

Amazon

Exam Questions AWS-Solution-Architect-Associate

AWS Certified Solutions Architect - Associate



NEW QUESTION 1

You have set up an Auto Scaling group. The cool down period for the Auto Scaling group is 7 minutes. The first instance is launched after 3 minutes, while the second instance is launched after 4 minutes. How many minutes after the first instance is launched will Auto Scaling accept another scaling actMty request?

- A. 11 minutes
- B. 7 minutes
- C. 10 minutes
- D. 14 minutes

Answer: A

Explanation: If an Auto Scaling group is launching more than one instance, the cool down period for each instance starts after that instance is launched. The group remains locked until the last instance that was launched has completed its cool down period. In this case the cool down period for the first instance starts after 3 minutes and finishes at the 10th minute (3+7 cool down), while for the second instance it starts at the 4th minute and finishes at the 11th minute (4+7 cool down). Thus, the Auto Scaling group will receive another request only after 11 minutes.

Reference: http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/AS_Concepts.html

NEW QUESTION 2

In Amazon EC2 Container Service components, what is the name of a logical grouping of container instances on which you can place tasks?

- A. A cluster
- B. A container instance
- C. A container
- D. A task definition

Answer: A

Explanation: Amazon ECS contains the following components:

A Cluster is a logical grouping of container instances that you can place tasks on.

A Container instance is an Amazon EC2 instance that is running the Amazon ECS agent and has been registered into a cluster.

A Task definition is a description of an application that contains one or more container definitions. A Scheduler is the method used for placing tasks on container instances.

A Service is an Amazon ECS service that allows you to run and maintain a specified number of instances of a task definition simultaneously.

A Task is an instantiation of a task definition that is running on a container instance. A Container is a Linux container that was created as part of a task.

Reference: <http://docs.aws.amazon.com/AmazonECS/latest/developerguide/Welcome.html>

NEW QUESTION 3

Amazon EBS provides the ability to create backups of any Amazon EC2 volume into what is known as

- A. snapshots
- B. images
- C. instance backups
- D. mirrors

Answer: A

Explanation: Amazon allows you to make backups of the data stored in your EBS volumes through snapshots that can later be used to create a new EBS volume.

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/Storage.html>

NEW QUESTION 4

After you recommend Amazon Redshift to a client as an alternative solution to paying data warehouses to analyze his data, your client asks you to explain why you are recommending Redshift. Which of the following would be a reasonable response to his request?

- A. It has high performance at scale as data and query complexity grows.
- B. It prevents reporting and analytic processing from interfering with the performance of OLTP workloads.
- C. You don't have the administrative burden of running your own data warehouse and dealing with setup, durability, monitoring, scaling, and patching.
- D. All answers listed are a reasonable response to his QUESTION

Answer: D

Explanation: Amazon Redshift delivers fast query performance by using columnar storage technology to improve I/O efficiency and parallelizing queries across multiple nodes. Redshift uses standard PostgreSQL JDBC and ODBC drivers, allowing you to use a wide range of familiar SQL clients. Data load speed scales linearly with cluster size, with integrations to Amazon S3, Amazon DynamoDB, Amazon Elastic MapReduce, Amazon Kinesis or any SSH-enabled host.

AWS recommends Amazon Redshift for customers who have a combination of needs, such as: High performance at scale as data and query complexity grows
Desire to prevent reporting and analytic processing from interfering with the performance of OLTP workloads

Large volumes of structured data to persist and query using standard SQL and existing BI tools
Desire to the administrative burden of running one's own data warehouse and dealing with setup, durability, monitoring, scaling and patching

Reference: https://aws.amazon.com/running_databases/#redshift_anchor

NEW QUESTION 5

One of the criteria for a new deployment is that the customer wants to use AWS Storage Gateway. However you are not sure whether you should use gateway-cached volumes or gateway-stored volumes or even what the differences are. Which statement below best describes those differences?

- A. Gateway-cached lets you store your data in Amazon Simple Storage Service (Amazon S3) and retain a copy of frequently accessed data subsets locally
- B. Gateway-stored enables you to configure your on-premises gateway to store all your data locally and then asynchronously back up point-in-time snapshots of this data to Amazon S3.
- C. Gateway-cached is free whilst gateway-stored is not.
- D. Gateway-cached is up to 10 times faster than gateway-stored.
- E. Gateway-stored lets you store your data in Amazon Simple Storage Service (Amazon S3) and retain a copy of frequently accessed data subsets locally
- F. Gateway-cached enables you to configure your on-premises gateway to store all your data locally and then asynchronously back up point-in-time snapshots of this data to Amazon S3.

Answer: A

Explanation: Volume gateways provide cloud-backed storage volumes that you can mount as Internet Small Computer System Interface (iSCSI) devices from your on-premises application servers. The gateway supports the following volume configurations:

Gateway-cached volumes — You store your data in Amazon Simple Storage Service (Amazon S3) and retain a copy of frequently accessed data subsets locally. Gateway-cached volumes offer a substantial cost savings on primary storage and minimize the need to scale your storage on-premises. You also retain low-latency access to your frequently accessed data.

Gateway-stored volumes — If you need low-latency access to your entire data set, you can configure your on-premises gateway to store all your data locally and then asynchronously back up point-in-time snapshots of this data to Amazon S3. This configuration provides durable and inexpensive off-site backups that you can recover to your local data center or Amazon EC2. For example, if you need replacement capacity for disaster recovery, you can recover the backups to Amazon EC2.

Reference: <http://docs.aws.amazon.com/storagegateway/latest/userguide/volume-gateway.html>

NEW QUESTION 6

A user is launching an EC2 instance in the US East region. Which of the below mentioned options is recommended by AWS with respect to the selection of the availability zone?

- A. Always select the AZ while launching an instance
- B. Always select the US-East-1-a zone for HA
- C. Do not select the AZ; instead let AWS select the AZ
- D. The user can never select the availability zone while launching an instance

Answer: C

Explanation: When launching an instance with EC2, AWS recommends not to select the availability zone (AZ). AWS specifies that the default Availability Zone should be accepted. This is because it enables AWS to select the best Availability Zone based on the system health and available capacity. If the user launches additional instances, only then an Availability Zone should be specified. This is to specify the same or different AZ from the running instances.

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

NEW QUESTION 7

A user is storing a large number of objects on AWS S3. The user wants to implement the search functionality among the objects. How can the user achieve this?

- A. Use the indexing feature of S3.
- B. Tag the objects with the metadata to search on that.
- C. Use the query functionality of S3.
- D. Make your own DB system which stores the S3 metadata for the search functionality

Answer: D

Explanation: In Amazon Web Services, AWS S3 does not provide any query facility. To retrieve a specific object the user needs to know the exact bucket / object key. In this case it is recommended to have an own DB system which manages the S3 metadata and key mapping.

Reference: http://media.amazonwebservices.com/AWS_Storage_Options.pdf

NEW QUESTION 8

What is a placement group in Amazon EC2?

- A. It is a group of EC2 instances within a single Availability Zone.
- B. It is the edge location of your web content.
- C. It is the AWS region where you run the EC2 instance of your web content.
- D. It is a group used to span multiple Availability Zones

Answer: A

Explanation: A placement group is a logical grouping of instances within a single Availability Zone. Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html>

NEW QUESTION 9

You are migrating an internal server on your DC to an EC2 instance with EBS volume. Your server disk usage is around 500GB so you just copied all your data to a 2TB disk to be used with AWS Import/Export. Where will the data be imported once it arrives at Amazon?

- A. to a 2TB EBS volume
- B. to an S3 bucket with 2 objects of 1TB
- C. to an 500GB EBS volume
- D. to an S3 bucket as a 2TB snapshot

Answer: B

Explanation: An import to Amazon EBS will have different results depending on whether the capacity of your storage device is less than or equal to 1 TB or greater than 1 TB. The maximum size of an Amazon EBS snapshot is 1 TB, so if the device image is larger than 1 TB, the image is chunked and stored on Amazon S3. The target location is determined based on the total capacity of the device, not the amount of data on the device.

Reference: <http://docs.aws.amazon.com/AWSImportExport/latest/DG/Concepts.html>

NEW QUESTION 10

A client needs you to import some existing infrastructure from a dedicated hosting provider to AWS to try and save on the cost of running his current website. He also needs an automated process that manages backups, software patching, automatic failure detection, and recovery. You are aware that his existing set up currently uses an Oracle database. Which of the following AWS databases would be best for accomplishing this task?

- A. Amazon RDS
- B. Amazon Redshift
- C. Amazon SimpleDB
- D. Amazon ElastiCache

Answer: A

Explanation: Amazon RDS gives you access to the capabilities of a familiar MySQL, Oracle, SQL Server, or PostgreSQL database engine. This means that the code, applications, and tools you already use today with your existing databases can be used with Amazon RDS. Amazon RDS automatically patches the database software and backs up your database, storing the backups for a user-defined retention period and enabling point-in-time recovery.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

NEW QUESTION 10

An edge location refers to which Amazon Web Service?

- A. An edge location is referred to the network configured within a Zone or Region
- B. An edge location is an AWS Region
- C. An edge location is the location of the data center used for Amazon CloudFront.
- D. An edge location is a Zone within an AWS Region

Answer: C

Explanation: Amazon CloudFront is a content distribution network. A content delivery network or content distribution network (CDN) is a large distributed system of servers deployed in multiple data centers across the world. The location of the data center used for CDN is called edge location. Amazon CloudFront can cache static content at each edge location. This means that your popular static content (e.g., your site's logo, navigational images, cascading style sheets, JavaScript code, etc.) will be available at a nearby edge location for the browsers to download with low latency and improved performance for viewers. Caching popular static content with Amazon CloudFront also helps you offload requests for such files from your origin server — CloudFront serves the cached copy when available and only makes a request to your origin server if the edge location receiving the browser's request does not have a copy of the file.

Reference: <http://aws.amazon.com/cloudfront/>

NEW QUESTION 13

You are looking at ways to improve some existing infrastructure as it seems a lot of engineering resources are being taken up with basic management and monitoring tasks and the costs seem to be excessive.

You are thinking of deploying Amazon ElastiCache to help. Which of the following statements is true in regards to ElastiCache?

- A. You can improve load and response times to user actions and queries however the cost associated with scaling web applications will be more.
- B. You can't improve load and response times to user actions and queries but you can reduce the cost associated with scaling web applications.
- C. You can improve load and response times to user actions and queries however the cost associated with scaling web applications will remain the same.
- D. You can improve load and response times to user actions and queries and also reduce the cost associated with scaling web applications.

Answer: D

Explanation: Amazon ElastiCache is a web service that makes it easy to deploy and run Memcached or Redis protocol-compliant server nodes in the cloud. Amazon ElastiCache improves the performance of web applications by allowing you to retrieve information from a fast, managed, in-memory caching system, instead of relying entirely on slower disk-based databases. The service simplifies and offloads the management, monitoring and operation of in-memory cache environments, enabling your engineering resources to focus on developing applications.

Using Amazon ElastiCache, you can not only improve load and response times to user actions and queries, but also reduce the cost associated with scaling web applications.

Reference: <https://aws.amazon.com/elasticache/faqs/>

NEW QUESTION 18

Do Amazon EBS volumes persist independently from the running life of an Amazon EC2 instance?

- A. Yes, they do but only if they are detached from the instance.
- B. No, you cannot attach EBS volumes to an instance.
- C. No, they are dependent.
- D. Yes, they do

Answer: D

Explanation: An Amazon EBS volume behaves like a raw, unformatted, external block device that you can attach to a single instance. The volume persists independently from the running life of an Amazon EC2 instance. Reference:

<http://docs.amazonaws.com/AWSEC2/latest/UserGuide/Storage.html>

NEW QUESTION 20

Your supervisor has asked you to build a simple file synchronization service for your department. He doesn't want to spend too much money and he wants to be notified of any changes to files by email. What do you think would be the best Amazon service to use for the email solution?

- A. Amazon SES
- B. Amazon CloudSearch
- C. Amazon SWF
- D. Amazon AppStream

Answer: A

Explanation: File change notifications can be sent via email to users following the resource with Amazon Simple Email Service (Amazon SES), an easy-to-use, cost-effective email solution.

Reference: http://media.amazonwebservices.com/architecturecenter/AWS_ac_ra_filesync_08.pdf

NEW QUESTION 24

In Amazon AWS, which of the following statements is true of key pairs?

- A. Key pairs are used only for Amazon SDKs.
- B. Key pairs are used only for Amazon EC2 and Amazon CloudFront.
- C. Key pairs are used only for Elastic Load Balancing and AWS IAM.
- D. Key pairs are used for all Amazon service

Answer: B

Explanation: Key pairs consist of a public and private key, where you use the private key to create a digital signature, and then AWS uses the corresponding public key to validate the signature. Key pairs are used only for Amazon EC2 and Amazon CloudFront.

Reference: <http://docs.aws.amazon.com/general/latest/gr/aws-sec-cred-types.html>

NEW QUESTION 27

Does Amazon DynamoDB support both increment and decrement atomic operations?

- A. Only increment, since decrement are inherently impossible with DynamoDB's data model.
- B. No, neither increment nor decrement operations.
- C. Yes, both increment and decrement operations.
- D. Only decrement, since increment are inherently impossible with DynamoDB's data mode

Answer: C

Explanation: Amazon DynamoDB supports increment and decrement atomic operations.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/APISummary.html>

NEW QUESTION 31

An organization has three separate AWS accounts, one each for development, testing, and production. The organization wants the testing team to have access to certain AWS resources in the production account. How can the organization achieve this?

- A. It is not possible to access resources of one account with another account.
- B. Create the IAM roles with cross account access.
- C. Create the IAM user in a test account, and allow it access to the production environment with the IAM policy.
- D. Create the IAM users with cross account acces

Answer: B

Explanation: An organization has multiple AWS accounts to isolate a development environment from a testing or production environment. At times the users from one account need to access resources in the other account, such as promoting an update from the development environment to the production environment. In this case the IAM role with cross account access will provide a solution. Cross account access lets one account share access to their resources with users in the other AWS accounts.

Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

NEW QUESTION 35

You need to import several hundred megabytes of data from a local Oracle database to an Amazon RDS DB instance. What does AWS recommend you use to accomplish this?

- A. Oracle export/import utilities
- B. Oracle SQL Developer
- C. Oracle Data Pump
- D. DBMS_FILE_TRANSFER

Answer: C

Explanation: How you import data into an Amazon RDS DB instance depends on the amount of data you have and the number and variety of database objects in your database.

For example, you can use Oracle SQL Developer to import a simple, 20 MB database; you want to use Oracle Data Pump to import complex databases or databases that are several hundred megabytes or several terabytes in size.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Oracle.Procedural.Importing.html>

NEW QUESTION 40

A user has created an EBS volume with 1000 IOPS. What is the average IOPS that the user will get for most of the year as per EC2 SLA if the instance is attached to the EBS optimized instance?

- A. 950
- B. 990
- C. 1000
- D. 900

Answer: D

Explanation: As per AWS SLA if the instance is attached to an EBS-Optimized instance, then the Provisioned IOPS volumes are designed to deliver within 10% of the provisioned IOPS performance 99.9% of the time in a given year. Thus, if the user has created a volume of 1000 IOPS, the user will get a minimum 900 IOPS 99.9% time of the year.

Reference: <http://aws.amazon.com/ec2/faqs/>

NEW QUESTION 43

You need to migrate a large amount of data into the cloud that you have stored on a hard disk and you decide that the best way to accomplish this is with AWS Import/Export and you mail the hard disk to AWS. Which of the following statements is incorrect in regards to AWS Import/Export?

- A. It can export from Amazon S3
- B. It can Import to Amazon Glacier
- C. It can export from Amazon Glacier.
- D. It can Import to Amazon EBS

Answer: C

Explanation: AWS Import/Export supports: Import to Amazon S3

Export from Amazon S3 Import to Amazon EBS Import to Amazon Glacier

AWS Import/Export does not currently support export from Amazon EBS or Amazon Glacier. Reference:

<https://docs.aws.amazon.com/AWSImportExport/latest/DG/whatisdisk.html>

NEW QUESTION 46

A user wants to use an EBS-backed Amazon EC2 instance for a temporary job. Based on the input data, the job is most likely to finish within a week. Which of the following steps should be followed to terminate the instance automatically once the job is finished?

- A. Configure the EC2 instance with a stop instance to terminate it.
- B. Configure the EC2 instance with ELB to terminate the instance when it remains idle.
- C. Configure the CloudWatch alarm on the instance that should perform the termination action once the instance is idle.
- D. Configure the Auto Scaling schedule actMty that terminates the instance after 7 day

Answer: C

Explanation: Auto Scaling can start and stop the instance at a pre-defined time. Here, the total running time is unknown. Thus, the user has to use the CloudWatch alarm, which monitors the CPU utilization. The user can create an alarm that is triggered when the average CPU utilization percentage has been lower than 10 percent

for 24 hours, signaling that it is idle and no longer in use. When the utilization is below the threshold limit, it will terminate the instance as a part of the instance action.

Reference: <http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/UsingAlarmActions.html>

NEW QUESTION 49

Which of the following is true of Amazon EC2 security group?

- A. You can modify the outbound rules for EC2-Classic.
- B. You can modify the rules for a security group only if the security group controls the traffic for just one instance.
- C. You can modify the rules for a security group only when a new instance is created.
- D. You can modify the rules for a security group at any time

Answer: D

Explanation: A security group acts as a virtual firewall that controls the traffic for one or more instances. When you launch an instance, you associate one or more security groups with the instance. You add rules to each security group that allow traffic to or from its associated instances. You can modify the rules for a security group at any time; the new rules are automatically applied to all instances that are associated with the security group.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html>

NEW QUESTION 54

An Elastic IP address (EIP) is a static IP address designed for dynamic cloud computing. With an EIP, you can mask the failure of an instance or software by rapidly remapping the address to another instance in your account. Your EIP is associated with your AWS account, not a particular EC2 instance, and it remains associated with your account until you choose to explicitly release it. By default how many EIPs is each AWS account limited to on a per region basis?

- A. 1

- B. 5
- C. Unlimited
- D. 10

Answer: B

Explanation: By default, all AWS accounts are limited to 5 Elastic IP addresses per region for each AWS account, because public (IPv4) Internet addresses are a scarce public resource. AWS strongly encourages you to use an EIP primarily for load balancing use cases, and use DNS hostnames for all other inter-node communication.

If you feel your architecture warrants additional EIPs, you would need to complete the Amazon EC2 Elastic IP Address Request Form and give reasons as to your need for additional addresses. Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/elastic-ip-addresses-eip.html#using-instance-addressing-limit>

NEW QUESTION 58

In EC2, what happens to the data in an instance store if an instance reboots (either intentionally or unintentionally)?

- A. Data is deleted from the instance store for security reasons.
- B. Data persists in the instance store.
- C. Data is partially present in the instance store.
- D. Data in the instance store will be lost

Answer: B

Explanation: The data in an instance store persists only during the lifetime of its associated instance. If an instance reboots (intentionally or unintentionally), data in the instance store persists. However, data on instance store volumes is lost under the following circumstances.

Failure of an underlying drive

Stopping an Amazon EBS-backed instance Terminating an instance

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

NEW QUESTION 59

You are setting up a VPC and you need to set up a public subnet within that VPC. Which following requirement must be met for this subnet to be considered a public subnet?

- A. Subnet's traffic is not routed to an internet gateway but has its traffic routed to a virtual private gateway.
- B. Subnet's traffic is routed to an internet gateway.
- C. Subnet's traffic is not routed to an internet gateway.
- D. None of these answers can be considered a public subnet

Answer: B

Explanation: A virtual private cloud (VPC) is a virtual network dedicated to your AWS account. It is logically isolated from other virtual networks in the AWS cloud. You can launch your AWS resources, such as Amazon EC2 instances, into your VPC. You can configure your VPC: you can select its IP address range, create subnets, and configure route tables, network gateways, and security settings.

A subnet is a range of IP addresses in your VPC. You can launch AWS resources into a subnet that you select. Use a public subnet for resources that must be connected to the internet, and a private subnet for resources that won't be connected to the Internet.

If a subnet's traffic is routed to an internet gateway, the subnet is known as a public subnet.

If a subnet doesn't have a route to the internet gateway, the subnet is known as a private subnet.

If a subnet doesn't have a route to the internet gateway, but has its traffic routed to a virtual private gateway, the subnet is known as a VPN-only subnet.

Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Subnets.html

NEW QUESTION 60

Can you specify the security group that you created for a VPC when you launch an instance in EC2-Classic?

- A. No, you can specify the security group created for EC2-Classic when you launch a VPC instance.
- B. No
- C. Yes
- D. No, you can specify the security group created for EC2-Classic to a non-VPC based instance only

Answer: B

Explanation: If you're using EC2-Classic, you must use security groups created specifically for EC2-Classic. When you launch an instance in EC2-Classic, you must specify a security group in the same region as the instance. You can't specify a security group that you created for a VPC when you launch an instance in EC2-Classic.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html#ec2-classic-security-groups>

NEW QUESTION 64

While using the EC2 GET requests as URLs, this is the URL that serves as the entry point for the web service.

- A. token
- B. endpoint
- C. action
- D. None of these

Answer: B

Explanation: The endpoint is the URL that serves as the entry point for the web service.
Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/using-query-api.html>

NEW QUESTION 69

You have been asked to build a database warehouse using Amazon Redshift. You know a little about it, including that it is a SQL data warehouse solution, and uses industry standard ODBC and JDBC connections and PostgreSQL drivers. However you are not sure about what sort of storage it uses for database tables. What sort of storage does Amazon Redshift use for database tables?

- A. InnoDB Tables
- B. NDB data storage
- C. Columnar data storage
- D. NDB CLUSTER Storage

Answer: C

Explanation: Amazon Redshift achieves efficient storage and optimum query performance through a combination of massively parallel processing, columnar data storage, and very efficient, targeted data compression encoding schemes. Columnar storage for database tables is an important factor in optimizing analytic query performance because it drastically reduces the overall disk I/O requirements and reduces the amount of data you need to load from disk.
Reference: http://docs.aws.amazon.com/redshift/latest/dg/c_columnar_storage_disk_mem_mgmt.html

NEW QUESTION 71

You are building infrastructure for a data warehousing solution and an extra request has come through that there will be a lot of business reporting queries running all the time and you are not sure if your current DB instance will be able to handle it. What would be the best solution for this?

- A. DB Parameter Groups
- B. Read Replicas
- C. Multi-AZ DB Instance deployment
- D. Database Snapshots

Answer: B

Explanation: Read Replicas make it easy to take advantage of MySQL's built-in replication functionality to elastically scale out beyond the capacity constraints of a single DB Instance for read-heavy database workloads. There are a variety of scenarios where deploying one or more Read Replicas for a given source DB Instance may make sense. Common reasons for deploying a Read Replica include:
Scaling beyond the compute or I/O capacity of a single DB Instance for read-heavy database workloads. This excess read traffic can be directed to one or more Read Replicas.
Serving read traffic while the source DB Instance is unavailable. If your source DB Instance cannot take I/O requests (e.g. due to I/O suspension for backups or scheduled maintenance), you can direct read traffic to your Read Replica(s). For this use case, keep in mind that the data on the Read Replica may be "stale" since the source DB Instance is unavailable.
Business reporting or data warehousing scenarios; you may want business reporting queries to run against a Read Replica, rather than your primary, production DB Instance.
Reference: <https://aws.amazon.com/rds/faqs/>

NEW QUESTION 76

In DynamoDB, could you use IAM to grant access to Amazon DynamoDB resources and API actions?

- A. In DynamoDB there is no need to grant access
- B. Depended to the type of access
- C. No
- D. Yes

Answer: D

Explanation: Amazon DynamoDB integrates with AWS Identity and Access Management (IAM). You can use AWS IAM to grant access to Amazon DynamoDB resources and API actions. To do this, you first write an AWS IAM policy, which is a document that explicitly lists the permissions you want to grant. You then attach that policy to an AWS IAM user or role.
Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/UsingIAMWithDDB.html>

NEW QUESTION 77

Much of your company's data does not need to be accessed often, and can take several hours for retrieval time, so it's stored on Amazon Glacier. However someone within your organization has expressed concerns that his data is more sensitive than the other data, and is wondering whether the high level of encryption that he knows is on S3 is also used on the much cheaper Glacier service. Which of the following statements would be most applicable in regards to this concern?

- A. There is no encryption on Amazon Glacier, that's why it is cheaper.
- B. Amazon Glacier automatically encrypts the data using AES-128 a lesser encryption method than Amazon S3 but you can change it to AES-256 if you are willing to pay more.
- C. Amazon Glacier automatically encrypts the data using AES-256, the same as Amazon S3.
- D. Amazon Glacier automatically encrypts the data using AES-128 a lesser encryption method than Amazon S3.

Answer: C

Explanation: Like Amazon S3, the Amazon Glacier service provides low-cost, secure, and durable storage. But where S3 is designed for rapid retrieval, Glacier is meant to be used as an archival service for data that is not accessed often, and for which retrieval times of several hours are suitable.

Amazon Glacier automatically encrypts the data using AES-256 and stores it durably in an immutable form. Amazon Glacier is designed to provide average annual durability of 99.999999999% for an archive. It stores each archive in multiple facilities and multiple devices. Unlike traditional systems which can require laborious data verification and manual repair, Glacier performs regular, systematic data integrity checks, and is built to be automatically self-healing.
Reference: <http://d0.awsstatic.com/whitepapers/Security/AWS%20Security%20Whitepaper.pdf>

NEW QUESTION 82

Your EBS volumes do not seem to be performing as expected and your team leader has requested you look into improving their performance. Which of the following is not a true statement relating to the performance of your EBS volumes?

- A. Frequent snapshots provide a higher level of data durability and they will not degrade the performance of your application while the snapshot is in progress.
- B. General Purpose (SSD) and Provisioned IOPS (SSD) volumes have a throughput limit of 128 MB/s per volume.
- C. There is a relationship between the maximum performance of your EBS volumes, the amount of I/O you are drMng to them, and the amount of time it takes for each transaction to complete.
- D. There is a 5 to 50 percent reduction in IOPS when you first access each block of data on a newly created or restored EBS volume

Answer: A

Explanation: Several factors can affect the performance of Amazon EBS volumes, such as instance configuration, I/O characteristics, workload demand, and storage configuration.

Frequent snapshots provide a higher level of data durability, but they may slightly degrade the performance of your application while the snapshot is in progress. This trade off becomes critical when you have data that changes rapidly. Whenever possible, plan for snapshots to occur during off-peak times in order to minimize workload impact.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSPerformance.html>

NEW QUESTION 84

You've created your first load balancer and have registered your EC2 instances with the load balancer. Elastic Load Balancing routinely performs health checks on all the registered EC2 instances and automatically distributes all incoming requests to the DNS name of your load balancer across your registered, healthy EC2 instances. By default, the load balancer uses the _ protocol for checking the health of your instances.

- A. HTTPS
- B. HTTP
- C. ICMP
- D. IPv6

Answer: B

Explanation: In Elastic Load Balancing a health configuration uses information such as protocol, ping port, ping path (URL), response timeout period, and health check interval to determine the health state of the instances registered with the load balancer.

Currently, HTTP on port 80 is the default health check. Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/TerminologyandKeyConcepts.html>

NEW QUESTION 85

In Amazon EC2 Container Service, are other container types supported?

- A. Yes, EC2 Container Service supports any container service you need.
- B. Yes, EC2 Container Service also supports Microsoft container service.
- C. No, Docker is the only container platform supported by EC2 Container Service presently.
- D. Yes, EC2 Container Service supports Microsoft container service and Openstac

Answer: C

Explanation: In Amazon EC2 Container Service, Docker is the only container platform supported by EC2 Container Service presently.

Reference: <http://aws.amazon.com/ecs/faqs/>

NEW QUESTION 86

is a fast, filexible, fully managed push messaging service.

- A. Amazon SNS
- B. Amazon SES
- C. Amazon SQS
- D. Amazon FPS

Answer: A

Explanation: Amazon Simple Notification Service (Amazon SNS) is a fast, filexible, fully managed push messaging service. Amazon SNS makes it simple and cost-effective to push to mobile devices such as iPhone, iPad, Android, Kindle Fire, and internet connected smart devices, as well as pushing to other distributed services.

Reference: http://aws.amazon.com/sns/?nc1=h_l2_as

NEW QUESTION 87

As AWS grows, most of your clients' main concerns seem to be about security, especially when all of their competitors also seem to be using AWS. One of your clients asks you whether having a competitor who hosts their EC2 instances on the same physical host would make it easier for the competitor to hack into the client's data. Which of the following statements would be the best choice to put your client's mind at rest?

- A. Different instances running on the same physical machine are isolated from each other via a 256-bit Advanced Encryption Standard (AES-256).
- B. Different instances running on the same physical machine are isolated from each other via the Xen hypervisor and via a 256-bit Advanced Encryption Standard (AES-256).
- C. Different instances running on the same physical machine are isolated from each other via the Xen hypervisor.
- D. Different instances running on the same physical machine are isolated from each other via IAM permissions.

Answer: C

Explanation: Amazon Elastic Compute Cloud (EC2) is a key component in Amazon's Infrastructure as a Service (IaaS), providing resizable computing capacity using server instances in AWS's data centers. Amazon EC2 is designed to make web-scale computing easier by enabling you to obtain and configure capacity with minimal friction.

You create and launch instances, which are collections of platform hardware and software. Different instances running on the same physical machine are isolated from each other via the Xen hypervisor.

Amazon is active in the Xen community, which provides awareness of the latest developments. In addition, the AWS firewall resides within the hypervisor layer, between the physical network interface and the instance's virtual interface. All packets must pass through this layer, thus an instance's neighbors have no more access to that instance than any other host on the Internet and can be treated as if they are on separate physical hosts. The physical RAM is separated using similar mechanisms.

Reference: <http://d0.awsstatic.com/whitepapers/Security/AWS%20Security%20Whitepaper.pdf>

NEW QUESTION 92

In Amazon RDS, security groups are ideally used to:

- A. Define maintenance period for database engines
- B. Launch Amazon RDS instances in a subnet
- C. Create, describe, modify, and delete DB instances
- D. Control what IP addresses or EC2 instances can connect to your databases on a DB instance

Answer: D

Explanation: In Amazon RDS, security groups are used to control what IP addresses or EC2 instances can connect to your databases on a DB instance.

When you first create a DB instance, its firewall prevents any database access except through rules specified by an associated security group.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/UsingWithRDS.html>

NEW QUESTION 93

You have just been given a scope for a new client who has an enormous amount of data (petabytes) that he constantly needs analysed. Currently he is paying a huge amount of money for a data warehousing company to do this for him and is wondering if AWS can provide a cheaper solution. Do you think AWS has a solution for this?

- A. Ye
- B. Amazon SimpleDB
- C. N
- D. Not presently
- E. Ye
- F. Amazon Redshift
- G. Ye
- H. Your choice of relational AMLs on Amazon EC2 and EBS

Answer: C

Explanation: Amazon Redshift is a fast, fully managed, petabyte-scale data warehouse service that makes it simple and cost-effective to efficiently analyze all your data using your existing business intelligence tools. You can start small for just \$0.25 per hour with no commitments or upfront costs and scale to a petabyte or more for \$1,000 per terabyte per year, less than a tenth of most other data warehousing solutions. Amazon Redshift delivers fast query performance by using columnar storage technology to improve I/O efficiency and parallelizing queries across multiple nodes. Redshift uses standard PostgreSQL JDBC and ODBC drivers, allowing you to use a wide range of familiar SQL clients. Data load speed scales linearly with cluster size, with integrations to Amazon S3, Amazon DynamoDB, Amazon Elastic MapReduce, Amazon Kinesis or any SSH-enabled host.

Reference: https://aws.amazon.com/running_databases/#redshift_anchor

NEW QUESTION 94

In an experiment, if the minimum size for an Auto Scaling group is 1 instance, which of the following statements holds true when you terminate the running instance?

- A. Auto Scaling must launch a new instance to replace it.
- B. Auto Scaling will raise an alarm and send a notification to the user for action.
- C. Auto Scaling must configure the schedule actMty that terminates the instance after 5 days.
- D. Auto Scaling will terminate the experimen

Answer: A

Explanation: If the minimum size for an Auto Scaling group is 1 instance, when you terminate the running instance, Auto Scaling must launch a new instance to replace it.

Reference: http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/AS_Concepts.html

NEW QUESTION 99

In Amazon EC2, while sharing an Amazon EBS snapshot, can the snapshots with AWS IV|arketplace product codes be public?

- A. Yes, but only for US-based providers.
- B. Yes, they can be public.
- C. No, they cannot be made public.
- D. Yes, they are automatically made public by the system

Answer: C

Explanation: Snapshots with AWS Marketplace product codes can't be made public. Reference:
<http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/ebs-modifying-snapshot-permissions.html>

NEW QUESTION 102

You are running PostgreSQL on Amazon RDS and it seems to be all running smoothly deployed in one availability zone. A database administrator asks you if DB instances running PostgreSQL support Multi-AZ deployments. What would be a correct response to this QUESTION ?

- A. Yes.
- B. Yes but only for small db instances.
- C. No.
- D. Yes but you need to request the service from AWS

Answer: A

Explanation: Amazon RDS supports DB instances running several versions of PostgreSQL. Currently we support PostgreSQL versions 9.3.1, 9.3.2, and 9.3.3. You can create DB instances and DB snapshots, point-in-time restores and backups. DB instances running PostgreSQL support Multi-AZ deployments, Provisioned IOPS, and can be created inside a VPC. You can also use SSL to connect to a DB instance running PostgreSQL. You can use any standard SQL client application to run commands for the instance from your client computer. Such applications include pgAdmin, a popular Open Source administration and development tool for PostgreSQL, or psql, a command line utility that is part of a PostgreSQL installation. In order to deliver a managed service experience, Amazon RDS does not provide host access to DB instances, and it restricts access to certain system procedures and tables that require advanced privileges. Amazon RDS supports access to databases on a DB instance using any standard SQL client application. Amazon RDS does not allow direct host access to a DB instance via Telnet or Secure Shell (SSH). Reference: http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_PostgreSQL.html

NEW QUESTION 104

A user has launched 10 EC2 instances inside a placement group. Which of the below mentioned statements is true with respect to the placement group?

- A. All instances must be in the same AZ
- B. All instances can be across multiple regions
- C. The placement group cannot have more than 5 instances
- D. All instances must be in the same region

Answer: A

Explanation: A placement group is a logical grouping of EC2 instances within a single Availability Zone. Using placement groups enables applications to participate in a low-latency, 10 Gbps network. Placement groups are recommended for applications that benefit from low network latency, high network throughput or both. Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html>

NEW QUESTION 106

An organization has developed a mobile application which allows end users to capture a photo on their mobile device, and store it inside an application. The application internally uploads the data to AWS S3. The organization wants each user to be able to directly upload data to S3 using their Google ID. How will the mobile app allow this?

- A. Use the AWS Web identity federation for mobile applications, and use it to generate temporary security credentials for each user.
- B. It is not possible to connect to AWS S3 with a Google ID.
- C. Create an IAM user every time a user registers with their Google ID and use IAM to upload files to S3.
- D. Create a bucket policy with a condition which allows everyone to upload if the login ID has a Google part to it.

Answer: A

Explanation: For Amazon Web Services, the Web identity federation allows you to create cloud-backed mobile apps that use public identity providers, such as login with Facebook, Google, or Amazon. It will create temporary security credentials for each user, which will be authenticated by the AWS services, such as S3. Reference: <http://docs.aws.amazon.com/STS/latest/UsingSTS/CreatingWIF.html>

NEW QUESTION 111

You are architecting an auto-scalable batch processing system using video processing pipelines and Amazon Simple Queue Service (Amazon SQS) for a customer. You are unsure of the limitations of SQS and need to find out. What do you think is a correct statement about the limitations of Amazon SQS?

- A. It supports an unlimited number of queues but a limited number of messages per queue for each user but automatically deletes messages that have been in the queue for more than 4 weeks.
- B. It supports an unlimited number of queues and unlimited number of messages per queue for each user but automatically deletes messages that have been in the queue for more than 4 days.
- C. It supports an unlimited number of queues but a limited number of messages per queue for each user but automatically deletes messages that have been in the queue for more than 4 days.
- D. It supports an unlimited number of queues and unlimited number of messages per queue for each user but automatically deletes messages that have been in

the queue for more than 4 weeks.

Answer: B

Explanation: Amazon Simple Queue Service (Amazon SQS) is a messaging queue service that handles message or workflows between other components in a system.

Amazon SQS supports an unlimited number of queues and unlimited number of messages per queue for each user. Please be aware that Amazon SQS automatically deletes messages that have been in the queue for more than 4 days.

Reference: <http://aws.amazon.com/documentation/sqs/>

NEW QUESTION 115

An online gaming site asked you if you can deploy a database that is a fast, highly scalable NoSQL database service in AWS for a new site that he wants to build. Which database should you recommend?

- A. Amazon DynamoDB
- B. Amazon RDS
- C. Amazon Redshift
- D. Amazon SimpleDB

Answer: A

Explanation: Amazon DynamoDB is ideal for database applications that require very low latency and predictable performance at any scale but don't need complex querying capabilities like joins or transactions. Amazon DynamoDB is a fully-managed NoSQL database service that offers high performance, predictable throughput and low cost. It is easy to set up, operate, and scale.

With Amazon DynamoDB, you can start small, specify the throughput and storage you need, and easily scale your capacity requirements on the fly. Amazon DynamoDB automatically partitions data over a number of servers to meet your request capacity. In addition, DynamoDB automatically replicates your data synchronously across multiple Availability Zones within an AWS Region to ensure high-availability and data durability.

Reference: https://aws.amazon.com/running_databases/#dynamodb_anchor

NEW QUESTION 117

You log in to IAM on your AWS console and notice the following message. "Delete your root access keys." Why do you think IAM is requesting this?

- A. Because the root access keys will expire as soon as you log out.
- B. Because the root access keys expire after 1 week.
- C. Because the root access keys are the same for all users.
- D. Because they provide unrestricted access to your AWS resource

Answer: D

Explanation: In AWS an access key is required in order to sign requests that you make using the command-line interface (CLI), using the AWS SDKs, or using direct API calls. Anyone who has the access key for your root account has unrestricted access to all the resources in your account, including billing information. One of the best ways to protect your account is to not have an access key for your root account. We recommend that unless you must have a root access key (this is very rare), that you do not generate one. Instead, AWS best practice is to create one or more AWS Identity and Access Management (IAM) users, give them the necessary permissions, and use IAM users for everyday interaction with AWS.

Reference:

<http://docs.aws.amazon.com/general/latest/gr/aws-access-keys-best-practices.html#root-password>

NEW QUESTION 120

Once again your customers are concerned about the security of their sensitive data and with their latest enquiry ask about what happens to old storage devices on AWS. What would be the best answer to this QUESTION ?

- A. AWS reformats the disks and uses them again.
- B. AWS uses the techniques detailed in DoD 5220.22-M to destroy data as part of the decommissioning process.
- C. AWS uses their own proprietary software to destroy data as part of the decommissioning process.
- D. AWS uses a 3rd party security organization to destroy data as part of the decommissioning process

Answer: B

Explanation: When a storage device has reached the end of its useful life, AWS procedures include a decommissioning process that is designed to prevent customer data from being exposed to unauthorized individuals.

AWS uses the techniques detailed in DoD 5220.22-M ("National Industrial Security Program Operating Manual ") or NIST 800-88 ("Guidelines for Media Sanitization") to destroy data as part of the decommissioning process.

All decommissioned magnetic storage devices are degaussed and physically destroyed in accordance with industry-standard practices.

Reference: <http://d0.awsstatic.com/whitepapers/Security/AWS%20Security%20Whitepaper.pdf>

NEW QUESTION 122

Your company has been storing a lot of data in Amazon Glacier and has asked for an inventory of what is in there exactly. So you have decided that you need to download a vault inventory. Which of the following statements is incorrect in relation to Vault Operations in Amazon Glacier?

- A. You can use Amazon Simple Notification Service (Amazon SNS) notifications to notify you when the job completes.
- B. A vault inventory refers to the list of archives in a vault.
- C. You can use Amazon Simple Queue Service (Amazon SQS) notifications to notify you when the job completes.
- D. Downloading a vault inventory is an asynchronous operation

Answer: C

Explanation: Amazon Glacier supports various vault operations.

A vault inventory refers to the list of archives in a vault. For each archive in the list, the inventory provides archive information such as archive ID, creation date, and size. Amazon Glacier updates the vault inventory approximately once a day, starting on the day the first archive is uploaded to the vault. A vault inventory must exist for you to be able to download it.

Downloading a vault inventory is an asynchronous operation. You must first initiate a job to download the inventory. After receiving the job request, Amazon Glacier prepares your inventory for download. After the job completes, you can download the inventory data.

Given the asynchronous nature of the job, you can use Amazon Simple Notification Service (Amazon SNS) notifications to notify you when the job completes. You can specify an Amazon SNS topic for each individual job request or configure your vault to send a notification when specific vault events occur. Amazon Glacier prepares an inventory for each vault periodically, every 24 hours. If there have been no archive additions or deletions to the vault since the last inventory, the inventory date is not updated. When you initiate a job for a vault inventory, Amazon Glacier returns the last inventory it generated, which is a point-in-time snapshot and not real-time data. You might not find it useful to retrieve vault inventory for each archive upload. However, suppose you maintain a database on the client-side associating metadata about the archives you upload to Amazon Glacier. Then, you might find the vault inventory useful to reconcile information in your database with the actual vault inventory.

Reference: <http://docs.aws.amazon.com/amazonglacier/latest/dev/working-with-vaults.html>

NEW QUESTION 124

You need to change some settings on Amazon Relational Database Service but you do not want the database to reboot immediately which you know might happen depending on the setting that you change. Which of the following will cause an immediate DB instance reboot to occur?

- A. You change storage type from standard to PIOPS, and Apply Immediately is set to true.
- B. You change the DB instance class, and Apply Immediately is set to false.
- C. You change a static parameter in a DB parameter group.
- D. You change the backup retention period for a DB instance from 0 to a nonzero value or from a nonzero value to 0, and Apply Immediately is set to false.

Answer: A

Explanation: A DB instance outage can occur when a DB instance is rebooted, when the DB instance is put into a state that prevents access to it, and when the database is restarted. A reboot can occur when you manually reboot your DB instance or when you change a DB instance setting that requires a reboot before it can take effect.

A DB instance reboot occurs immediately when one of the following occurs:

You change the backup retention period for a DB instance from 0 to a nonzero value or from a nonzero value to 0 and set Apply Immediately to true.

You change the DB instance class, and Apply Immediately is set to true.

You change storage type from standard to PIOPS, and Apply Immediately is set to true.

A DB instance reboot occurs during the maintenance window when one of the following occurs:

You change the backup retention period for a DB instance from 0 to a nonzero value or from a nonzero value to 0, and Apply Immediately is set to false.

You change the DB instance class, and Apply Immediately is set to false. Reference:

http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Troubleshooting.Security

NEW QUESTION 126

You are setting up a very complex financial services grid and so far it has 5 Elastic IP (EIP) addresses.

You go to assign another EIP address, but all accounts are limited to 5 Elastic IP addresses per region by default, so you aren't able to. What is the reason for this?

- A. For security reasons.
- B. Hardware restrictions.
- C. Public (IPv4) internet addresses are a scarce resource.
- D. There are only 5 network interfaces per instance.

Answer: C

Explanation: Public (IPv4) internet addresses are a scarce resource. There is only a limited amount of public IP space available, and Amazon EC2 is committed to helping use that space efficiently.

By default, all accounts are limited to 5 Elastic IP addresses per region. If you need more than 5 Elastic IP addresses, AWS asks that you apply for your limit to be raised. They will ask you to think through your use case and help them understand your need for additional addresses.

Reference: http://aws.amazon.com/ec2/faqs/#How_many_instances_can_I_run_in_Amazon_EC2

NEW QUESTION 130

Amazon RDS provides high availability and failover support for DB instances using .

- A. customized deployments
- B. Appstream customizations
- C. log events
- D. Multi-AZ deployments

Answer: D

Explanation: Amazon RDS provides high availability and failover support for DB instances using Multi-AZ deployments. Multi-AZ deployments for Oracle, PostgreSQL, MySQL, and MariaDB DB instances use Amazon technology, while SQL Server DB instances use SQL Server Mirroring.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html>

NEW QUESTION 132

A major customer has asked you to set up his AWS infrastructure so that it will be easy to recover in the case of a disaster of some sort. Which of the following is important when thinking about being able to quickly launch resources in AWS to ensure business continuity in case of a disaster?

- A. Create and maintain AMIs of key servers where fast recovery is required.
- B. Regularly run your servers, test them, and apply any software updates and configuration changes.
- C. All items listed here are important when thinking about disaster recovery.
- D. Ensure that you have all supporting custom software packages available in AWS

Answer: C

Explanation: In the event of a disaster to your AWS infrastructure you should be able to quickly launch resources in Amazon Web Services (AWS) to ensure business continuity.

The following are some key steps you should have in place for preparation:

1. Set up Amazon EC2 instances to replicate or mirror data.
2. Ensure that you have all supporting custom software packages available in AWS.
3. Create and maintain AMIs of key servers where fast recovery is required.
4. Regularly run these servers, test them, and apply any software updates and configuration changes.
5. Consider automating the provisioning of AWS resources.

Reference: http://d36cz9buwru1tt.cloudfront.net/AWS_Disaster_Recovery.pdf

NEW QUESTION 136

What does Amazon DynamoDB provide?

- A. A predictable and scalable MySQL database
- B. A fast and reliable PL/SQL database cluster
- C. A standalone Cassandra database, managed by Amazon Web Services
- D. A fast, highly scalable managed NoSQL database service

Answer: D

Explanation: Amazon DynamoDB is a managed NoSQL database service offered by Amazon. It automatically manages tasks like scalability for you while it provides high availability and durability for your data, allowing you to concentrate in other aspects of your application.

Reference: check link - https://aws.amazon.com/running_databases/

NEW QUESTION 138

You want to use AWS Import/Export to send data from your S3 bucket to several of your branch offices. What should you do if you want to send 10 storage units to AWS?

- A. Make sure your disks are encrypted prior to shipping.
- B. Make sure you format your disks prior to shipping.
- C. Make sure your disks are 1TB or more.
- D. Make sure you submit a separate job request for each device

Answer: D

Explanation: When using Amazon Import/Export, a separate job request needs to be submitted for each physical device even if they belong to the same import or export job.

Reference: <http://docs.aws.amazon.com/AWSImportExport/latest/DG/Concepts.html>

NEW QUESTION 142

Having set up a website to automatically be redirected to a backup website if it fails, you realize that there are different types of failovers that are possible. You need all your resources to be available the majority of the time. Using Amazon Route 53 which configuration would best suit this requirement?

- A. Active-active failover.
- B. Non
- C. Route 53 can't failover.
- D. Active-passive failover.
- E. Active-active-passive and other mixed configuration

Answer: A

Explanation: You can set up a variety of failover configurations using Amazon Route 53 alias: weighted, latency, geolocation routing, and failover resource record sets.

Active-active failover: Use this failover configuration when you want all of your resources to be available the majority of the time. When a resource becomes unavailable, Amazon Route 53 can detect that it's unhealthy and stop including it when responding to queries.

Active-passive failover: Use this failover configuration when you want a primary group of resources to be available the majority of the time and you want a secondary group of resources to be on standby in case all of the primary resources become unavailable. When responding to queries, Amazon Route 53 includes only the healthy primary resources. If all of the primary resources are unhealthy, Amazon Route 53 begins to include only the healthy secondary resources in response to DNS queries.

Active-active-passive and other mixed configurations: You can combine alias and non-alias resource record sets to produce a variety of Amazon Route 53 behaviors.

Reference: <http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/dns-failover.html>

NEW QUESTION 146

AWS CloudFormation is a service that helps you model and set up your Amazon Web Services resources so that you can spend less time managing those resources and more time focusing on your applications that run in AWS. You create a template that describes all the AWS resources that you want (like Amazon EC2 instances or Amazon RDS DB instances), and AWS CloudFormation takes care of provisioning and configuring those resources for you. What formatting is required for this template?

- A. JSON-formatted document
- B. CSS-formatted document
- C. XML-formatted document
- D. HTML-formatted document

Answer: A

Explanation: You can write an AWS CloudFormation template (a JSON-formatted document) in a text editor or pick an existing template. The template describes the resources you want and their settings. For example, suppose you want to create an Amazon EC2. Your template can declare an instance Amazon EC2 and describe its properties, as shown in the following example:

```
{
  "AWSTemplateFormatVersion" : "2010-09-09",
  "Description" : "A simple Amazon EC2 instance", "Resources" : {
  "MyEC2Instance" : {
    "Type" : "AWS::EC2::Instance", "Properties" : {
    "ImageId" : "ami-2f726546", "|instanceType" : "t1.micro"
    }
  }
}
```

Reference:

<http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/cfn-what-is-how-does-it-work.html>

NEW QUESTION 147

True or False: In Amazon Route 53, you can create a hosted zone for a top-level domain (TLD).

- A. FALSE
- B. False, Amazon Route 53 automatically creates it for you.
- C. True, only if you send an XML document with a CreateHostedZoneRequest element for TLD.
- D. TRUE

Answer: A

Explanation: In Amazon Route 53, you cannot create a hosted zone for a top-level domain (TLD).

Reference: http://docs.aws.amazon.com/Route53/latest/APIReference/API_CreateHostedZone.html

NEW QUESTION 148

You decide that you need to create a number of Auto Scaling groups to try and save some money as you have noticed that at certain times most of your EC2 instances are not being used. By default, what is the maximum number of Auto Scaling groups that AWS will allow you to create?

- A. 12
- B. Unlimited
- C. 20
- D. 2

Answer: C

Explanation: Auto Scaling is an AWS service that allows you to increase or decrease the number of EC2 instances within your application's architecture. With Auto Scaling, you create collections of EC2 instances, called Auto Scaling groups. You can create these groups from scratch, or from existing EC2 instances that are already in production.

Reference: http://docs.aws.amazon.com/general/latest/gr/aws_service_limits.html#limits_autoscaling

NEW QUESTION 152

Which of the following is NOT a characteristic of Amazon Elastic Compute Cloud (Amazon EC2)?

- A. It can be used to launch as many or as few virtual servers as you need.
- B. It increases the need to forecast traffic by providing dynamic IP addresses for static cloud computing.
- C. It eliminates your need to invest in hardware up front, so you can develop and deploy applications faster.
- D. It offers scalable computing capacity in the Amazon Web Services (AWS) cloud

Answer: B

Explanation: Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) cloud. Using Amazon EC2 eliminates your need to invest in hardware up front, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html>

NEW QUESTION 153

You are setting up your first Amazon Virtual Private Cloud (Amazon VPC) so you decide to use the VPC wizard in the AWS console to help make it easier for you. Which of the following statements is correct regarding instances that you launch into a default subnet via the VPC wizard?

- A. Instances that you launch into a default subnet receive a public IP address and 10 private IP addresses.
- B. Instances that you launch into a default subnet receive both a public IP address and a private IP address.
- C. Instances that you launch into a default subnet don't receive any ip addresses and you need to define them manually.

D. Instances that you launch into a default subnet receive a public IP address and 5 private IP addresses

Answer: B

Explanation: Instances that you launch into a default subnet receive both a public IP address and a private IP address. Instances in a default subnet also receive both public and private DNS hostnames. Instances that you launch into a nondefault subnet in a default VPC don't receive a public IP address or a DNS hostname. You can change your subnet's default public IP addressing behavior.

Reference: <http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/default-vpc.html>

NEW QUESTION 158

A user has configured ELB with two EBS backed EC2 instances. The user is trying to understand the DNS access and IP support for ELB. Which of the below mentioned statements may not help the user understand the IP mechanism supported by ELB?

- A. The client can connect over IPV4 or IPV6 using Dualstack
- B. Communication between the load balancer and back-end instances is always through IPV4
- C. ELB DNS supports both IPV4 and IPV6
- D. The ELB supports either IPV4 or IPV6 but not both

Answer: D

Explanation: Elastic Load Balancing supports both Internet Protocol version 6 (IPv6) and Internet Protocol version 4 (IPv4). Clients can connect to the user's load balancer using either IPv4 or IPv6 (in EC2-Classic) DNS. However, communication between the load balancer and its back-end instances uses only IPv4. The user can use the Dualstack-prefixed DNS name to enable IPv6 support for communications between the client and the load balancers. Thus, the clients are able to access the load balancer using either IPv4 or IPv6 as their individual connectivity needs dictate.

Reference: <http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/UserScenariosForEC2.html>

NEW QUESTION 159

An existing client comes to you and says that he has heard that launching instances into a VPC (virtual private cloud) is a better strategy than launching instances into a EC2-classic which he knows is what you currently do. You suspect that he is correct and he has asked you to do some research about this and get back to him. Which of the following statements is true in regards to what ability launching your instances into a VPC instead of EC2-Classic gives you?

- A. All of the things listed here.
- B. Change security group membership for your instances while they're running
- C. Assign static private IP addresses to your instances that persist across starts and stops
- D. Define network interfaces, and attach one or more network interfaces to your instances

Answer: A

Explanation: By launching your instances into a VPC instead of EC2-Classic, you gain the ability to: Assign static private IP addresses to your instances that persist across starts and stops

Assign multiple IP addresses to your instances

Define network interfaces, and attach one or more network interfaces to your instances

Change security group membership for your instances while they're running

Control the outbound traffic from your instances (egress filtering) in addition to controlling the inbound traffic to them (ingress filtering)

Add an additional layer of access control to your instances in the form of network access control lists (ACL)

Run your instances on single-tenant hardware

Reference: http://media.amazonwebservices.com/AWS_Cloud_Best_Practices.pdf

NEW QUESTION 160

Amazon S3 allows you to set per-file permissions to grant read and/or write access. However you have decided that you want an entire bucket with 100 files already in it to be accessible to the public. You don't want to go through 100 files individually and set permissions. What would be the best way to do this?

- A. Move the bucket to a new region
- B. Add a bucket policy to the bucket.
- C. Move the files to a new bucket.
- D. Use Amazon EBS instead of S3

Answer: B

Explanation: Amazon S3 supports several mechanisms that give you flexibility to control who can access your data as well as how, when, and where they can access it. Amazon S3 provides four different access control mechanisms: AWS Identity and Access Management (IAM) policies, Access Control Lists (ACLs), bucket policies, and query string authentication. IAM enables organizations to create and manage multiple users under a single AWS account. With IAM policies, you can grant IAM users fine-grained control to your Amazon S3 bucket or objects. You can use ACLs to selectively add (grant) certain permissions on individual objects.

Amazon S3 bucket policies can be used to add or deny permissions across some or all of the objects within a single bucket.

With Query string authentication, you have the ability to share Amazon S3 objects through URLs that are valid for a specified period of time.

Reference: <http://aws.amazon.com/s3/details/#security>

NEW QUESTION 161

You need to set up a high level of security for an Amazon Relational Database Service (RDS) you have just built in order to protect the confidential information stored in it. What are all the possible security groups that RDS uses?

- A. DB security groups, VPC security groups, and EC2 security groups.
- B. DB security groups only.
- C. EC2 security groups only.

D. VPC security groups, and EC2 security group

Answer: A

Explanation: A security group controls the access to a DB instance. It does so by allowing access to IP address ranges or Amazon EC2 instances that you specify.

Amazon RDS uses DB security groups, VPC security groups, and EC2 security groups. In simple terms, a DB security group controls access to a DB instance that is not in a VPC, a VPC security group controls access to a DB instance inside a VPC, and an Amazon EC2 security group controls access to an EC2 instance and can be used with a DB instance.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html>

NEW QUESTION 166

A user has created an application which will be hosted on EC2. The application makes calls to DynamoDB to fetch certain data. The application is using the DynamoDB SDK to connect with from the EC2 instance. Which of the below mentioned statements is true with respect to the best practice for security in this scenario?

- A. The user should create an IAM user with DynamoDB access and use its credentials within the application to connect with DynamoDB
- B. The user should attach an IAM role with DynamoDB access to the EC2 instance
- C. The user should create an IAM role, which has EC2 access so that it will allow deploying the application
- D. The user should create an IAM user with DynamoDB and EC2 access
- E. Attach the user with the application so that it does not use the root account credentials

Answer: B

Explanation: With AWS IAM a user is creating an application which runs on an EC2 instance and makes requests to AWS, such as DynamoDB or S3 calls. Here it is recommended that the user should not create an IAM user and pass the user's credentials to the application or embed those credentials inside the application. Instead, the user should use roles for EC2 and give that role access to DynamoDB /S3. When the roles are attached to EC2, it will give temporary security credentials to the application hosted on that EC2, to connect with DynamoDB / S3.

Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_WorkingWithGroupsAndUsers.html

NEW QUESTION 167

After setting up several database instances in Amazon Relational Database Service (Amazon RDS) you decide that you need to track the performance and health of your databases. How can you do this?

- A. Subscribe to Amazon RDS events to be notified when changes occur with a DB instance, DB snapshot, DB parameter group, or DB security group.
- B. Use the free Amazon CloudWatch service to monitor the performance and health of a DB instance.
- C. All of the items listed will track the performance and health of a database.
- D. View, download, or watch database log files using the Amazon RDS console or Amazon RDS API
- E. You can also query some database log files that are loaded into database tables.

Answer: C

Explanation: Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the cloud. It provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks.

There are several ways you can track the performance and health of a database or a DB instance. You can:

Use the free Amazon CloudWatch service to monitor the performance and health of a DB instance. Subscribe to Amazon RDS events to be notified when changes occur with a DB instance, DB snapshot, DB parameter group, or DB security group.

View, download, or watch database log files using the Amazon RDS console or Amazon RDS APIs. You can also query some database log files that are loaded into database tables.

Use the AWS CloudTrail service to record AWS calls made by your AWS account. The calls are recorded in log files and stored in an Amazon S3 bucket.

Reference: http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Monitoring.html

NEW QUESTION 171

A user has attached 1 EBS volume to a VPC instance. The user wants to achieve the best fault tolerance of data possible. Which of the below mentioned options can help achieve fault tolerance?

- A. Attach one more volume with RAID 1 configuration.
- B. Attach one more volume with RAID 0 configuration.
- C. Connect multiple volumes and stripe them with RAID 6 configuration.
- D. Use the EBS volume as a root device

Answer: A

Explanation: The user can join multiple provisioned IOPS volumes together in a RAID 1 configuration to achieve better fault tolerance. RAID 1 does not provide a write performance improvement; it requires more bandwidth than non-RAID configurations since the data is written simultaneously to multiple volumes.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/raid-config.html>

NEW QUESTION 173

Which one of the following answers is not a possible state of Amazon CloudWatch Alarm?

- A. INSUFFICIENT_DATA
- B. ALARM
- C. OK
- D. STATUS_CHECK_FAILED

Answer: D

Explanation: Amazon CloudWatch Alarms have three possible states: OK: The metric is within the defined threshold ALARM: The metric is outside of the defined threshold
INSUFFICIENT_DATA: The alarm has just started, the metric is not available, or not enough data is available for the metric to determine the alarm state
Reference: <http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/AlarmThatSendsEmail.html>

NEW QUESTION 175

A user is planning to launch a scalable web application. Which of the below mentioned options will not affect the latency of the application?

- A. Region.
- B. Provisioned IOPS.
- C. Availability Zone.
- D. Instance size

Answer: C

Explanation: In AWS, the instance size decides the I/O characteristics. The provisioned IOPS ensures higher throughput, and lower latency. The region does not affect the latency; latency will always be less when the instance is near to the end user. Within a region the user uses any AZ and this does not affect the latency. The AZ is mainly for fault tolerance or HA.
Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

NEW QUESTION 178

Which of the following strategies can be used to control access to your Amazon EC2 instances?

- A. DB security groups
- B. IAM policies
- C. None of these
- D. EC2 security groups

Answer: D

Explanation: IAM policies allow you to specify what actions your IAM users are allowed to perform against your EC2 Instances. However, when it comes to access control, security groups are what you need in order to define and control the way you want your instances to be accessed, and whether or not certain kind of communications are allowed or not.
Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/UsingIAM.html>

NEW QUESTION 181

A user has launched one EC2 instance in the US East region and one in the US West region. The user has launched an RDS instance in the US East region. How can the user configure access from both the EC2 instances to RDS?

- A. It is not possible to access RDS of the US East region from the US West region
- B. Configure the US West region's security group to allow a request from the US East region's instance and configure the RDS security group's ingress rule for the US East EC2 group
- C. Configure the security group of the US East region to allow traffic from the US West region's instance and configure the RDS security group's ingress rule for the US East EC2 group
- D. Configure the security group of both instances in the ingress rule of the RDS security group

Answer: C

Explanation: The user cannot authorize an Amazon EC2 security group if it is in a different AWS Region than the RDS DB instance. The user can authorize an IP range or specify an Amazon EC2 security group in the same region that refers to an IP address in another region. In this case allow IP of US West inside US East's security group and open the RDS security group for US East region.
Reference: http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithSecurityGroups.html

NEW QUESTION 186

In Amazon EC2, if your EBS volume stays in the detaching state, you can force the detachment by clicking .

- A. Force Detach
- B. Detach Instance
- C. AttachVolume
- D. AttachInstance

Answer: A

Explanation: If your volume stays in the detaching state, you can force the detachment by clicking Force Detach. Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/ebs-detaching-volume.html>

NEW QUESTION 189

An organization has a statutory requirement to protect the data at rest for data stored in EBS volumes. Which of the below mentioned options can the organization use to achieve data protection?

- A. Data replication.
- B. Data encryption.
- C. Data snapshot.
- D. All the options listed here

Answer: D

Explanation: For protecting the Amazon EBS data at REST, the user can use options, such as Data Encryption (Windows / Linux / third party based), Data Replication (AWS internally replicates data for redundancy), and Data Snapshot (for point in time backup).

Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

NEW QUESTION 192

A client of yours has a huge amount of data stored on Amazon S3, but is concerned about someone stealing it while it is in transit. You know that all data is encrypted in transit on AWS, but which of the following is wrong when describing server-side encryption on AWS?

- A. Amazon S3 server-side encryption employs strong multi-factor encryption.
- B. Amazon S3 server-side encryption uses one of the strongest block ciphers available, 256-bit Advanced Encryption Standard (AES-256), to encrypt your data.
- C. In server-side encryption, you manage encryption/decryption of your data, the encryption keys, and related tools.
- D. Server-side encryption is about data encryption at rest—that is, Amazon S3 encrypts your data as it writes it to disks.

Answer: C

Explanation: Amazon S3 encrypts your object before saving it on disks in its data centers and decrypts it when you download the objects. You have two options depending on how you choose to manage the encryption keys: Server-side encryption and client-side encryption.

Server-side encryption is about data encryption at rest—that is, Amazon S3 encrypts your data as it writes it to disks in its data centers and decrypts it for you when you access it. As long as you authenticate your request and you have access permissions, there is no difference in the way you access encrypted or unencrypted objects. Amazon S3 manages encryption and decryption for you. For example, if you share your objects using a pre-signed URL, that URL works the same way for both encrypted and unencrypted objects.

In client-side encryption, you manage encryption/decryption of your data, the encryption keys, and related tools. Server-side encryption is an alternative to client-side encryption in which Amazon S3 manages the encryption of your data, freeing you from the tasks of managing encryption and encryption keys.

Amazon S3 server-side encryption employs strong multi-factor encryption. Amazon S3 encrypts each object with a unique key. As an additional safeguard, it encrypts the key itself with a master key that it regularly rotates. Amazon S3 server-side encryption uses one of the strongest block ciphers available, 256-bit Advanced Encryption Standard (AES-256), to encrypt your data.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingServerSideEncryption.html>

NEW QUESTION 194

You have just set up a large site for a client which involved a huge database which you set up with Amazon RDS to run as a Multi-AZ deployment. You now start to worry about what will happen if the database instance fails. Which statement best describes how this database will function if there is a database failure?

- A. Updates to your DB Instance are synchronously replicated across Availability Zones to the standby in order to keep both in sync and protect your latest database updates against DB Instance failure.
- B. Your database will not resume operation without manual administrative intervention.
- C. Updates to your DB Instance are asynchronously replicated across Availability Zones to the standby in order to keep both in sync and protect your latest database updates against DB Instance failure.
- D. Updates to your DB Instance are synchronously replicated across S3 to the standby in order to keep both in sync and protect your latest database updates against DB Instance failure.

Answer: A

Explanation: Amazon Relational Database Service (Amazon RDS) is a managed service that makes it easy to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity, while managing time-consuming database administration tasks, freeing you up to focus on your applications and business.

When you create or modify your DB Instance to run as a Multi-AZ deployment, Amazon RDS automatically provisions and maintains a synchronous "standby" replica in a different Availability Zone. Updates to your DB Instance are synchronously replicated across Availability Zones to the standby in order to keep both in sync and protect your latest database updates against DB Instance failure.

During certain types of planned maintenance, or in the unlikely event of DB Instance failure or Availability Zone failure, Amazon RDS will automatically failover to the standby so that you can resume database writes and reads as soon as the standby is promoted. Since the name record for your DB Instance remains the same, your application can resume database operation without the need for manual administrative intervention. With Multi-AZ deployments, replication is transparent: you do not interact directly with the standby, and it cannot be used to serve read traffic. If you are using Amazon RDS for MySQL and are looking to scale read traffic beyond the capacity constraints of a single DB Instance, you can deploy one or more Read Replicas.

Reference: <http://aws.amazon.com/rds/faqs/>

NEW QUESTION 195

Name the disk storage supported by Amazon Elastic Compute Cloud (EC2).

- A. None of these
- B. Amazon AppStream store
- C. Amazon SNS store
- D. Amazon Instance Store

Answer: D

Explanation: Amazon EC2 supports the following storage options: Amazon Elastic Block Store (Amazon EBS) Amazon EC2 Instance Store Amazon Simple Storage Service (Amazon S3)

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/Storage.html>

NEW QUESTION 198

You are signed in as root user on your account but there is an Amazon S3 bucket under your account that you cannot access. What is a possible reason for this?

- A. An IAM user assigned a bucket policy to an Amazon S3 bucket and didn't specify the root user as a principal
- B. The S3 bucket is full.
- C. The S3 bucket has reached the maximum number of objects allowed.
- D. You are in the wrong availability zone

Answer: A

Explanation: With IAM, you can centrally manage users, security credentials such as access keys, and permissions that control which AWS resources users can access.

In some cases, you might have an IAM user with full access to IAM and Amazon S3. If the IAM user assigns a bucket policy to an Amazon S3 bucket and doesn't specify the root user as a principal, the root user is denied access to that bucket. However, as the root user, you can still access the bucket by modifying the bucket policy to allow root user access.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/iam-troubleshooting.html#testing2>

NEW QUESTION 201

You have a number of image files to encode. In an Amazon SQS worker queue, you create an Amazon SQS message for each file specifying the command (jpeg-encode) and the location of the file in Amazon S3. Which of the following statements best describes the functionality of Amazon SQS?

- A. Amazon SQS is a distributed queuing system that is optimized for horizontal scalability, not for single-threaded sending or receive speeds.
- B. Amazon SQS is for single-threaded sending or receive speeds.
- C. Amazon SQS is a non-distributed queuing system.
- D. Amazon SQS is a distributed queuing system that is optimized for vertical scalability and for single-threaded sending or receive speeds.

Answer: A

Explanation: Amazon SQS is a distributed queuing system that is optimized for horizontal scalability, not for single-threaded sending or receive speeds. A single client can send or receive Amazon SQS messages at a rate of about 5 to 50 messages per second. Higher receive performance can be achieved by requesting multiple messages (up to 10) in a single call. It may take several seconds before a message that has been to a queue is available to be received.

Reference: http://media.amazonwebservices.com/AWS_Storage_Options.pdf

NEW QUESTION 202

A user is observing the EC2 CPU utilization metric on CloudWatch. The user has observed some interesting patterns while filtering over the 1 week period for a particular hour. The user wants to zoom that data point to a more granular period. How can the user do that easily with CloudWatch?

- A. The user can zoom a particular period by selecting that period with the mouse and then releasing the mouse
- B. The user can zoom a particular period by specifying the aggregation data for that period
- C. The user can zoom a particular period by double clicking on that period with the mouse
- D. The user can zoom a particular period by specifying the period in the Time Range

Answer: A

Explanation: Amazon CloudWatch provides the functionality to graph the metric data generated either by the AWS services or the custom metric to make it easier for the user to analyse. The AWS CloudWatch console provides the option to change the granularity of a graph and zoom in to see data over a shorter time period. To zoom, the user has to click in the graph details pane, drag on the graph area for selection, and then release the mouse button.

Reference: http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/zoom_in_on_graph.html

NEW QUESTION 206

A scope has been handed to you to set up a super fast gaming server and you decide that you will use Amazon DynamoDB as your database. For efficient access to data in a table, Amazon DynamoDB creates and maintains indexes for the primary key attributes. A secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support Query operations. How many types of secondary indexes does DynamoDB support?

- A. 2
- B. 16
- C. 4
- D. As many as you need

Answer: A

Explanation: DynamoDB supports two types of secondary indexes:

Local secondary index — an index that has the same hash key as the table, but a different range key. A local secondary index is "local" in the sense that every partition of a local secondary index is scoped to a table partition that has the same hash key.

Global secondary index — an index with a hash and range key that can be different from those on the table. A global secondary index is considered "global" because queries on the index can span all of the data in a table, across all partitions.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/SecondaryIndexes.html>

NEW QUESTION 208

Select the correct statement: Within Amazon EC2, when using Linux instances, the device name /dev/sda1 is .

- A. reserved for EBS volumes

- B. recommended for EBS volumes
- C. recommended for instance store volumes
- D. reserved for the root device

Answer: D

Explanation: Within Amazon EC2, when using a Linux instance, the device name /dev/sda1 is reserved for the root device.
Reference: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/device_naming.html

NEW QUESTION 213

A user has set up the CloudWatch alarm on the CPU utilization metric at 50%, with a time interval of 5 minutes and 10 periods to monitor. What will be the state of the alarm at the end of 90 minutes, if the CPU utilization is constant at 80%?

- A. ALERT
- B. ALARM
- C. OK
- D. INSUFFICIENT_DATA

Answer: B

Explanation: In this case the alarm watches a metric every 5 minutes for 10 intervals. Thus, it needs at least 50 minutes to come to the "OK" state. Till then it will be in the INSUFFICIENT_DATA state.
Since 90 minutes have passed and CPU utilization is at 80% constant, the state of alarm will be "ALARM". Reference: <http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/AlarmThatSendsEmail.html>

NEW QUESTION 214

You need to set up security for your VPC and you know that Amazon VPC provides two features that you can use to increase security for your VPC: security groups and network access control lists (ACLs). You have already looked into security groups and you are now trying to understand ACLs. Which statement below is incorrect in relation to ACLs?

- A. Supports allow rules and deny rules.
- B. Is stateful: Return traffic is automatically allowed, regardless of any rules.
- C. Processes rules in number order when deciding whether to allow traffic.
- D. Operates at the subnet level (second layer of defense).

Answer: B

Explanation: Amazon VPC provides two features that you can use to increase security for your VPC:
Security groups—Act as a firewall for associated Amazon EC2 instances, controlling both inbound and outbound traffic at the instance level
Network access control lists (ACLs)—Act as a firewall for associated subnets, controlling both inbound and outbound traffic at the subnet level
Security groups are stateful: (Return traffic is automatically allowed, regardless of any rules) Network ACLs are stateless: (Return traffic must be explicitly allowed by rules)
Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Security.html

NEW QUESTION 217

A user comes to you and wants access to Amazon CloudWatch but only wants to monitor a specific LoadBalancer. Is it possible to give him access to a specific set of instances or a specific LoadBalancer?

- A. No because you can't use IAM to control access to CloudWatch data for specific resources.
- B. Yes
- C. You can use IAM to control access to CloudWatch data for specific resources.
- D. No because you need to be Sysadmin to access CloudWatch data.
- E. Yes
- F. Any user can see all CloudWatch data and needs no access right

Answer: A

Explanation: Amazon CloudWatch integrates with AWS Identity and Access Management (IAM) so that you can specify which CloudWatch actions a user in your AWS Account can perform. For example, you could create an IAM policy that gives only certain users in your organization permission to use GetMetricStatistics. They could then use the action to retrieve data about your cloud resources.
You can't use IAM to control access to CloudWatch data for specific resources. For example, you can't give a user access to CloudWatch data for only a specific set of instances or a specific LoadBalancer. Permissions granted using IAM cover all the cloud resources you use with CloudWatch. In addition, you can't use IAM roles with the Amazon CloudWatch command line tools.
Using Amazon CloudWatch with IAM doesn't change how you use CloudWatch. There are no changes to CloudWatch actions, and no new CloudWatch actions related to users and access control.
Reference: <http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/UsingIAM.html>

NEW QUESTION 220

A user is planning to make a mobile game which can be played online or offline and will be hosted on EC2. The user wants to ensure that if someone breaks the highest score or they achieve some milestone they can inform all their colleagues through email. Which of the below mentioned AWS services helps achieve this goal?

- A. AWS Simple Workflow Service.
- B. AWS Simple Email Service.
- C. Amazon Cognito

D. AWS Simple Queue Service

Answer: B

Explanation: Amazon Simple Email Service (Amazon SES) is a highly scalable and cost-effective email-sending service for businesses and developers. It integrates with other AWS services, making it easy to send emails from applications that are hosted on AWS.

Reference: <http://aws.amazon.com/ses/faqs/>

NEW QUESTION 223

You need to create an Amazon Machine Image (AMI) for a customer for an application which does not appear to be part of the standard AWS AMI template that you can see in the AWS console. What are the alternative possibilities for creating an AMI on AWS?

- A. You can purchase an AMIs from a third party but cannot create your own AMI.
- B. You can purchase an AMIs from a third party or can create your own AMI.
- C. Only AWS can create AMIs and you need to wait till it becomes available.
- D. Only AWS can create AMIs and you need to request them to create one for you.

Answer: B

Explanation: You can purchase an AMIs from a third party, including AMIs that come with service contracts from organizations such as Red Hat. You can also create an AMI and sell it to other Amazon EC2 users. After you create an AMI, you can keep it private so that only you can use it, or you can share it with a specified list of AWS accounts. You can also make your custom AMI public so that the community can use it. Building a safe, secure, usable AMI for public consumption is a fairly straightforward process, if you follow a few simple guidelines.

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

NEW QUESTION 227

While creating an Amazon RDS DB, your first task is to set up a DB that controls which IP address or EC2 instance can access your DB Instance.

- A. security token pool
- B. security token
- C. security pool
- D. security group

Answer: D

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

Reference: http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithSecurityGroups.html

NEW QUESTION 232

You are very concerned about security on your network because you have multiple programmers testing APIs and SDKs and you have no idea what is happening. You think CloudTrail may help but are not sure what it does. Which of the following statements best describes the AWS service CloudTrail?

- A. With AWS CloudTrail you can get a history of AWS API calls and related events for your account.
- B. With AWS CloudTrail you can get a history of IAM users for your account.
- C. With AWS CloudTrail you can get a history of S3 logfiles for your account.
- D. With AWS CloudTrail you can get a history of CloudFormation JSON scripts used for your account.

Answer: A

Explanation: With AWS CloudTrail, you can get a history of AWS API calls for your account, including API calls made via the AWS Management Console, the AWS SDKs, the command line tools, and higher-level AWS services. You can also identify which users and accounts called AWS APIs for services that support CloudTrail, the source IP address the calls were made from, and when the calls occurred.

You can identify which users and accounts called AWS for services that support CloudTrail, the source IP address the calls were made from, and when the calls occurred. You can integrate CloudTrail into applications using the API, automate trail creation for your organization, check the status of your trails, and control how administrators turn CloudTrail logging on and off.

Reference: http://docs.aws.amazon.com/awsccloudtrail/latest/userguide/what_is_cloud_trail_top_level.html

NEW QUESTION 233

A user has deployed an application on his private cloud. The user is using his own monitoring tool. He wants to configure it so that whenever there is an error, the monitoring tool will notify him via SMS. Which of the below mentioned AWS services will help in this scenario?

- A. AWS SES
- B. AWS SNS
- C. None because the user infrastructure is in the private cloud.
- D. AWS SMS

Answer: B

Explanation: Amazon Simple Notification Service (Amazon SNS) is a fast, flexible, and fully managed push messaging service. Amazon SNS can be used to make push notifications to mobile devices. Amazon SNS can deliver notifications by SMS text message or email to the Amazon Simple Queue Service (SQS) queues or to any HTTP endpoint. In this case user can use the SNS APIs to send SMS.

Reference: <http://aws.amazon.com/sns/>

NEW QUESTION 236

After setting up an EC2 security group with a cluster of 20 EC2 instances, you find an error in the security group settings. You quickly make changes to the security group settings. When will the changes to the settings be effective?

- A. The settings will be effective immediately for all the instances in the security group.
- B. The settings will be effective only when all the instances are restarted.
- C. The settings will be effective for all the instances only after 30 minutes.
- D. The settings will be effective only for the new instances added to the security group.

Answer: A

Explanation: Amazon Redshift applies changes to a cluster security group immediately. So if you have associated the cluster security group with a cluster, inbound cluster access rules in the updated cluster security group apply immediately.

Reference: <http://docs.aws.amazon.com/redshift/latest/mgmt/working-with-security-groups.htm>

NEW QUESTION 239

You have a lot of data stored in the AWS Storage Gateway and your manager has come to you asking about how the billing is calculated, specifically the Virtual Tape Shelf usage. What would be a correct response to this?

- A. You are billed for the virtual tape data you store in Amazon Glacier and are billed for the size of the virtual tape.
- B. You are billed for the virtual tape data you store in Amazon Glacier and billed for the portion of virtual tape capacity that you use, not for the size of the virtual tape.
- C. You are billed for the virtual tape data you store in Amazon S3 and billed for the portion of virtual tape capacity that you use, not for the size of the virtual tape.
- D. You are billed for the virtual tape data you store in Amazon S3 and are billed for the size of the virtual tape.

Answer: B

Explanation: The AWS Storage Gateway is a service connecting an on-premises software appliance with cloud-based storage to provide seamless and secure integration between an organization's on-premises IT environment and AWS's storage infrastructure.

AWS Storage Gateway billing is as follows. Volume storage usage (per GB per month):

You are billed for the Cached volume data you store in Amazon S3. You are only billed for volume capacity you use, not for the size of the volume you create.

Snapshot Storage usage (per GB per month): You are billed for the snapshots your gateway stores in Amazon S3. These snapshots are stored and billed as Amazon EBS snapshots. Snapshots are incremental backups, reducing your storage charges. When taking a new snapshot, only the data that has changed since your last snapshot is stored.

Virtual Tape Library usage (per GB per month):

You are billed for the virtual tape data you store in Amazon S3. You are only billed for the portion of virtual tape capacity that you use, not for the size of the virtual tape.

Virtual Tape Shelf usage (per GB per month):

You are billed for the virtual tape data you store in Amazon Glacier. You are only billed for the portion of virtual tape capacity that you use, not for the size of the virtual tape.

Reference: <https://aws.amazon.com/storagegateway/faqs/>

NEW QUESTION 243

You are setting up some EBS volumes for a customer who has requested a setup which includes a RAID (redundant array of inexpensive disks). AWS has some recommendations for RAID setups. Which RAID setup is not recommended for Amazon EBS?

- A. RAID 5 only
- B. RAID 5 and RAID 6
- C. RAID 1 only
- D. RAID 1 and RAID 6

Answer: B

Explanation: With Amazon EBS, you can use any of the standard RAID configurations that you can use with a traditional bare metal server, as long as that particular RAID configuration is supported by the operating system for your instance. This is because all RAID is accomplished at the software level. For greater I/O performance than you can achieve with a single volume, RAID 0 can stripe multiple volumes together; for on-instance redundancy, RAID 1 can mirror two volumes together.

RAID 5 and RAID 6 are not recommended for Amazon EBS because the parity write operations of these RAID modes consume some of the IOPS available to your volumes.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/raid-config.html>

NEW QUESTION 247

What is the default maximum number of Access Keys per user?

- A. 10
- B. 15
- C. 2
- D. 20

Answer: C

Explanation: The default maximum number of Access Keys per user is 2.

Reference: <http://docs.aws.amazon.com/IAM/latest/UserGuide/LimitationsOnEntities.html>

NEW QUESTION 251

What is the network performance offered by the c4.8xlarge instance in Amazon EC2?

- A. 20 Gigabit
- B. 10 Gigabit
- C. Very High but variable
- D. 5 Gigabit

Answer: B

Explanation: Networking performance offered by the c4.8xlarge instance is 10 Gigabit. Reference: <http://aws.amazon.com/ec2/instance-types/>

NEW QUESTION 253

Doug has created a VPC with CIDR 10.201.0.0/16 in his AWS account. In this VPC he has created a public subnet with CIDR block 10.201.31.0/24. While launching a new EC2 from the console, he is not able to assign the private IP address 10.201.31.6 to this instance. Which is the most likely reason for this issue?

- A. Private IP address 10.201.31.6 is blocked via ACLs in Amazon infrastructure as a part of platform security.
- B. Private address IP 10.201.31.6 is currently assigned to another interface.
- C. Private IP address 10.201.31.6 is not part of the associated subnet's IP address range.
- D. Private IP address 10.201.31.6 is reserved by Amazon for IP networking purpose

Answer: B

Explanation: In Amazon VPC, you can assign any Private IP address to your instance as long as it is: Part of the associated subnet's IP address range
Not reserved by Amazon for IP networking purposes
Not currently assigned to another interface
Reference: <http://aws.amazon.com/vpc/faqs/>

NEW QUESTION 258

You need to create a JSON-formatted text file for AWS CloudFormation. This is your first template and the only thing you know is that the templates include several major sections but there is only one that is required for it to work. What is the only section required?

- A. Mappings
- B. Outputs
- C. Resources
- D. Conditions

Answer: C

Explanation: AWS CloudFormation is a service that helps you model and set up your Amazon Web Services resources so that you can spend less time managing those resources and more time focusing on your applications that run in AWS. You create a template that describes all the AWS resources that you want (like Amazon EC2 instances or Amazon RDS DB instances), and AWS CloudFormation takes care of provisioning and configuring those resources for you.

A template is a JSON-formatted text file that describes your AWS infrastructure. Templates include several major sections.

The Resources section is the only section that is required.

The first character in the template must be an open brace ({}), and the last character must be a closed brace (}). The following template fragment shows the template structure and sections.

Reference: <http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/template-anatomy.html>

NEW QUESTION 260

You are planning and configuring some EBS volumes for an application. In order to get the most performance out of your EBS volumes, you should attach them to an instance with enough to support your volumes.

- A. Redundancy
- B. Storage
- C. Bandwidth
- D. Memory

Answer: C

Explanation: When you plan and configure EBS volumes for your application, it is important to consider the configuration of the instances that you will attach the volumes to. In order to get the most performance out of your EBS volumes, you should attach them to an instance with enough bandwidth to support your volumes, such as an EBS-optimized instance or an instance with 10 Gigabit network connectMty. This is especially important when you use General Purpose (SSD) or Provisioned IOPS (SSD) volumes, or when you stripe multiple volumes together in a RAID configuration.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-ec2-config.html>

NEW QUESTION 262

Can a single EBS volume be attached to multiple EC2 instances at the same time?

- A. Yes
- B. No
- C. Only for high-performance EBS volumes.
- D. Only when the instances are located in the US region

Answer: B

Explanation: You can't attach an EBS volume to multiple EC2 instances. This is because it is equivalent to using a single hard drive with many computers at the same time.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AmazonEBS.html>

NEW QUESTION 264

How long does an AWS free usage tier EC2 last for?

- A. Forever
- B. 12 Months upon signup
- C. 1 Month upon signup
- D. 6 Months upon signup

Answer: B

Explanation: The AWS free usage tier will expire 12 months from the date you sign up. When your free usage expires or if your application use exceeds the free usage tiers, you simply pay the standard, pay-as-you-go service rates.

Reference: <http://aws.amazon.com/free/faqs/>

NEW QUESTION 266

A user is hosting a website in the US West-1 region. The website has the highest client base from the Asia-Pacific (Singapore / Japan) region. The application is accessing data from S3 before serving it to client. Which of the below mentioned regions gives a better performance for S3 objects?

- A. Japan
- B. Singapore
- C. US East
- D. US West-1

Answer: D

Explanation: Access to Amazon S3 from within Amazon EC2 in the same region is fast. In this aspect, though the client base is Singapore, the application is being hosted in the US West-1 region. Thus, it is recommended that S3 objects be stored in the US-West-1 region.

Reference: http://media.amazonwebservices.com/AWS_Storage_Options.pdf

NEW QUESTION 271

You have been setting up an Amazon Virtual Private Cloud (Amazon VPC) for your company, including setting up subnets. Security is a concern, and you are not sure which is the best security practice for securing subnets in your VPC. Which statement below is correct in describing the protection of AWS resources in each subnet?

- A. You can use multiple layers of security, including security groups and network access control lists (ACL).
- B. You can only use access control lists (ACL).
- C. You don't need any security in subnets.
- D. You can use multiple layers of security, including security groups, network access control lists (ACL) and CloudHSM.

Answer: A

Explanation: A subnet is a range of IP addresses in your VPC. You can launch AWS resources into a subnet that you select. Use a public subnet for resources that must be connected to the Internet, and a private subnet for resources that won't be connected to the Internet.

To protect the AWS resources in each subnet, you can use multiple layers of security, including security groups and network access control lists (ACL).

Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html

NEW QUESTION 272

Your organization is in the business of architecting complex transactional databases. For a variety of reasons, this has been done on EBS. What is AWS's recommendation for customers who have architected databases using EBS for backups?

- A. Backups to Amazon S3 be performed through the database management system.
- B. Backups to AWS Storage Gateway be performed through the database management system.
- C. If you take regular snapshots no further backups are required.
- D. Backups to Amazon Glacier be performed through the database management system.

Answer: A

Explanation: Data stored in Amazon EBS volumes is redundantly stored in multiple physical locations as part of normal operation of those services and at no additional charge.

However, Amazon EBS replication is stored within the same availability zone, not across multiple zones; therefore, it is highly recommended that you conduct regular snapshots to Amazon S3 for long-term data durability.

For customers who have architected complex transactional databases using EBS, it is recommended that backups to Amazon S3 be performed through the database management system so that distributed transactions and logs can be checkpointed.

AWS does not perform backups of data that are maintained on virtual disks attached to running instances on Amazon EC2.

Reference: <http://d0.awsstatic.com/whitepapers/Security/AWS%20Security%20Whitepaper.pdf>

NEW QUESTION 273

You have three Amazon EC2 instances with Elastic IP addresses in the US East (Virginia) region, and you want to distribute requests across all three IPs evenly

for users for whom US East (Virginia) is the appropriate region.
How many EC2 instances would be sufficient to distribute requests in other regions?

- A. 3
- B. 9
- C. 2
- D. 1

Answer: D

Explanation: If your application is running on Amazon EC2 instances in two or more Amazon EC2 regions, and if you have more than one Amazon EC2 instance in one or more regions, you can use latency-based routing to route traffic to the correct region and then use weighted resource record sets to route traffic to instances within the region based on weights that you specify.
For example, suppose you have three Amazon EC2 instances with Elastic IP addresses in the US East (Virginia) region and you want to distribute requests across all three IPs evenly for users for whom US East (Virginia) is the appropriate region. Just one Amazon EC2 instance is sufficient in the other regions, although you can apply the same technique to many regions at once.
Reference: <http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/Tutorials.html>

NEW QUESTION 276

A user has created a CloudFormation stack. The stack creates AWS services, such as EC2 instances, ELB, AutoScaling, and RDS. While creating the stack it created EC2, ELB and AutoScaling but failed to create RDS. What will CloudFormation do in this scenario?

- A. Rollback all the changes and terminate all the created services
- B. It will wait for the user's input about the error and correct the mistake after the input
- C. CloudFormation can never throw an error after launching a few services since it verifies all the steps before launching
- D. It will warn the user about the error and ask the user to manually create RDS

Answer: A

Explanation: AWS CloudFormation is an application management tool which provides application modeling, deployment, configuration, management and related activities. The AWS CloudFormation stack is a collection of AWS resources which are created and managed as a single unit when AWS CloudFormation instantiates a template. If any of the services fails to launch, CloudFormation will rollback all the changes and terminate or delete all the created services.
Reference: <http://aws.amazon.com/cloudformation/faqs/>

NEW QUESTION 281

A major client who has been spending a lot of money on his internet service provider asks you to set up an AWS Direct Connection to try and save him some money. You know he needs high-speed connectivity. Which connection port speeds are available on AWS Direct Connect?

- A. 500Mbps and 1Gbps
- B. 1Gbps and 10Gbps
- C. 100Mbps and 1Gbps
- D. 1Gbps

Answer: B

Explanation: AWS Direct Connect is a network service that provides an alternative to using the internet to utilize AWS cloud services. Using AWS Direct Connect, data that would have previously been transported over the Internet can now be delivered through a private network connection between AWS and your datacenter or corporate network.
1Gbps and 10Gbps ports are available. Speeds of 50Mbps, 100Mbps, 200Mbps, 300Mbps, 400Mbps, and 500Mbps can be ordered from any APN partners supporting AWS Direct Connect.
Reference: <https://aws.amazon.com/directconnect/faqs/>

NEW QUESTION 282

The AWS CloudHSM service defines a resource known as a high-availability (HA) partition group, which is a virtual partition that represents a group of partitions, typically distributed between several physical HSMs for high-availability.

- A. proxy group
- B. partition group
- C. functional group
- D. relational group

Answer: B

Explanation: The AWS CloudHSM service defines a resource known as a high-availability (HA) partition group, which is a virtual partition that represents a group of partitions, typically distributed between several physical HSMs for high-availability.
Reference: <http://docs.aws.amazon.com/cloudhsm/latest/userguide/configuring-ha.html>

NEW QUESTION 287

After moving an E-Commerce website for a client from a dedicated server to AWS you have also set up auto scaling to perform health checks on the instances in your group and replace instances that fail these checks. Your client has come to you with his own health check system that he wants you to use as it has proved to be very useful prior to his site running on AWS. What do you think would be an appropriate response to this given all that you know about auto scaling?

- A. It is not possible to implement your own health check system
- B. You need to use AWS's health check system.
- C. It is not possible to implement your own health check system due to compatibility issues.

- D. It is possible to implement your own health check system and then send the instance's health information directly from your system to Cloud Watch.
- E. It is possible to implement your own health check system and then send the instance's health information directly from your system to Cloud Watch but only in the US East (
- F. Virginia) region.

Answer: C

Explanation: Auto Scaling periodically performs health checks on the instances in your group and replaces instances that fail these checks. By default, these health checks use the results of EC2 instance status checks to determine the health of an instance. If you use a load balancer with your Auto Scaling group, you can optionally choose to include the results of Elastic Load Balancing health checks.

Auto Scaling marks an instance unhealthy if the calls to the Amazon EC2 action DescribeInstanceStatus returns any other state other than running, the system status shows impaired, or the calls to Elastic Load Balancing action DescribeInstanceHealth returns OutOfService in the instance state field.

After an instance is marked unhealthy because of an Amazon EC2 or Elastic Load Balancing health check, it is scheduled for replacement.

You can customize the health check conducted by your Auto Scaling group by specifying additional checks or by having your own health check system and then sending the instance's health information directly from your system to Auto Scaling.

Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/healthcheck.html>

NEW QUESTION 289

What is the data model of DynamoDB?

- A. Since DynamoDB is schema-less, there is no data model.
- B. "Items", with Keys and one or more Attribute; and "Attribute", with Name and Value.
- C. "Table", a collection of Items; "Items", with Keys and one or more Attribute; and "Attribute", with Name and Value.
- D. "Database", which is a set of "Tables", which is a set of "Items", which is a set of "Attributes".

Answer: C

Explanation: The data model of DynamoDB is: "Table", a collection of Items; "Items", with Keys and one or more Attribute; "Attribute", with Name and Value.

Reference: <http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DataModel.html>

NEW QUESTION 290

A gaming company comes to you and asks you to build them infrastructure for their site. They are not sure how big they will be as with all start ups they have limited money and big ideas. What they do tell you is that if the game becomes successful, like one of their previous games, it may rapidly grow to millions of users and generate tens (or even hundreds) of thousands of writes and reads per second. After considering all of this, you decide that they need a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. Which of the following databases do you think would best fit their needs?

- A. Amazon DynamoDB
- B. Amazon Redshift
- C. Any non-relational database.
- D. Amazon SimpleDB

Answer: A

Explanation: Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. Amazon DynamoDB enables customers to offload the administrative burdens of operating and scaling distributed databases to AWS, so they don't have to worry about hardware provisioning, setup and configuration, replication, software patching, or cluster scaling. Today's web-based applications generate and consume massive amounts of data. For example, an online game might start out with only a few thousand users and a light database workload consisting of 10 writes per second and 50 reads per second. However, if the game becomes successful, it may rapidly grow to millions of users and generate tens (or even hundreds) of thousands of writes and reads per second. It may also create terabytes or more of data per day. Developing your applications against Amazon DynamoDB enables you to start small and simply dial-up your request capacity for a table as your requirements scale, without incurring downtime. You pay highly cost-efficient rates for the request capacity you provision, and let Amazon DynamoDB do the work over partitioning your data and traffic over sufficient server capacity to meet your needs. Amazon DynamoDB does the database management and administration, and you simply store and request your data. Automatic replication and failover provides built-in fault tolerance, high availability, and data durability. Amazon DynamoDB gives you the peace of mind that your database is fully managed and can grow with your application requirements.

Reference: <http://aws.amazon.com/dynamodb/faqs/>

NEW QUESTION 294

Mike is appointed as Cloud Consultant in Netcrak Inc. Netcrak has the following VPCs set-up in the US East Region:

A VPC with CIDR block 10.10.0.0/16, a subnet in that VPC with CIDR block 10.10.1.0/24 A VPC with CIDR block 10.40.0.0/16, a subnet in that VPC with CIDR block 10.40.1.0/24

Netcrak Inc is trying to establish network connection between two subnets, a subnet with CIDR block 10.10.1.0/24 and another subnet with CIDR block 10.40.1.0/24. Which one of the following solutions should Mke recommend to Netcrak Inc?

- A. Create 2 Virtual Private Gateways and configure one with each VPC.
- B. Create one EC2 instance in each subnet, assign Elastic IPs to both instances, and configure a set up Site-to-Site VPN connection between both EC2 instances.
- C. Create a VPC Peering connection between both VPCs.
- D. Create 2 Internet Gateways, and attach one to each VP

Answer: C

Explanation: A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them using private IP addresses. EC2 instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, or with a VPC in another AWS account within a single region.

AWS uses the existing infrastructure of a VPC to create a VPC peering connection; it is neither a gateway nor a VPN connection, and does not rely on a separate piece of physical hardware.

Reference: <http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-peering.htm>

NEW QUESTION 297

A favored client needs you to quickly deploy a database that is a relational database service with minimal administration as he wants to spend the least amount of time administering it. Which database would be the best option?

- A. Amazon SimpleDB
- B. Your choice of relational AMs on Amazon EC2 and EBS.
- C. Amazon RDS
- D. Amazon Redshift

Answer: C

Explanation: Amazon Relational Database Service (Amazon RDS) is a web service that makes it easy to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity while managing time-consuming database administration tasks, freeing you up to focus on your applications and business.

Amazon RDS gives you access to the capabilities of a familiar MySQL, Oracle, SQL Server, or PostgreSQL database engine. This means that the code, applications, and tools you already use today with your existing databases can be used with Amazon RDS. Amazon RDS automatically patches the database software and backs up your database, storing the backups for a user-defined retention period and enabling point-in-time recovery.

Reference: https://aws.amazon.com/running_databases/#rds_anchor

NEW QUESTION 299

You're trying to delete an SSL certificate from the IAM certificate store, and you're getting the message "Certificate: <certificate-id> is being used by CloudFront." Which of the following statements is probably the reason why you are getting this error?

- A. Before you can delete an SSL certificate, you need to either rotate SSL certificates or revert from using a custom SSL certificate to using the default CloudFront certificate.
- B. You can't delete SSL certificates. You need to request it from AWS.
- C. Before you can delete an SSL certificate, you need to set up the appropriate access level in IAM.
- D. Before you can delete an SSL certificate you need to set up https on your server.

Answer: A

Explanation: CloudFront is a web service that speeds up distribution of your static and dynamic web content, for example, .html, .css, .php, and image files, to end users.

Every CloudFront web distribution must be associated either with the default CloudFront certificate or with a custom SSL certificate. Before you can delete an SSL certificate, you need to either rotate SSL certificates (replace the current custom SSL certificate with another custom SSL certificate) or revert from using a custom SSL certificate to using the default CloudFront certificate.

Reference: <http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Troubleshooting.htm>

NEW QUESTION 303

How many types of block devices does Amazon EC2 support?

- A. 4
- B. 5
- C. 2
- D. 1

Answer: C

Explanation: Amazon EC2 supports 2 types of block devices. Reference:

<http://docs.amazonaws.com/AWSEC2/latest/UserGuide/block-device-mapping-concepts.html>

NEW QUESTION 308

You need to set up security for your VPC and you know that Amazon VPC provides two features that you can use to increase security for your VPC: Security groups and network access control lists (ACLs). You start to look into security groups first. Which statement below is incorrect in relation to security groups?

- A. Are stateful: Return traffic is automatically allowed, regardless of any rules.
- B. Evaluate all rules before deciding whether to allow traffic.
- C. Support allow rules and deny rules.
- D. Operate at the instance level (first layer of defense).

Answer: C

Explanation: Amazon VPC provides two features that you can use to increase security for your VPC:

Security groups—Act as a firewall for associated Amazon EC2 instances, controlling both inbound and outbound traffic at the instance level and supports allow rules only.

Network access control lists (ACLs)—Act as a firewall for associated subnets, controlling both inbound and outbound traffic at the subnet level and supports allow rules and deny rules.

Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Security.html

NEW QUESTION 310

In relation to AWS CloudHSM, High-availability (HA) recovery is hands-off resumption by failed HA group members.

Prior to the introduction of this function, the HA feature provided redundancy and performance, but required that a failed/lost group member be reinstated.

- A. automatically
- B. periodically
- C. manually
- D. continuously

Answer: C

Explanation: In relation to AWS CloudHSM, High-availability (HA) recovery is hands-off resumption by failed HA group members. Prior to the introduction of this function, the HA feature provided redundancy and performance, but required that a failed/lost group member be manually reinstated.

Reference: <http://docs.aws.amazon.com/cloudhsm/latest/userguide/ha-best-practices.html>

NEW QUESTION 312

You have created a Route 53 latency record set from your domain to a machine in Northern Virginia and a similar record to a machine in Sydney. When a user located in U S visits your domain he will be routed to:

- A. Northern Virginia
- B. Sydney
- C. Both, Northern Virginia and Sydney
- D. Depends on the Weighted Resource Record Sets

Answer: A

Explanation: If your application is running on Amazon EC2 instances in two or more Amazon EC2 regions, and if you have more than one Amazon EC2 instance in one or more regions, you can use latency-based routing to route traffic to the correct region and then use weighted resource record sets to route traffic to instances within the region based on weights that you specify.

For example, suppose you have three Amazon EC2 instances with Elastic IP addresses in the US East (Virginia) region and you want to distribute requests across all three IPs evenly for users for whom US East (Virginia) is the appropriate region. Just one Amazon EC2 instance is sufficient in the other regions, although you can apply the same technique to many regions at once.

Reference: <http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/Tutorials.html>

NEW QUESTION 315

Any person or application that interacts with AWS requires security credentials. AWS uses these credentials to identify who is making the call and whether to allow the requested access. You have just set up a VPC network for a client and you are now thinking about the best way to secure this network. You set up a security group called vpcsecuritygroup. Which following statement is true in respect to the initial settings that will be applied to this security group if you choose to use the default settings for this group?

- A. Allow all inbound traffic and allow no outbound traffic.
- B. Allow no inbound traffic and allow all outbound traffic.
- C. Allow inbound traffic on port 80 only and allow all outbound traffic.
- D. Allow all inbound traffic and allow all outbound traffic

Answer: B

Explanation: Amazon VPC provides advanced security features such as security groups and network access control lists to enable inbound and outbound filtering at the instance level and subnet level.

AWS assigns each security group a unique ID in the form sg-xxxxxxx. The following are the initial settings for a security group that you create:

Allow no inbound traffic Allow all outbound traffic

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html>

NEW QUESTION 319

Having just set up your first Amazon Virtual Private Cloud (Amazon VPC) network, which defined a default network interface, you decide that you need to create and attach an additional network interface, known as an elastic network interface (ENI) to one of your instances. Which of the following statements is true regarding attaching network interfaces to your instances in your VPC?

- A. You can attach 5 ENIs per instance type.
- B. You can attach as many ENIs as you want.
- C. The number of ENIs you can attach varies by instance type.
- D. You can attach 100 ENIs total regardless of instance type

Answer: C

Explanation: Each instance in your VPC has a default network interface that is assigned a private IP address from the IP address range of your VPC. You can create and attach an additional network interface, known as an elastic network interface (ENI), to any instance in your VPC. The number of ENIs you can attach varies by instance type.

NEW QUESTION 320

A for a VPC is a collection of subnets (typically private) that you may want to designate for your backend RDS DB Instances.

- A. DB Subnet Set
- B. RDS Subnet Group
- C. DB Subnet Group
- D. DB Subnet Collection

Answer: C

Explanation: DB Subnet Groups are a set of subnets (one per Availability Zone of a particular region) designed for your DB instances that reside in a VPC. They make easy to manage Multi-AZ deployments as well as the conversion from a Single-AZ to a Multi-AZ one.

Reference: <http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.RDSVPC.html>

NEW QUESTION 324

Amazon Elastic Load Balancing is used to manage traffic on a fleet of Amazon EC2 instances, distributing traffic to instances across all availability zones within a region. Elastic Load Balancing has all the advantages of an on-premises load balancer, plus several security benefits.

Which of the following is not an advantage of ELB over an on-premise load balancer?

- A. ELB uses a four-tier, key-based architecture for encryption.
- B. ELB offers clients a single point of contact, and can also serve as the first line of defense against attacks on your network.
- C. ELB takes over the encryption and decryption work from the Amazon EC2 instances and manages it centrally on the load balancer.
- D. ELB supports end-to-end traffic encryption using TLS (previously SSL) on those networks that use secure HTTP (HTTPS) connections.

Answer: A

Explanation: Amazon Elastic Load Balancing is used to manage traffic on a fleet of Amazon EC2 instances, distributing traffic to instances across all availability zones within a region. Elastic Load Balancing has all the advantages of an on-premises load balancer, plus several security benefits:

Takes over the encryption and decryption work from the Amazon EC2 instances and manages it centrally on the load balancer

Offers clients a single point of contact, and can also serve as the first line of defense against attacks on your network

When used in an Amazon VPC, supports creation and management of security groups associated with your Elastic Load Balancing to provide additional networking and security options

Supports end-to-end traffic encryption using TLS (previously SSL) on those networks that use secure HTTP (HTTPS) connections. When TLS is used, the TLS server certificate used to terminate client connections can be managed centrally on the load balancer, rather than on every individual instance. Reference:

<http://d0.awsstatic.com/whitepapers/Security/AWS%20Security%20Whitepaper.pdf>

NEW QUESTION 326

You have been asked to build AWS infrastructure for disaster recovery for your local applications and within that you should use an AWS Storage Gateway as part of the solution. Which of the following best describes the function of an AWS Storage Gateway?

- A. Accelerates transferring large amounts of data between the AWS cloud and portable storage devices .
- B. A web service that speeds up distribution of your static and dynamic web content.
- C. Connects an on-premises software appliance with cloud-based storage to provide seamless and secure integration between your on-premises IT environment and AWS's storage infrastructure.
- D. Is a storage service optimized for infrequently used data, or "cold data."

Answer: C

Explanation: AWS Storage Gateway connects an on-premises software appliance with cloud-based storage to provide seamless integration with data security features between your on-premises IT environment and the Amazon Web Services (AWS) storage infrastructure. You can use the service to store data in the AWS cloud for scalable and cost-effective storage that helps maintain data security. AWS Storage Gateway offers both volume-based and tape-based storage solutions:

Volume gateways Gateway-cached volumes Gateway-stored volumes

Gateway-virtual tape library (VTL)

Reference:

http://media.amazonwebservices.com/architecturecenter/AWS_ac_ra_disasterrecovery_07.pdf

NEW QUESTION 331

An organization has a statutory requirement to protect the data at rest for the S3 objects. Which of the below mentioned options need not be enabled by the organization to achieve data security?

- A. MFA delete for S3 objects
- B. Client side encryption
- C. Bucket versioning
- D. Data replication

Answer: D

Explanation: AWS S3 provides multiple options to achieve the protection of data at REST. The options include Permission (Policy), Encryption (Client and Server Side), Bucket Versioning and MFA based delete. The user can enable any of these options to achieve data protection. Data replication is an internal facility by AWS where S3 replicates each object across all the Availability Zones and the organization need not

enable it in this case.

Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

NEW QUESTION 333

In Amazon CloudFront, if you use Amazon EC2 instances and other custom origins with CloudFront, it is recommended to .

- A. not use Elastic Load Balancing
- B. restrict Internet communication to private instances while allowing outgoing traffic
- C. enable access key rotation for CloudWatch metrics
- D. specify the URL of the load balancer for the domain name of your origin server

Answer: D

Explanation: In Amazon CloudFront, you should use an Elastic Load Balancing load balancer to handle traffic across multiple Amazon EC2 instances and to isolate your application from changes to Amazon EC2 instances. When you create your CloudFront distribution, specify the URL of the load balancer for the domain name of your origin server.

Reference: <http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/CustomOriginBestPractices.html>

NEW QUESTION 335

What is the time period with which metric data is sent to CloudWatch when detailed monitoring is enabled on an Amazon EC2 instance?

- A. 15 minutes
- B. 5 minutes
- C. 1 minute
- D. 45 seconds

Answer: C

Explanation: By default, Amazon EC2 metric data is automatically sent to CloudWatch in 5-minute periods. However, you can, enable detailed monitoring on an Amazon EC2 instance, which sends data to CloudWatch in 1-minute periods

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-cloudwatch.html>

NEW QUESTION 340

Are penetration tests allowed as long as they are limited to the customer's instances?

- A. Yes, they are allowed but only for selected regions.
- B. No, they are never allowed.
- C. Yes, they are allowed without any permission.
- D. Yes, they are allowed but only with approval.

Answer: D

Explanation: Penetration tests are allowed after obtaining permission from AWS to perform them. Reference: <http://aws.amazon.com/security/penetration-testing/>

NEW QUESTION 342

What happens to data on an ephemeral volume of an EBS-backed EC2 instance if it is terminated or if it fails?

- A. Data is automatically copied to another volume.
- B. The volume snapshot is saved in S3.
- C. Data persists.
- D. Data is delete

Answer: D

Explanation: Any data on the instance store volumes persists as long as the instance is running, but this data is deleted when the instance is terminated or if it fails (such as if an underlying drive has issues). After an instance store-backed instance fails or terminates, it cannot be restored.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/RootDeviceStorage.html>

NEW QUESTION 346

In AWS CloudHSM, in addition to the AWS recommendation that you use two or more HSM appliances in a high-availability configuration to prevent the loss of keys and data, you can also perform a remote backup/restore of a Luna SA partition if you have purchased a:

- A. Luna Restore HSNI.
- B. Luna Backup HSM.
- C. Luna HSNI.
- D. Luna SA HSM.

Answer: B

Explanation: In AWS CloudHSM, you can perform a remote backup/restore of a Luna SA partition if you have purchased a Luna Backup HSM.

Reference: <http://docs.aws.amazon.com/cloudhsm/latest/userguide/cloud-hsm-backup-restore.html>

NEW QUESTION 348

AWS Identity and Access Management is a web service that enables Amazon Web Services (AWS) customers to manage users and user permissions in AWS. In addition to supporting IAM user policies, some services support resource-based permissions. Which of the following services are supported by resource-based permissions?

- A. Amazon SNS, and Amazon SQS and AWS Direct Connect.
- B. Amazon S3 and Amazon SQS and Amazon ElastiCache.
- C. Amazon S3, Amazon SNS, Amazon SQS, Amazon Glacier and Amazon EBS.
- D. Amazon Glacier, Amazon SNS, and Amazon CloudWatch

Answer: C

Explanation: In addition to supporting IAM user policies, some services support resource-based permissions, which let you attach policies to the service's resources instead of to IAM users or groups. Resource-based permissions are supported by Amazon S3, Amazon SNS, Amazon SQS, Amazon Glacier and Amazon EBS.

Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_SpecificProducts.htm

NEW QUESTION 351

Content and Media Server is the latest requirement that you need to meet for a client.

The client has been very specific about his requirements such as low latency, high availability, durability, and access control. Potentially there will be millions of views on this server and because of "spiky" usage patterns, operations teams will need to provision static hardware, network, and management resources to support the maximum expected need. The Customer base will be initially low but is expected to grow and become more geographically distributed.

Which of the following would be a good solution for content distribution?

- A. Amazon S3 as both the origin server and for caching
- B. AWS Storage Gateway as the origin server and Amazon EC2 for caching
- C. AWS CloudFront as both the origin server and for caching
- D. Amazon S3 as the origin server and Amazon CloudFront for caching

Answer: D

Explanation: As your customer base grows and becomes more geographically distributed, using a high-performance edge cache like Amazon CloudFront can provide substantial improvements in latency, fault tolerance, and cost.

By using Amazon S3 as the origin server for the Amazon CloudFront distribution, you gain the advantages of fast in-network data transfer rates, simple publishing/caching workflow, and a unified security framework.

Amazon S3 and Amazon CloudFront can be configured by a web service, the AWS Management Console, or a host of third-party management tools.

Reference: http://media.amazonwebservices.com/architecturecenter/AWS_ac_ra_media_02.pdf

NEW QUESTION 356

Which one of the below doesn't affect Amazon CloudFront billing?

- A. Distribution Type
- B. Data Transfer Out
- C. Dedicated IP SSL Certificates
- D. Requests

Answer: A

Explanation: Amazon CloudFront is a web service for content delivery. CloudFront delivers your content using a global network of edge locations and works seamlessly with Amazon S3 which durably stores the original and definitive versions of your files.

Amazon CloudFront billing is mainly affected by Data Transfer Out

Edge Location Traffic Distribution Requests

Dedicated IP SSL Certificates

Reference: <http://calculator.s3.amazonaws.com/index.html>

NEW QUESTION 361

A user is trying to launch a similar EC2 instance from an existing instance with the option "Launch More like this". The AMI of the selected instance is deleted. What will happen in this case?

- A. AWS does not need an AMI for the "Launch more like this" option
- B. AWS will launch the instance but will not create a new AMI
- C. AWS will create a new AMI and launch the instance
- D. AWS will throw an error saying that the AMI is deregistered

Answer: D

Explanation: If the user has deregistered the AMI of an EC2 instance and is trying to launch a similar instance with the option "Launch more like this", AWS will throw an error saying that the AMI is deregistered or not available.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html>

NEW QUESTION 362

Your company has multiple IT departments, each with their own VPC. Some VPCs are located within the same AWS account, and others in a different AWS account. You want to peer together all VPCs to enable the IT departments to have full access to each others' resources. There are certain limitations placed on VPC peering. Which of the following statements is incorrect in relation to VPC peering?

- A. Private DNS values cannot be resolved between instances in peered VPCs.
- B. You can have up to 3 VPC peering connections between the same two VPCs at the same time.
- C. You cannot create a VPC peering connection between VPCs in different regions.
- D. You have a limit on the number active and pending VPC peering connections that you can have per VPC.

Answer: B

Explanation: To create a VPC peering connection with another VPC, you need to be aware of the following limitations and rules:

You cannot create a VPC peering connection between VPCs that have matching or overlapping CIDR blocks.

You cannot create a VPC peering connection between VPCs in different regions.

You have a limit on the number active and pending VPC peering connections that you can have per VPC. VPC peering does not support transitive peering relationships; in a VPC peering connection, your VPC will not have access to any other VPCs that the peer VPC may be peered with. This includes VPC peering

connections that are established entirely within your own AWS account.

You cannot have more than one VPC peering connection between the same two VPCs at the same time. The Maximum Transmission Unit (MTU) across a VPC peering connection is 1500 bytes.

A placement group can span peered VPCs; however, you will not get full-bisection bandwidth between instances in peered VPCs.

Unicast reverse path forwarding in VPC peering connections is not supported.

You cannot reference a security group from the peer VPC as a source or destination for ingress or egress rules in your security group. Instead, reference CIDR blocks of the peer VPC as the source or destination of your security group's ingress or egress rules.

Private DNS values cannot be resolved between instances in peered VPCs. Reference:

<http://docs.aws.amazon.com/AmazonVPC/latest/PeeringGuide/vpc-peering-overview.html#vpc-peering-limitations>

NEW QUESTION 366

A company wants to review the security requirements of Glacier. Which of the below mentioned statements is true with respect to the AWS Glacier data security?

- A. All data stored on Glacier is protected with AES-256 serverside encryption.
- B. All data stored on Glacier is protected with AES-128 serverside encryption.
- C. The user can set the serverside encryption flag to encrypt the data stored on Glacier.
- D. The data stored on Glacier is not encrypted by default

Answer: A

Explanation: For Amazon Web Services, all the data stored on Amazon Glacier is protected using serverside encryption. AWS generates separate unique encryption keys for each Amazon Glacier archive, and encrypts it using AES-256. The encryption key then encrypts itself using AES-256 with a master key that is stored in a secure location.

Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

NEW QUESTION 371

A friend wants you to set up a small BitTorrent storage area for him on Amazon S3. You tell him it is highly unlikely that AWS would allow such a thing in their infrastructure. However you decide to investigate. Which of the following statements best describes using BitTorrent with Amazon S3?

- A. Amazon S3 does not support the BitTorrent protocol because it is used for pirated software.
- B. You can use the BitTorrent protocol but only for objects that are less than 100 GB in size.
- C. You can use the BitTorrent protocol but you need to ask AWS for specific permissions first.
- D. You can use the BitTorrent protocol but only for objects that are less than 5 GB in size

Answer: D

Explanation: BitTorrent is an open, peer-to-peer protocol for distributing files. You can use the BitTorrent protocol to retrieve any publicly-accessible object in Amazon S3.

Amazon S3 supports the BitTorrent protocol so that developers can save costs when distributing content at high scale. Amazon S3 is useful for simple, reliable storage of any data. The default distribution mechanism for Amazon S3 data is via client/server download. In client/server distribution, the entire object is transferred point-to-point from Amazon S3 to every authorized user who requests that object. While client/server delivery is appropriate for a wide variety of use cases, it is not optimal for everybody. Specifically, the costs of client/server distribution increase linearly as the number of users downloading objects increases. This can make it expensive to distribute popular objects.

BitTorrent addresses this problem by recruiting the very clients that are downloading the object as distributors themselves: Each client downloads some pieces of the object from Amazon S3 and some from other clients, while simultaneously uploading pieces of the same object to other interested "peers." The benefit for publishers is that for large, popular files the amount of data actually supplied by Amazon S3 can be substantially lower than what it would have been serving the same clients via client/server download. Less data transferred means lower costs for the publisher of the object.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/S3Torrent.html>

NEW QUESTION 373

In the most recent company meeting, your CEO focused on the fact that everyone in the organization needs to make sure that all of the infrastructure that is built is truly scalable. Which of the following statements is incorrect in reference to scalable architecture?

- A. A scalable service is capable of handling heterogeneity.
- B. A scalable service is resilient.
- C. A scalable architecture won't be cost effective as it grows.
- D. Increasing resources results in a proportional increase in performance

Answer: C

Explanation: In AWS it is critical to build a scalable architecture in order to take advantage of a scalable infrastructure. The cloud is designed to provide conceptually infinite scalability. However, you cannot leverage all that scalability in infrastructure if your architecture is not scalable. Both have to work together. You will have to identify the monolithic components and bottlenecks in your architecture, identify the areas where you cannot leverage the on-demand provisioning capabilities in your architecture, and work to refactor your application, in order to leverage the scalable infrastructure and take advantage of the cloud.

Characteristics of a truly scalable application:

Increasing resources results in a proportional increase in performance A scalable service is capable of handling heterogeneity

A scalable service is operationally efficient A scalable service is resilient

A scalable service should become more cost effective when it grows (Cost per unit reduces as the number of units increases)

Reference: http://media.amazonwebservices.com/AWS_Cloud_Best_Practices.pdf

NEW QUESTION 378

A user has defined an AutoScaling termination policy to first delete the instance with the nearest billing hour. AutoScaling has launched 3 instances in the US-East-1A region and 2 instances in the US-East-1 B region. One of the instances in the US-East-1B region is running nearest to the billing hour. Which instance will AutoScaling terminate first while executing the termination action?

- A. Random Instance from US-East-1A
- B. Instance with the nearest billing hour in US-East-1 B
- C. Instance with the nearest billing hour in US-East-1A
- D. Random instance from US-East-1B

Answer: C

Explanation: Even though the user has configured the termination policy, before AutoScaling selects an instance to terminate, it first identifies the Availability Zone that has more instances than the other Availability Zones used by the group. Within the selected Availability Zone, it identifies the instance that matches the specified termination policy.

Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/us-termination-policy.html>

NEW QUESTION 380

You are playing around with setting up stacks using JSON templates in CloudFormation to try and understand them a little better. You have set up about 5 or 6 but now start to wonder if you are being charged for these stacks. What is AWS's billing policy regarding stack resources?

- A. You are not charged for the stack resources if they are not taking any traffic.
- B. You are charged for the stack resources for the time they were operating (even if you deleted the stack right away)
- C. You are charged for the stack resources for the time they were operating (but not if you deleted the stack within 60 minutes)
- D. You are charged for the stack resources for the time they were operating (but not if you deleted the stack within 30 minutes)

Answer: B

Explanation: A stack is a collection of AWS resources that you can manage as a single unit. In other words, you can create, update, or delete a collection of resources by creating, updating, or deleting stacks. All the resources in a stack are defined by the stack's AWS CloudFormation template. A stack, for instance, can include all the resources required to run a web application, such as a web server, a database, and networking rules. If you no longer require that web application, you can simply delete the stack, and all of its related resources are deleted.

You are charged for the stack resources for the time they were operating (even if you deleted the stack right away).

Reference: <http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/stacks.html>

NEW QUESTION 385

After deploying a new website for a client on AWS, he asks if you can set it up so that if it fails it can be automatically redirected to a backup website that he has stored on a dedicated server elsewhere. You are wondering whether Amazon Route 53 can do this. Which statement below is correct in regards to Amazon Route 53?

- A. Amazon Route 53 can't help detect an outage
- B. You need to use another service.
- C. Amazon Route 53 can help detect an outage of your website and redirect your end users to alternate locations.
- D. Amazon Route 53 can help detect an outage of your website but can't redirect your end users to alternate locations.
- E. Amazon Route 53 can't help detect an outage of your website, but can redirect your end users to alternate locations.

Answer: B

Explanation: With DNS Failover, Amazon Route 53 can help detect an outage of your website and redirect your end users to alternate locations where your application is operating properly.

Reference:

<http://aws.amazon.com/about-aws/whats-new/2013/02/11/announcing-dns-failover-for-route-53/>

NEW QUESTION 390

In Route 53, what does a Hosted Zone refer to?

- A. A hosted zone is a collection of geographical load balancing rules for Route 53.
- B. A hosted zone is a collection of resource record sets hosted by Route 53.
- C. A hosted zone is a selection of specific resource record sets hosted by CloudFront for distribution to Route 53.
- D. A hosted zone is the Edge Location that hosts the Route 53 records for a use

Answer: B

Explanation: A Hosted Zone refers to a selection of resource record sets hosted by Route 53.

Reference: <http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/AboutHostedZones.html>

NEW QUESTION 391

Which of the following statements is true of Amazon EC2 security groups?

- A. You can change the outbound rules for EC2-Classic
- B. Also, you can add and remove rules to a group at any time.
- C. You can modify an existing rule in a group
- D. However, you can't add and remove rules to a group.
- E. None of the statements are correct.
- F. You can't change the outbound rules for EC2-Classic
- G. However, you can add and remove rules to a group at any time

Answer: D

Explanation:

When dealing with security groups, bear in mind that you can freely add and remove rules from a group, but you can't change the outbound rules for EC2-Classic. If you're using the Amazon EC2 console, you can modify existing rules, and you can copy the rules from an existing security group to a new security group.

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/using-network-security.html>

NEW QUESTION 396

Which DNS name can only be resolved within Amazon EC2?

- A. Public DNS name
- B. Internal DNS name
- C. External DNS name
- D. Global DNS name

Answer: B

Explanation: Only Internal DNS name can be resolved within Amazon EC2. Reference:
<http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/using-instance-addressing.html>

NEW QUESTION 400

You need to create a management network using network interfaces for a virtual private cloud (VPC) network. Which of the following statements is incorrect pertaining to Best Practices for Configuring Network Interfaces.

- A. You can detach secondary (ethN) network interfaces when the instance is running or stopped
- B. However, you can't detach the primary (eth0) interface.
- C. Launching an instance with multiple network interfaces automatically configures interfaces, private IP addresses, and route tables on the operating system of the instance.
- D. You can attach a network interface in one subnet to an instance in another subnet in the same VPC, however, both the network interface and the instance must reside in the same Availability Zone.
- E. Attaching another network interface to an instance is a valid method to increase or double the network bandwidth to or from the dual-homed instance

Answer: D

Explanation: Best Practices for Configuring Network Interfaces

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

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

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

When launching an instance from the CLI or API, you can specify the network interfaces to attach to the instance for both the primary (eth0) and additional network interfaces.

Launching an instance with multiple network interfaces automatically configures interfaces, private IP addresses, and route tables on the operating system of the instance.

A warm or hot attach of an additional network interface may require you to manually bring up the second interface, configure the private IP address, and modify the route table accordingly. (Instances running Amazon Linux automatically recognize the warm or hot attach and configure themselves.)

Attaching another network interface to an instance is not a method to increase or double the network bandwidth to or from the dual-homed instance.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-eni.html#use-network-and-security-interfaces-in-your-vpc>

NEW QUESTION 401

All Amazon EC2 instances are assigned two IP addresses at launch. Which are those?

- A. 2 Elastic IP addresses
- B. A private IP address and an Elastic IP address
- C. A public IP address and an Elastic IP address
- D. A private IP address and a public IP address

Answer: D

Explanation: In Amazon EC2-Classic every instance is given two IP Addresses: a private IP address and a public IP address

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-instance-addressing.html#differences>

NEW QUESTION 406

You want to establish a dedicated network connection from your premises to AWS in order to save money by transferring data directly to AWS rather than through your internet service provider. You are sure there must be some other benefits beyond cost savings. Which of the following would not be considered a benefit if you were to establish such a connection?

- A. Elasticity
- B. Compatibility with all AWS services.
- C. Private connectivity to your Amazon VPC.
- D. Everything listed is a benefit

Answer: D

Explanation: 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.

You could expect the following benefits if you use AWS Direct Connect. Reduced bandwidth costs

Consistent network performance Compatibility with all AWS services Private connectivity to your Amazon VPC Elasticity

Simplicity

Reference: <http://aws.amazon.com/directconnect/>

NEW QUESTION 407

A user has launched an EC2 instance. The instance got terminated as soon as it was launched. Which of the below mentioned options is not a possible reason for this?

- A. The user account has reached the maximum volume limit
- B. The AMI is missing
- C. It is the required part
- D. The snapshot is corrupt
- E. The user account has reached the maximum EC2 instance limit

Answer: D

Explanation: When the user account has reached the maximum number of EC2 instances, it will not be allowed to launch an instance. AWS will throw an 'Instance Limit Exceeded' error. For all other reasons, such as

"AMI is missing part", "Corrupt Snapshot" or "Volume limit has reached" it will launch an EC2 instance and then terminate it.

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

NEW QUESTION 410

You can seamlessly join an EC2 instance to your directory domain. What connectivity do you need to be able to connect remotely to this instance?

- A. You must have IP connectivity to the instance from the network you are connecting from.
- B. You must have the correct encryption keys to connect to the instance remotely.
- C. You must have enough bandwidth to connect to the instance.
- D. You must use MFA authentication to be able to connect to the instance remotely.

Answer: A

Explanation: You can seamlessly join an EC2 instance to your directory domain when the instance is launched using the Amazon EC2 Simple Systems Manager. If you need to manually join an EC2 instance to your domain, you must launch the instance in the proper region and security group or subnet, then join the instance to the domain. To be able to connect remotely to these instances, you must have IP connectivity to the instances from the network you are connecting from. In most cases, this requires that an Internet gateway be attached to your VPC and that the instance has a public IP address.

Reference: http://docs.aws.amazon.com/directoryservice/latest/admin-guide/join_a_directory.html

NEW QUESTION 414

Can you encrypt EBS volumes?

- A. Yes, you can enable encryption when you create a new EBS volume using the AWS Management Console, API, or CLI.
- B. No, you should use a third-party software to perform raw block-level encryption of an EBS volume.
- C. Yes, but you must use a third-party API for encrypting data before it's loaded on EBS.
- D. Yes, you can encrypt with the special "ebs_encrypt" command through Amazon API

Answer: A

Explanation: With Amazon EBS encryption, you can now create an encrypted EBS volume and attach it to a supported instance type. Data on the volume, disk I/O, and snapshots created from the volume are then all encrypted. The encryption occurs on the servers that host the EC2 instances, providing encryption of data as it moves between EC2 instances and EBS storage. EBS encryption is based on the industry standard AES-256 cryptographic algorithm.

To get started, simply enable encryption when you create a new EBS volume using the AWS Management Console, API, or CLI. Amazon EBS encryption is available for all the latest EC2 instances in all commercially available AWS regions.

Reference:

<https://aws.amazon.com/about-aws/whats-new/2014/05/21/Amazon-EBS-encryption-now-available/>

NEW QUESTION 416

A user has created an ELB with Auto Scaling. Which of the below mentioned offerings from ELB helps the user to stop sending new requests traffic from the load balancer to the EC2 instance when the instance is being deregistered while continuing in-flight requests?

- A. ELB sticky session
- B. ELB deregistration check
- C. ELB auto registration Off
- D. ELB connection draining

Answer: D

Explanation: The Elastic Load Balancer connection draining feature causes the load balancer to stop sending new requests to the back-end instances when the instances are deregistering or become unhealthy, while ensuring that in-flight requests continue to be served.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/config-conn-drain.html>

NEW QUESTION 419

While controlling access to Amazon EC2 resources, which of the following acts as a firewall that controls the traffic allowed to reach one or more instances?

- A. A security group
- B. An instance type
- C. A storage cluster
- D. An object

Answer: A

Explanation: A security group acts as a firewall that controls the traffic allowed to reach one or more instances. When you launch an instance, you assign it one or more security groups.

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/UsingIAM.html>

NEW QUESTION 421

Just when you thought you knew every possible storage option on AWS you hear someone mention Reduced Redundancy Storage (RRS) within Amazon S3. What is the ideal scenario to use Reduced Redundancy Storage (RRS)?

- A. Huge volumes of data
- B. Sensitive data
- C. Non-critical or reproducible data
- D. Critical data

Answer: C

Explanation: Reduced Redundancy Storage (RRS) is a new storage option within Amazon S3 that enables customers to reduce their costs by storing non-critical, reproducible data at lower levels of redundancy than Amazon S3's standard storage. RRS provides a lower cost, less durable, highly available storage option that is designed to sustain the loss of data in a single facility.

RRS is ideal for non-critical or reproducible data.

For example, RRS is a cost-effective solution for sharing media content that is durably stored elsewhere. RRS also makes sense if you are storing thumbnails and other resized images that can be easily reproduced from an original image.

Reference: <https://aws.amazon.com/s3/faqs/>

NEW QUESTION 425

A user is making a scalable web application with compartmentalization. The user wants the log module to be able to be accessed by all the application functionalities in an asynchronous way. Each module of the application sends data to the log module, and based on the resource availability it will process the logs. Which AWS service helps this functionality?

- A. AWS Simple Queue Service.
- B. AWS Simple Notification Service.
- C. AWS Simple Workflow Service.
- D. AWS Simple Email Service

Answer: A

Explanation: Amazon Simple Queue Service (SQS) is a highly reliable distributed messaging system for storing messages as they travel between computers. By using Amazon SQS, developers can simply move data between distributed application components. It is used to achieve compartmentalization or loose coupling. In this case all the modules will send a message to the logger queue and the data will be processed by queue as per the resource availability.

Reference: http://media.amazonwebservices.com/AWS_Building_Fault_Tolerant_Applications.pdf

NEW QUESTION 428

You have some very sensitive data stored on AWS S3 and want to try every possible alternative to keeping it secure in regards to access control. What are the mechanisms available for access control on AWS S3?

- A. (IAM) policies, Access Control Lists (ACLs), bucket policies, and query string authentication.
- B. (IAM) policies, Access Control Lists (ACLs) and bucket policies.
- C. Access Control Lists (ACLs), bucket policies, and query string authentication
- D. (IAM) policies, Access Control Lists (ACLs), bucket policies, query string authentication and encryption.

Answer: A

Explanation: Amazon S3 supports several mechanisms that give you flexibility to control who can access your data as well as how, when, and where they can access it.

Amazon S3 provides four different access control mechanisms:

AWS Identity and Access Management (IAM) policies, Access Control Lists (ACLs), bucket policies, and query string authentication.

IAM enables organizations to create and manage multiple users under a single AWS account. With IAM policies, you can grant IAM users fine-grained control to your Amazon S3 bucket or objects. You can use ACLs to selectively add (grant) certain permissions on individual objects.

Amazon S3 bucket policies can be used to add or deny permissions across some or all of the objects within a single bucket.

With Query string authentication, you have the ability to share Amazon S3 objects through URLs that are valid for a specified period of time.

NEW QUESTION 429

Your manager has come to you saying that he is very confused about the bills he is receiving from AWS as he is getting different bills for every user and needs you to look into making it more understandable. Which of the following would be the best solution to meet his request?

- A. AWS Billing Aggregation
- B. Consolidated Billing
- C. Deferred Billing
- D. Aggregated Billing

Answer: B

Explanation: Consolidated Billing enables you to consolidate payment for multiple AWS accounts within your company by designating a single paying account. Consolidated Billing enables you to see a combined view of AWS costs incurred by all accounts, as well as obtain a detailed cost report for each of the individual AWS accounts associated with your "Paying Account". Consolidated Billing is offered at no additional charge. Reference: <https://aws.amazon.com/billing/faqs/>

NEW QUESTION 431

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

- A. Resources
- B. Outputs
- C. Parameters
- D. Mappings

Answer: B

Explanation: You can use AWS CloudFormation's sample templates or create your own templates to describe the AWS resources, and any associated dependencies or runtime parameters, required to run your application.

Reference:

<http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/outputs-section-structure.html>

NEW QUESTION 432

You have been asked to set up monitoring of your network and you have decided that Cloudwatch would be the best service to use. Amazon CloudWatch monitors your Amazon Web Services (AWS) resources and the applications you run on AWS in real-time. You can use CloudWatch to collect and track metrics, which are the variables you want to measure for your resources and applications. Which of the following items listed can AWS Cloudwatch monitor?

- A. Log files your applications generate.
- B. All of the items listed on this page.
- C. System-wide visibility into resource utilization, application performance, and operational health.
- D. Custom metrics generated by your applications and services .

Answer: B

Explanation: Amazon CloudWatch can monitor AWS resources such as Amazon EC2 instances, Amazon DynamoDB tables, and Amazon RDS DB instances, as well as custom metrics generated by your applications and services, and any log files your applications generate. You can use Amazon CloudWatch to gain system-wide visibility into resource utilization, application performance, and operational health. You can use these insights to react and keep your application running smoothly.

Reference: <http://aws.amazon.com/cloudwatch/>

NEW QUESTION 433

A user has hosted an application on EC2 instances. The EC2 instances are configured with ELB and Auto Scaling. The application server session time out is 2 hours. The user wants to configure connection draining to ensure that all in-flight requests are supported by ELB even though the instance is being deregistered. What time out period should the user specify for connection draining?

- A. 1 hour
- B. 30 minutes
- C. 5 minutes
- D. 2 hours

Answer: A

Explanation: The Elastic Load Balancer connection draining feature causes the load balancer to stop sending new requests to the back-end instances when the instances are deregistering or become unhealthy, while ensuring that in-flight requests continue to be served. The user can specify a maximum time of 3600 seconds (1 hour) for the load balancer to keep the connections alive before reporting the instance as deregistered. If the user does not specify the maximum timeout period, by default, the load balancer will close the connections to the deregistering instance after 300 seconds.

Reference:

<http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/config-conn-drain.html>

NEW QUESTION 437

You need to quickly set up an email-sending service because a client needs to start using it in the next hour. Amazon Simple Email Service (Amazon SES) seems to be the logical choice but there are several options available to set it up. Which of the following options to set up SES would best meet the needs of the client?

- A. Amazon SES console
- B. AWS CloudFormation
- C. SMTP Interface
- D. AWS Elastic Beanstalk

Answer: A

Explanation: Amazon SES is an outbound-only email-sending service that provides an easy, cost-effective way for you to send email. There are several ways that you can send an email by using Amazon SES. You can use the Amazon SES console, the Simple Mail Transfer Protocol (SMTP) interface, or you can call the Amazon SES API. Amazon SES console—This method is the quickest way to set up your system
Reference: <http://docs.aws.amazon.com/ses/latest/DeveloperGuide/Welcome.html>

NEW QUESTION 440

Identify a true statement about the On-Demand instances purchasing option provided by Amazon EC2.

- A. Pay for the instances that you use by the hour, with no long-term commitments or up-front payments.
- B. Make a low, one-time, up-front payment for an instance, reserve it for a one- or three-year term, and pay a significantly lower hourly rate for these instances.
- C. Pay for the instances that you use by the hour, with long-term commitments or up-front payments.
- D. Make a high, one-time, all-front payment for an instance, reserve it for a one- or three-year term, and pay a significantly higher hourly rate for these instance

Answer: A

Explanation: On-Demand instances allow you to pay for the instances that you use by the hour, with no long-term commitments or up-front payments.
Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/reserved-instances-offerings.html>

NEW QUESTION 441

In Amazon EC2, how many Elastic IP addresses can you have by default?

- A. 10
- B. 2
- C. 5
- D. 20

Answer: C

Explanation: The number of Elastic IP addresses you can have in EC2 is 5.
Reference: http://docs.aws.amazon.com/general/latest/gr/aws_service_limits.html#limits_ec2

NEW QUESTION 442

After deciding that EMR will be useful in analysing vast amounts of data for a gaming website that you are architecting you have just deployed an Amazon EMR Cluster and wish to monitor the cluster performance. Which of the following tools cannot be used to monitor the cluster performance?

- A. Kinesis
- B. Ganglia
- C. CloudWatch Metrics
- D. Hadoop Web Interfaces

Answer: A

Explanation: Amazon EMR provides several tools to monitor the performance of your cluster. Hadoop Web Interfaces
Every cluster publishes a set of web interfaces on the master node that contain information about the cluster. You can access these web pages by using an SSH tunnel to connect them on the master node. For more information, see [View Web Interfaces Hosted on Amazon EMR Clusters](#).
CloudWatch Metrics
Every cluster reports metrics to CloudWatch. CloudWatch is a web service that tracks metrics, and which you can use to set alarms on those metrics. For more information, see [Monitor Metrics with CloudWatch](#).
Ganglia
Ganglia is a cluster monitoring tool. To have this available, you have to install Ganglia on the cluster when you launch it. After you've done so, you can monitor the cluster as it runs by using an SSH tunnel to connect to the Ganglia UI running on the master node. For more information, see [Monitor Performance with Ganglia](#).
Reference:
<http://docs.aws.amazon.com/ElasticMapReduce/latest/DeveloperGuide/emr-troubleshoot-tools.html>

NEW QUESTION 446

Can you move a Reserved Instance from one Availability Zone to another?

- A. Yes, but each Reserved Instance is associated with a specific Region that cannot be changed.
- B. Yes, only in US-West-2.
- C. Yes, only in US-East-1.
- D. No

Answer: A

Explanation: Each Reserved Instance is associated with a specific Region, which is fixed for the lifetime of the reservation and cannot be changed. Each reservation can, however, be used in any of the available AZs within the associated Region.
Reference: <https://aws.amazon.com/rds/faqs/>

NEW QUESTION 449

You need to develop and run some new applications on AWS and you know that Elastic Beanstalk and CloudFormation can both help as a deployment mechanism for a broad range of AWS resources. Which of the following statements best describes the differences between Elastic Beanstalk and CloudFormation?

- A. Elastic Beanstalk uses Elastic load balancing and CloudFormation doesn't.
- B. CloudFormation is faster in deploying applications than Elastic Beanstalk.
- C. Elastic Beanstalk is faster in deploying applications than CloudFormation.
- D. CloudFormation is much more powerful than Elastic Beanstalk, because you can actually design and script custom resources

Answer: D

Explanation: These services are designed to complement each other. AWS Elastic Beanstalk provides an environment to easily develop and run applications in the cloud. It is integrated with developer tools and provides a one-stop experience for you to manage the lifecycle of your applications. AWS CloudFormation is a convenient deployment mechanism for a broad range of AWS resources. It supports the infrastructure needs of many different types of applications such as existing enterprise applications, legacy applications, applications built using a variety of AWS resources and container-based solutions (including those built using AWS Elastic Beanstalk).

AWS CloudFormation introduces two new concepts: The template, a JSON-format, text-based file that describes all the AWS resources you need to deploy to run your application and the stack, the set of AWS resources that are created and managed as a single unit when AWS CloudFormation instantiates a template.

Reference: <http://aws.amazon.com/cloudformation/faqs/>

NEW QUESTION 452

You need to set up a security certificate for a client's e-commerce website as it will use the HTTPS protocol. Which of the below AWS services do you need to access to manage your SSL server certificate?

- A. AWS Directory Service
- B. AWS Identity & Access Management
- C. AWS CloudFormation
- D. Amazon Route 53

Answer: B

Explanation: AWS Identity and Access Management (IAM) is a web service that enables Amazon Web Services (AWS) customers to manage users and user permissions in AWS.

All your SSL server certificates are managed by AWS Identity and Access management (IAM). Reference:

<http://docs.aws.amazon.com/IAM/latest/UserGuide/ManagingServerCerts.html>

NEW QUESTION 454

When controlling access to Amazon EC2 resources, each Amazon EBS Snapshot has a attribute that controls which AWS accounts can use the snapshot.

- A. createVolumePermission
- B. LaunchPermission
- C. SharePermission
- D. RequestPermission

Answer: A

Explanation: Each Amazon EBS Snapshot has a createVolumePermission attribute that you can set to one or more AWS Account IDs to share the AM with those AWS Accounts. To allow several AWS Accounts to use a particular EBS snapshot, you can use the snapshots's createVolumePermission attribute to include a list of the accounts that can use it.

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/UsingIAM.html>

NEW QUESTION 456

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 fail 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 53, and copy from 53 to root volume at boot tim
- B. App servers: share state using a combination of DynamoDB and IP unicas
- C. Database: use RDS with multi-AZ deployment and one or more read replica
- D. Backup: web servers, app servers, and database backed up weekly to Glacier using snapshots.
- E. Web servers: store read-only data in an EC2 NFS server, mount to each web server at boot tim
- F. App servers: share state using a combination of DynamoDB and IP multiclas
- G. Database: use RDS with multi-AZ deployment and one or more Read Replica
- H. Backup: web and app servers backed up weekly via AM Is, database backed up via DB snapshots.
- I. Web servers: store read-only data in 53, and copy from 53 to root volume at boot tim
- J. App servers: share state using a combination of DynamoDB and IP unicas
- K. Database: use RDS with multi-AZ deployment and one or more Read Replica
- L. Backup: web and app servers backed up weekly viaAM Is, database backed up via DB snapshots.
- M. Web servers: store read-only data in 53, and copy from 53 to root volume at boot tim
- N. App servers: share state using a combination of DynamoDB and IP unicas
- O. Database: use RDS with multi-AZ deploymen
- P. Backup: web and app sewers backed up weekly via ANI Is, 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 fail over 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.

NEW QUESTION 458

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 Recovery

In 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).

NEW QUESTION 460

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

Explanation: Reference: <https://aws.amazon.com/blogs/aws/category/amazon-elastic-map-reduce/>

NEW QUESTION 464

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 53 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 Game State 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 Federation

Imagine 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 Assume Role With Web Identity 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 Apps

The 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.

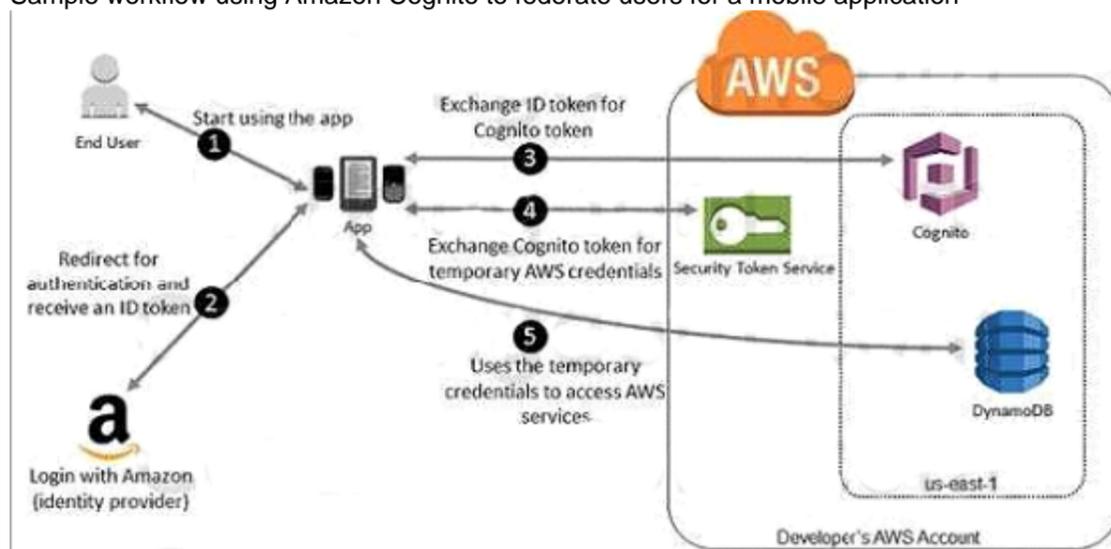
To enable the mobile app to access her AWS resources, Adele first registers for a developer ID with her chosen IdPs. She also configures the application with each of these providers. In her AWS account that contains the Amazon S3 bucket and DynamoDB table for the game, Adele uses Amazon Cognito to create 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



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 IAM 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.

NEW QUESTION 469

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: 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 filexible.

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.

NEW QUESTION 473

You have launched an EC2 instance with four (4) 500GB 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 0 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 volumestorage 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

NEW QUESTION 475

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 of 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 of some potential investors. The business plan requires a deployment of at least 1000 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 will 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 IOPS provisioned IOPS

Answer: C

NEW QUESTION 479

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 ca lls". 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 -TERMNATED" In this way the SOL query Is optimized by the use of the Index.

Answer: A

NEW QUESTION 480

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 53 client instead of an FTP clien
- B. Create a single 53 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.
- C. Create a single 53 bucket with Reduced Redundancy Storage turned on and ask their customers to use an 53 client instead of an FTP client Create a bucket for each customer with a Bucket Policy that permits access only to that one customer.
- D. 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 threshol
- E. Load a central list of ftp users from 53 as part of the user Data startup script on each Instance.
- F. Create a single 53 bucket with Requester Pays turned on and ask their customers to use an 53 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

NEW QUESTION 484

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