instance store volume persists only during the life of the associated Amazon EC2 instance
B. The data on an instance store volume is lost when the security group rule of the

associated instance is changed.
C. The data on an instance store volume persists even after associated Amazon EC2 instance is deleted

Answer: B

Question No : 360 - (Topic 3)

What does Amazon ELB stand for?

A. Elastic Linux Box.
B. Encrypted Linux Box.
C. Encrypted Load Balancing.
D. Elastic Load Balancing.

Answer: D

Question No : 361 - (Topic 3)

Are you able to integrate a multi-factor token service with the AWS Platform?

A. No, you cannot integrate multi-factor token devices with the AWS platform.
B. Yes, you can integrate private multi-factor token devices to authenticate users to the AWS platform.
C. Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform.

Answer: C

Question No : 362 - (Topic 3)

What are characteristics of Amazon S3? Choose 2 answers

A. S3 allows you to store objects of virtually unlimited size.
B. S3 offers Provisioned IOPS.
C. S3 allows you to store unlimited amounts of data.
D. S3 should be used to host a relational database.

E. Objects are directly accessible via a URL.

Answer: C,E
Reference:
http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html

Question No : 363 - (Topic 3)

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

A. May be performed by AWS, and will be performed by AWS upon customer request.
B. May be performed by AWS, and is periodically performed by AWS.
C. Are expressly prohibited under all circumstances.
D. May be performed by the customer on their own instances with prior authorization from AWS.
E. May be performed by the customer on their own instances, only if performed from EC2 instances

Answer: D
Reference: http://aws.amazon.com/security/penetration-testing/

Question No : 364 - (Topic 3)

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?

A. Amazon Simple Workflow Service
B. AWS Elastic Beanstalk
C. AWS CloudFormation
D. AWS OpsWorks

Answer: D
Reference: http://aws.amazon.com/opsworks/

Question No : 365 - (Topic 3)

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

A. No
B. Yes

Answer: B

Question No : 366 - (Topic 3)

How can an EBS volume that is currently attached to an EC2 instance be migrated from one Availability Zone to another?

A. Detach the volume and attach it to another EC2 instance in the other AZ.
B. Simply create a new volume in the other AZ and specify the original volume as the source.
C. Create a snapshot of the volume, and create a new volume from the snapshot in the other AZ.
D. Detach the volume, then use the ec2-migrate-voiume command to move it to another AZ.

Answer: C

Explanation:

These snapshots can be used to create multiple new EBS volumes, expand the size of a volume, or move volumes across Availability Zones.

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

Question No : 367 - (Topic 3)

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

A. Yes but only if Windows instance
B. No
C. Yes
D. Yes but only if a Linux instance

Answer: B

Question No : 368 - (Topic 3)

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?

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.

Answer: A

Question No : 369 - (Topic 3)

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

Choose 2 answers

A. Allow at least five minutes for Windows/Linux shutdown scripts to complete, before terminating the instance.
B. Terminate the instance with the least active network connections. If multiple instances meet this criterion, one will be randomly selected.
C. Send an 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.

Answer: C,D

Question No : 370 - (Topic 3)

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

A. 1,000 to 1, 00, 000
B. 100 to 1, 000
C. 10, 000 to 1, 00, 000
D. 1, 000 to 10, 000

Answer: D

Question No : 371 - (Topic 3)

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?

A. Elastic Load Balancing, Amazon EC2, and Auto Scaling
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 DynamoDB, and Amazon S3

Answer: A

Question No : 372 - (Topic 3)

Location of Instances are _____

A. Regional
B. based on Availability Zone
C. Global

Answer: B

Question No : 373 - (Topic 3)

What happens to the I/O operations while you take a database snapshot?

A. I/O operations to the database are suspended for an hour while the backup is in progress.
B. I/O operations to the database are sent to a Replica (if available) for a few minutes while the backup is in progress.
C. I/O operations will be functioning normally
D. I/O operations to the database are suspended for a few minutes while the backup is in progress.

Answer: D

Topic 4, Exam D

Question No : 374 - (Topic 4)

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?

A. Create a new peering connection Between Prod and Dev along with appropriate routes.
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.

Answer: A
Reference: http://docs.aws.amazon.com/AmazonVPC/latest/PeeringGuide/vpc-pg.pdf

Question No : 375 - (Topic 4)

Which of the following instance types are available as Amazon EBS-backed only? Choose 2 answers

A. General purpose T2
B. General purpose M3

C. Compute-optimized C4
D. Compute-optimized C3
E. Storage-optimized 12

Answer: D,E

Question No : 376 - (Topic 4)

A customer implemented AWS Storage Gateway with a gateway-cached volume at their main office. An event takes the link between the main and branch office offline. Which methods will enable the branch office to access their data? Choose 3 answers

A. Use a HTTPS GET to the Amazon S3 bucket where the files are located.
B. Restore by implementing a lifecycle policy on the Amazon S3 bucket.
C. Make an Amazon Glacier Restore API call to load the files into another Amazon S3 bucket within four to six hours.
D. Launch a new AWS Storage Gateway instance AMI in Amazon EC2, and restore from a gateway snapshot.
E. Create an Amazon EBS volume from a gateway snapshot, and mount it to an Amazon EC2 instance.
F. Launch an AWS Storage Gateway virtual iSCSI device at the branch office, and restore from a gateway snapshot.

Answer: A,D,F

Question No : 377 - (Topic 4)

The Trusted Advisor service provides insight regarding which four categories of an AWS account?

A. Security, fault tolerance, high availability, and connectivity
B. Security, access control, high availability, and performance
C. Performance, cost optimization, security, and fault tolerance
D. Performance, cost optimization, access control, and connectivity

Answer: C
Reference: https://aws.amazon.com/blogs/aws/category/aws-trusted-advisor/

Question No : 378 - (Topic 4)

An existing application stores sensitive information on a non-boot Amazon EBS data volume attached to an Amazon Elastic Compute Cloud instance. Which of the following approaches would protect the sensitive data on an Amazon EBS volume?

A. Upload your customer keys to AWS CloudHSM. Associate the Amazon EBS volume with AWS CloudHSM. Re-mount the Amazon EBS volume.
B. Create and mount a new, encrypted Amazon EBS volume. Move the data to the new volume. Delete the old Amazon EBS volume.
C. Unmount the EBS volume. Toggle the encryption attribute to True. Re-mount the Amazon EBS volume.
D. Snapshot the current Amazon EBS volume. Restore the snapshot to a new, encrypted Amazon EBS volume. Mount the Amazon EBS volume

Answer: B
Reference: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSEncryption.html

Extract: Apply Encryption While Copying a Snapshot

Because you can apply encryption to a snapshot while copying it, another path to encrypting your data is the following procedure.

To encrypt a volume's data by means of snapshot copying

Create a snapshot of your unencrypted EBS volume. This snapshot is also unencrypted.

Copy the snapshot while applying encryption parameters. The resulting target snapshot is encrypted.

Restore the encrypted snapshot to a new volume, which is also encrypted.

Question No : 379 - (Topic 4)

Which AWS service allows you to collect and process e-commerce data for near real-time analysis?

A. Amazon ElasticCache
B. Amazon DynamoDB
C. Amazon Redshift

D. Amazon Elastic Map Reduce

Answer: B

Question No : 380 - (Topic 4)

You have an Amazon EC2 instance in a VPC that is in a stopped state. Which of the following actions can you perform on this instance?

A. Change security groups
B. Detach the network interface
C. Attach to an Auto Scaling group
D. Disable detailed monitoring

Answer: A

Question No : 381 - (Topic 4)

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?

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

Answer: B

Question No : 382 - (Topic 4)

You have an Amazon EC2 instance that belongs to two security groups. The first security group has a rule that allows ingress traffic to TCP port 80 from IP address 206.251.8.21, and the second security group has a rule that allows ingress traffic to TCP ports 80 and 443 from everywhere. Where traffic is allowed to the Amazon EC2 instance?

A. Only ingress traffic to TCP port 80 from everywhere
B. Only ingress traffic to TCP port 80 from 206.251.8.21
C. Only ingress traffic to TCP ports 80 and 443 from everywhere
D. Only ingress traffic to TCP ports 80 and 443 from 206.251.8.21

Answer: C

Question No : 383 - (Topic 4)

You established a virtual private cloud (VPC) peering relationship between VPC 1 and VPC 2. VPC 1 has routes to VPC 2, yet hosts in VPC1 cannot connect to hosts in VPC 2. Which of the following is a possible cause?

A. Security groups applied to VPC 2 are blocking the traffic
B. The network access control list applied to VPC 2 denies by default
C. The subnet route table in VPC 2 does not have routes to VPC 1
D. The VPCs have not been attached to a virtual private gateway

Answer: B

Question No : 384 - (Topic 4)

A company is building software on AWS that requires access to various AWS services. Which configuration should be used to ensure mat AWS credentials (i.e., Access Key ID/Secret Access Key combination) are not compromised?

A. Enable Multi-Factor Authentication for your AWS root account.
B. Assign an IAM role to the Amazon EC2 instance.
C. Store the AWS Access Key ID/Secret Access Key combination in software comments.
D. Assign an IAM user to the Amazon EC2 Instance.

Answer: A
Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/IAMBestPractices.html

Question No : 385 - (Topic 4)

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?

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

Answer: A

Question No : 386 - (Topic 4)

A US-based company is expanding their web presence into Europe. The company wants to extend their AWS infrastructure from Northern Virginia (us-east-1) into the Dublin (eu-west-1) region. Which of the following options would enable an equivalent experience for users on both continents?

A. Use a public-facing load balancer per region to load-balance web traffic, and enable HTTP health checks.
B. Use a public-facing load balancer per region to load-balance web traffic, and enable sticky sessions.
C. Use Amazon Route 53, and apply a geolocation routing policy to distribute traffic across both regions.
D. Use Amazon Route 53, and apply a weighted routing policy to distribute traffic across both regions.

Answer: C

Explanation: https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html
Geolocation routing lets you choose the resources that serve your traffic based on the geographic location of your users, meaning the location from which DNS queries originate. When you use geolocation routing, you can localize your content and present some or all of your website in the language of your users. You can also use geolocation routing to restrict distribution of content to only the locations in which you have distribution rights.
Another possible use is for balancing load across endpoints in a predictable, easy-to-manage way, so that each user location is consistently routed to the same endpoint.

Question No : 387 - (Topic 4)

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?

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

Answer: A

Question No : 388 - (Topic 4)

A t2.medium EC2 instance type must be launched with what type of Amazon Machine Image (AMI)?

A. An Instance Store Hardware Virtual Machine AMI
B. An Instance store Paravirtual AMI
C. An Amazon EBS-backed Hardware Virtual Machine AMI
D. An Amazon EBS-backed Paravirtual AMI

Answer: A
Reference: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-resize.html

Question No : 389 - (Topic 4)

You are building an automated transcription service in which Amazon EC2 worker instances process an uploaded audio file and generate a text file. You must store both of these files in the same durable storage until the text file is retrieved. You do not know what the storage capacity requirements are. Which storage option is both cost-efficient and scalable?

A. Multiple Amazon EBS volume with snapshots
B. A single Amazon Glacier vault
C. A single Amazon S3 bucket
D. Multiple instance stores

Answer: C

Question No : 390 - (Topic 4)

You have a content management system running on an Amazon EC2 instance that is approaching 100% CPU utilization. Which option will reduce load on the Amazon EC2 instance?

A. Create a load balancer, and register the Amazon EC2 instance with it
B. Create a CloudFront distribution, and configure the Amazon EC2 instance as the origin
C. Create an Auto Scaling group from the instance using the CreateAutoScalingGroup action
D. Create a launch configuration from the instance using the CreateLaunchConfiguration action

Answer: A

Question No : 391 - (Topic 4)

You have an Amazon EC2 instance with data stored in an Amazon Elastic Block Store (EBS) volume. You want to make the data available in another region. Which of the following methods should be used for making the data in the Amazon EBS volume available to the newly launched Amazon EC2 instance?

A. Snapshot the Amazon EBS volume, and copy it to the other region. Create a new Amazon EBS volume from the snapshot, and attach it to the newly launched Amazon EC2 instance.
B. Use AWS Import/Export to copy the Amazon EBS volume to the other region and attach it to newly launched instance.
C. Copy the Amazon EBS volume to the other region, create a new Amazon EBS volume from that, and then attach it to newly launched Amazon EC2 instance.
D. Detach the Amazon EBS volume and attach it to the newly launched Amazon EC2 instance.

Answer: A

Question No : 392 - (Topic 4)

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?

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

Answer: B

Question No : 393 - (Topic 4)

Which of the following are true regarding encrypted Amazon Elastic Block Store (EBS) volumes? Choose 2 answers

A. Supported on all Amazon EBS volume types
B. Snapshots are automatically encrypted
C. Available to all instance types
D. Existing volumes can be encrypted
E. shared volumes can be encrypted

Answer: A,B

Explanation:
This feature is supported on all Amazon EBS volume types (General Purpose (SSD), Provisioned IOPS (SSD), and Magnetic). You can access encrypted Amazon EBS volumes the same way you access existing volumes; encryption and decryption are handled transparently and they require no additional action from you, your Amazon EC2 instance, or your application. Snapshots of encrypted Amazon EBS volumes are automatically encrypted, and volumes that are created from encrypted Amazon EBS snapshots are also automatically encrypted.

Reference: http://docs.aws.amazon.com/kms/latest/developerguide/services-ebs.html

Question No : 394 - (Topic 4)

You try to connect via SSH to a newly created Amazon EC2 instance and get one of the following error messages:

"Network error: Connection timed out" or "Error connecting to [instance], reason: -> Connection timed out: connect,"

You have confirmed that the network and security group rules are configured correctly and the instance is passing status checks. What steps should you take to identify the source of the behavior? Choose 2 answers

A. Verify that the private key file corresponds to the Amazon EC2 key pair assigned at launch.
B. Verify that your IAM user policy has permission to launch Amazon EC2 instances.
C. Verify that you are connecting with the appropriate user name for your AMI.
D. Verify that the Amazon EC2 Instance was launched with the proper IAM role.
E. Verify that your federation trust to AWS has been established.

Answer: A,C
Reference:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/TroubleshootingInstancesConnecting.html

Question No : 395 - (Topic 4)

A customer is running a multi-tier web application farm in a virtual private cloud (VPC) that is not connected to their corporate network. They are connecting to the VPC over the Internet to manage all of their Amazon EC2 instances running in both the public and private subnets. They have only authorized the bastion-security-group with Microsoft Remote Desktop Protocol (RDP) access to the application instance security groups, but the company wants to further limit administrative access to all of the instances in the VPC. Which of the following Bastion deployment scenarios will meet this requirement?

A. Deploy a Windows Bastion host on the corporate network that has RDP access to all instances in the VPC.
B. Deploy a Windows Bastion host with an Elastic IP address in the public subnet and allow SSH access to the bastion from anywhere.
C. Deploy a Windows Bastion host with an Elastic IP address in the private subnet, and restrict RDP access to the bastion from only the corporate public IP addresses.
D. Deploy a Windows Bastion host with an auto-assigned Public IP address in the public subnet, and allow RDP access to the bastion from only the corporate public IP addresses.

Answer: D

Explanation:
Basic MS Bastion host configuration.

Question No : 396 - (Topic 4)

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?

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.

Answer: A

Question No : 397 - (Topic 4)

Which of the following notification endpoints or clients are supported by Amazon Simple Notification Service? Choose 2 answers

A. Email
B. CloudFront distribution
C. File Transfer Protocol
D. Short Message Service
E. Simple Network Management Protocol

Answer: A,D
Reference: http://docs.aws.amazon.com/sns/latest/dg/welcome.html

Question No : 398 - (Topic 4)

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?

A. Amazon DynamoDB
B. Amazon Redshift
C. Amazon Kinesis
D. Amazon Simple Queue Service

Answer: C

Question No : 399 - (Topic 4)

Which of the following are true regarding AWS CloudTrail? Choose 3 answers

A. CloudTrail is enabled globally
B. CloudTrail is enabled by default
C. CloudTrail is enabled on a per-region basis
D. CloudTrail is enabled on a per-service basis.
E. Logs can be delivered to a single Amazon S3 bucket for aggregation.
F. CloudTrail is enabled for all available services within a region.
G. Logs can only be processed and delivered to the region in which they are generated.

Answer: C,D,E
Reference: http://aws.amazon.com/cloudtrail/faqs/

Question No : 400 - (Topic 4)

A company is preparing to give AWS Management Console access to developers Company policy mandates identity federation and role-based access control. Roles are currently assigned using groups in the corporate Active Directory. What combination of the

following will give developers access to the AWS console? (Select 2) Choose 2 answers

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

Answer: A,D

Question No : 401 - (Topic 4)

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

A. Establish a hardware VPN over the internet between VPC-2 and the on-premises network.
B. Establish a hardware VPN over the internet between VPC-1 and the on-premises network.
C. Establish a new AWS Direct Connect connection and private virtual interface in the same region as VPC-2.
D. Establish a new AWS Direct Connect connection and private virtual interface in a different AWS region than VPC-1.
E. Establish a new AWS Direct Connect connection and private virtual interface in the same AWS region as VPC-1

Answer: B,C

Question No : 402 - (Topic 4)

You have a load balancer configured for VPC, and all back-end Amazon EC2 instances are in service. However, your web browser times out when connecting to the load balancer's DNS name. Which options are probable causes of this behavior? Choose 2 answers

A. The load balancer was not configured to use a public subnet with an Internet gateway configured

B. The Amazon EC2 instances do not have a dynamically allocated private IP address
C. The security groups or network ACLs are not property configured for web traffic.
D. The load balancer is not configured in a private subnet with a NAT instance.
E. The VPC does not have a VGW configured.

Answer: A,C

Question No : 403 - (Topic 4)

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

A. MySQL Installed on two Amazon EC2 Instances in a single Availability Zone
B. Amazon RDS for MySQL with Multi-AZ
C. Amazon ElastiCache
D. Amazon DynamoDB

Answer: D
Reference: http://www.allthingsdistributed.com/2013/03/dynamodb-one-year-later.html

Question No : 404 - (Topic 4)

A company needs to monitor the read and write IOPs metrics for their AWS MySQL RDS instance and send real-time alerts to their operations team. Which AWS services can accomplish this? Choose 2 answers

A. Amazon Simple Email Service
B. Amazon CloudWatch
C. Amazon Simple Queue Service
D. Amazon Route 53
E. Amazon Simple Notification Service

Answer: B,E

Question No : 405 - (Topic 4)

You manually launch a NAT AMI in a public subnet. The network is properly configured. Security groups and network access control lists are property configured. Instances in a private subnet can access the NAT. The NAT can access the Internet. However, private instances cannot access the Internet. What additional step is required to allow access from the private instances?

A. Enable Source/Destination Check on the private Instances.
B. Enable Source/Destination Check on the NAT instance.
C. Disable Source/Destination Check on the private instances.
D. Disable Source/Destination Check on the NAT instance.

Answer: D

Explanation: Disabling Source/Destination Checks
Each EC2 instance performs source/destination checks by default. This means that the instance must be the source or destination of any traffic it sends or receives. However, a NAT instance must be able to send and receive traffic when the source or destination is not itself. Therefore, you must disable source/destination checks on the NAT instance.
You can disable the SrcDestCheck attribute for a NAT instance that's either running or stopped using the console or the command line.
http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_NAT_Instance.html

Question No : 406 - (Topic 4)

Which set of Amazon S3 features helps to prevent and recover from accidental data loss?

A. Object lifecycle and service access logging
B. Object versioning and Multi-factor authentication
C. Access controls and server-side encryption
D. Website hosting and Amazon S3 policies

Answer: B
Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

Question No : 407 - (Topic 4)

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?

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

Answer: B

Question No : 408 - (Topic 4)

Which of the following services natively encrypts data at rest within an AWS region? Choose 2 answers

A. AWS Storage Gateway
B. Amazon DynamoDB
C. Amazon CloudFront
D. Amazon Glacier
E. Amazon Simple Queue Service

Answer: A,D
Reference: https://media.amazonwebservices.com/AWS_Securing_Data_at_Rest_with_Encryption.pdf (page 12)

Question No : 409 - (Topic 4)

Which of the following statements are true about Amazon Route 53 resource records? Choose 2 answers

A. An Alias record can map one DNS name to another Amazon Route 53 DNS name.
B. A CNAME record can be created for your zone apex.
C. An Amazon Route 53 CNAME record can point to any DNS record hosted anywhere.

D. TTL can be set for an Alias record in Amazon Route 53.
E. An Amazon Route 53 Alias record can point to any DNS record hosted anywhere.

Answer: A,C
Reference: http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/resource-record-sets-choosing-alias-non-alias.html

New Questions:

Question No : 410 - (Topic 4)

A customer is hosting their company website on a cluster of web servers that are behind a public-facing load balancer. The customer also uses Amazon Route 53 to manage their public DNS. How should the customer configure the DNS zone apex record to point to the load balancer?

A. Create an A record pointing to the IP address of the load balancer
B. Create a CNAME record pointing to the load balancer DNS name.
C. Create a CNAME record aliased to the load balancer DNS name.
D. Create an A record aliased to the load balancer DNS name

Answer: C
Reference:
http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/using-domain-names-with-elb.html

Question No : 411 - (Topic 4)

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?

A. Amazon Kinesis

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

Answer: A

Question No : 412 - (Topic 4)

You need to pass a custom script to new Amazon Linux instances created in your Auto Scaling group. Which feature allows you to accomplish this?

A. User data
B. EC2Config service
C. IAM roles
D. AWS Config

Answer: A
Explanation:
Reasons:http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/user-data.html#user-data-shell-scripts

Question No : 413 - (Topic 4)

What is the minimum time Interval for the data that Amazon CloudWatch receives and aggregates?

A. One second
B. Five seconds
C. One minute
D. Three minutes
E. Five minutes

Answer: C
Explanation:
Many metrics are received and aggregated at 1-minute intervals. Some are at 3-minute or 5-minute intervals.

Question No : 414 - (Topic 4)

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

A. SAML-based Identity Federation
B. Cross-Account Access
C. AWS Identity and Access Management roles
D. Web Identity Federation

Answer: D

Question No : 415 - (Topic 4)

A company is building software on AWS that requires access to various AWS services. Which configuration should be used to ensure that AWS credentials (i.e., Access key ID/Secret Access Key combination) are not compromised?

A. Enable Multi-Factor Authentication for your AWS root account.
B. Assign an IAM role to the Amazon EC2 instance.
C. Store the AWS Access Key ID/Secret Access Key combination in Software comments.
D. Assign an IAM user to the Amazon EC2 instance.

Answer: B

Question No : 416 - (Topic 4)

Which of the following are use cases for Amazon DynamoDB? Choose 3 answers

A. Storing BLOB data.
B. Managing web sessions.
C. Storing JSON documents.
D. Storing metadata for Amazon S3 objects.

E. Running relational joins and complex updates.
F. Storing large amounts of infrequently accessed data.

Answer: C,E,F

Question No : 417 - (Topic 4)

A customer has a single 3-TB volume on-premises that is used to hold a large repository of images and print layout files. This repository is growing at 500 GB a year and must be presented as a single logical volume. The customer is becoming increasingly constrained with their local storage capacity and wants an off-site backup of this data, while maintaining low-latency access to their frequently accessed data. Which AWS Storage Gateway configuration meets the customer requirements?

A. Gateway-Cached volumes with snapshots scheduled to Amazon S3
B. Gateway-Stored volumes with snapshots scheduled to Amazon S3
C. Gateway-Virtual Tape Library with snapshots to Amazon S3
D. Gateway-Virtual Tape Library with snapshots to Amazon Glacier

Answer: A

Explanation: http://docs.aws.amazon.com/storagegateway/latest/userguide/storage-gateway-cached-concepts.html
The requirement is “off-site backup of this data, while maintaining low-latency access

Question No : 418 - (Topic 4)

When will you incur costs with an Elastic IP address (EIP)?

A. When an EIP is allocated.
B. When it is allocated and associated with a running instance.
C. When it is allocated and associated with a stopped instance.
D. Costs are incurred regardless of whether the EIP is associated with a running instance.

Answer: C

Explanation: To ensure efficient use of Elastic IP addresses, we impose a small hourly charge if an Elastic IP address is not associated with a running instance, or if it is associated with a stopped instance or an unattached network interface. While your instance is running, you are not charged for one Elastic IP address associated with the

instance, but you are charged for any additional Elastic IP addresses associated with the instance. For more information, see Amazon EC2 Pricing.
Source: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/elastic-ip-addresses-eip.html#eip-basics

Question No : 419 - (Topic 4)

Which of the following approaches provides the lowest cost for Amazon Elastic Block Store snapshots while giving you the ability to fully restore data?

A. Maintain two snapshots: the original snapshot and the latest incremental snapshot.
B. Maintain a volume snapshot; subsequent snapshots will overwrite one another
C. Maintain a single snapshot the latest snapshot is both Incremental and complete.
D. Maintain the most current snapshot, archive the original and incremental to Amazon Glacier.

Answer: C

Explanation:
Even though snapshots are saved incrementally, the snapshot deletion process is designed sothat you need to retain only the most recent snapshot in order to restore the volume.http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebsdeleting-snapshot.html
http://www.nimbo.com/blog/observations-ebs-snapshot-restorebehavior-aws/