**AWS Solutions Architect Associate**

28. An application hosted at the EC2 instances receives HTTP requests through the ELB. Each request has an X-Forwarded-For request header, having three IP addresses. Which of the following IP address will be a part of this header?

 IP address of ELB

 IP address of Forward Request

 IP address of client

 IP address of CloudWatch

Explanation:

Answer: (A) The X-Forwarded-For request header helps you identify the IP address of a client when you use HTTP/HTTPS load balancer. Because load balancers intercept traffic between clients and servers, your server access logs contain only the IP address of the load balancer. Elastic Load Balancing stores the IP address of the client in the X-Forwarded-For request header and passes the header along to your server.

31. The load balancer does not distribute traffic across \_\_\_\_\_\_\_\_.

 One Availability Zone

 Domains

 Availability Zones within a region

 Regions

Explanation:

Answer: (D) You can set up your Elastic Load Balancing to distribute incoming requests across EC2 instances in a single Availability Zone or multiple Availability Zones within a region. Your load balancer does not distribute traffic across regions.

32. In context of CloudFormation, which of the following information do you get from the AWS Cloud Formation list-stacks Command?

 A list of any of the stacks you have created.

 A list of any of the stacks you have created or have deleted up to 90 days ago.

 A list of any of the stacks that have been created or deleted up to 60 days ago.

 A 90 days history list of all your activity on stacks.

Explanation:

Answer: (B) The AWS CloudFormation list-stacks command enables you to get a list of any of the stacks you have created (even those which have been deleted up to 90 days). You can use an option to filter results by stack status, such as CREATE\_COMPLETE and DELETE\_COMPLETE. The AWS CloudFormation list-stacks command returns summary information about any of the running or deleted stacks, including the name, stack identifier, template, and status.

33. When you use the wizard in the console to create a VPC with a gateway, the wizard automatically \_\_\_\_\_\_\_\_\_\_ to use the gateway.

 updates the route tables

 updates the IP tables

 updates the protocol tables

 updates the IP tables and the protocol tables

Explanation:

Answer: (A) When you use the wizard in the console to create a VPC with a gateway, the wizard automatically updates the route tables to use the gateway. If you’re using the command line tools or the API to set up your VPC, then you have to update the route tables yourself.

35. You have configured a website www.abc.com and hosted it on WebLogic Server and you are using ELB with the EC2 instances for load balance. Which of the following would you configure to ensure that the EC2 instances accept requests only from ELB?

 Configure the security group of EC2, which allows access to the ELB source security group.

 Configure the EC2 instance so that it only listens on the ELB port.

 Configure the security group of EC2, which allows access only to the ELB listener.

 Open the port for an ELB static IP in the EC2 security group.

Explanation:

Answer: (A) A security group acts as a firewall that controls the traffic allowed into a group of instances. When you launch an Amazon EC2 instance, you can assign it to one or more security groups. For each security group, you can add rules that govern the allowed inbound traffic to instances in the group. By configuring the security group of EC2 you can ensure that the EC2 instances accept requests only from ELB.

36. You have written a CloudFormation template that creates one Elastic Load Balancer fronting two 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?

 Outputs

 Resources

 Parameters

 Mappings

Explanation:

Answer: (A) The Outputs section defines custom values that are returned by the AWS CloudFormation describe-stacks command and in the AWS CloudFormation console Outputs tab after the stack is created. You can use output values to return information from the resources in the stack such as the URL for a website that was created in the template or the Domain Name Server (DNS).

39. Once you've successfully created a Microsoft windows stack on AWS CloudFormation, you can log in to your instance with \_\_\_\_\_\_\_ to configure it manually.

 AWS Command Line Interface

 Remote Desktop

 Power shell

 Windows Command prompt

Explanation:

Answer: (B) Once you've successfully created a Microsoft Windows stack on AWS Cloud Formation, you can log in to your instance with Remote Desktop to configure it manually.

40. You have created a custom configured Amazon instance using Linux, containing all your software and applications. If you want to use the same setup again, what is the best way to do it?

 Create a back up copy of the EBS service

 Create a backup of the EC2 instances only

 Create a snapshot of the AMI only

 Create an EBS Image (AMI)

Explanation:

Answer: (D) The Amazon Linux AMI is a supported and maintained Linux image provided by Amazon Web services for use on Amazon Elastic Compute Cloud (Amazon EC2). It is designed to provide a stable, secure, and high performance execution environment for applications running on Amazon EC2. It also includes packages that enable easy integration with AWS, including launch configuration tools and many popular AWS libraries and tools.

43. With regards to RDS, the standby should be in the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the primary instance.

 Availability Zone

 Region

 VPC

 Subnet

Explanation:

Answer: (B) Your standby is automatically provisioned in a different Availability Zone of the same Region as your primary DB instance.

46. Which technique can be used to integrate AWS IAM (Identity and Access Management) with an on-premises LDAP (Light Weight Directory Access Protocol) directory service?

 Use an IAM policy that references the LDAP account identifiers and the AWS credentials.

 Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP.

 Use AWS security Token Service from an identity broker to issue short-lived AWS credentials.

 Use IAM roles to automatically rotate the IAM credentials when LDAP credentials are updated.

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

Explanation:

Answer: (B) You can use SAML Identity Providers in order to integrate IAM between AWS and on premise LDAP or federated SSO implementation. For example, you want to provide a way for users to copy data from their computers to a backup folder, in your organization. You build an application that users can run on their computers. On the back end, the application reads and writes objects in an S3 bucket but the users don't have direct access to AWS. Instead, the application can communicate with an identity provider (IdP) to authenticate the user. The IdP gets the user information from your LDAP which is the organization's identity store and then generates a SAML assertion that includes authentication and authorization information about that user. The application then uses that assertion to make a call to the AssumeRoleWithSAML API to get temporary security credentials. The app can then use those credentials to access a folder in the S3 bucket that's specific to the user.

56. You have a website www.abc.com which is used quite frequently. Therefore, you decide to use 50 EC2 instances, with two availability zones in two regions, each with 25 instances. However, while starting the servers, you are able to start only 20 servers and then the requests start failing. Why?

 There is a limit of 20 EC2 instances in each region; you can request to increase the limit.

 There is a limit of 20 EC2 instances in each availability zone, you can request to increase the limit.

 You might have exhausted the free space available and need to select paid version of storage.

 You cannot have more than one availability zone in a region.

Explanation:

Answer: (A) Unless otherwise noted, there is a limit per region. You are limited to: running up to 20 on-demand instances, purchasing 20 reserved instances, and requesting 5 spot instances per region. New AWS accounts may start with limits that are lower than the limits described here. Certain instance types are further limited per region.























































































