review

review questions

Virtual Private Cloud (VPC)
V1.00

Course title

BackSpace Academy
AWS Certified Cloud Practitioner

Contents

What Is Amazon VPC?

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Section: ***What Is Amazon VPC?***

Reference: Amazon Virtual Private Cloud User Guide

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

Question

A ____ is a range of IP addresses in your VPC.

Answers

A. NACL
B. route tables
C. subnet
D. network gateway

C
A subnet is a range of IP addresses in your VPC. You can launch AWS resources into a specified subnet. 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.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-vpc-subnet

Question

If you have a default VPC and don't specify a subnet when you launch an instance, the instance is launched into your default VPC.

Answers

A. True
B. False

A
If your account supports the EC2-VPC platform only, it comes with a default VPC that has a default subnet in each Availability Zone. A default VPC has the benefits of the advanced features provided by EC2-VPC, and is ready for you to use. If you have a default VPC and don't specify a subnet when you launch an instance, the instance is launched into your default VPC. You can launch instances into your default VPC without needing to know anything about Amazon VPC.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-default-nondefault

Question

A _____ enables your instances to connect to the Internet through the Amazon EC2 network edge. Your default VPC includes a _____.

Answers

A. public IP address
B. internet gateway
C. route table
D. none of the above

B
Your default VPC includes an internet gateway, and each default subnet is a public subnet. Each instance that you launch into a default subnet has a private IPv4 address and a public IPv4 address. These instances can communicate with the internet through the internet gateway. An internet gateway enables your instances to connect to the internet through the Amazon EC2 network edge.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-connectivity

Question

You can enable Internet access for an instance launched into a nondefault subnet by attaching an Internet gateway to its VPC (if its VPC is not a default VPC) and associating a _____ with the instance.

Answers

A. Route table
B. Elastic IP address
C. Default VPC
D. None of the above

B
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-connectivity

Question

To allow an instance in your VPC to initiate outbound connections to the Internet but prevent unsolicited inbound connections from the Internet, you can use a _____.

Answers

A. NACL
B. NAT
C. Route Table
D. None of the above

B
NAT maps multiple private IPv4 addresses to a single public IPv4 address. A NAT device has an Elastic IP address and is connected to the internet through an internet gateway. You can connect an instance in a private subnet to the internet through the NAT device, which routes traffic from the instance to the internet gateway, and routes any responses to the instance.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-connectivity

Question

A _____ is the VPN concentrator on the Amazon side of the VPN connection.

Answers

A. customer gateway
B. Internet gateway
C. virtual private gateway
D. None of the above

C
A VPN connection consists of a virtual private gateway attached to your VPC and a customer gateway located in your data center. A virtual private gateway is the VPN concentrator on the Amazon side of the VPN connection. A customer gateway is a physical device or software appliance on your side of the VPN connection.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-vpn

Question

A _____ is a physical device or software appliance on your side of the VPN connection.

Answers

A. customer gateway
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C. virtual private gateway
D. None of the above

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A VPN connection consists of a virtual private gateway attached to your VPC and a customer gateway located in your data center. A virtual private gateway is the VPN concentrator on the Amazon side of the VPN connection. A customer gateway is a physical device or software appliance on your side of the VPN connection.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Introduction.html#what-is-vpn

Amazon VPC Limits

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Section: ***Amazon VPC Limits***

Reference: Amazon Virtual Private Cloud User Guide

https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Appendix_Limits.html

Question

Default maximum VPCs per region

Answers

A. 5
B. 20
C. 50
D. 100
E. 200

A
The limit for internet gateways per region is directly correlated to this one. Increasing this limit increases the limit on internet gateways per region by the same amount.
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Appendix_Limits.html#vpc-limits-vpcs-subnets

Question

Maximum subnets per VPC

Answers

A. 5
B. 20
C. 50
D. 100
E. 200

E
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Appendix_Limits.html#vpc-limits-vpcs-subnets

Question
Maximum VPN connections per region

Answers

A. 5
B. 20
C. 50
D. 100
E. 200

C
https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Appendix_Limits.html#vpc-limits-vpn

Amazon Virtual Private Cloud FAQs

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Reference: Amazon Virtual Private Cloud FAQs

https://aws.amazon.com/vpc/faqs/

Question

If you connect your VPC to your corporate datacenter using the optional Hardware VPN connection, pricing is per VPN connection-hour.

Answers

A. True
B. False

A
There are no additional charges for creating and using the VPC itself. Usage charges for other Amazon Web Services, including Amazon EC2, still apply at published rates for those resources, including data transfer charges. If you connect your VPC to your corporate datacenter using the optional hardware VPN connection, pricing is per VPN connection-hour (the amount of time you have a VPN connection in the "available" state.) Partial hours are billed as full hours. Data transferred over VPN connections will be charged at standard AWS Data Transfer rates.
https://aws.amazon.com/vpc/faqs/#Billing

Question

Primary private IP addresses can be assigned, unassigned, or moved between interfaces or instances at any time.

Answers

A. True
B. False

B
Primary private IP addresses retained for the instance's or interface's lifetime. Secondary private IP addresses can be assigned, unassigned, or moved between interfaces or instances at any time.
https://aws.amazon.com/vpc/faqs/#IP_Addressing

Question

Security groups operate at the subnet level and evaluate traffic entering and exiting a subnet.

Answers

A. True
B. False

B
Security groups in a VPC specify which traffic is allowed to or from an Amazon EC2 instance. Network ACLs operate at the subnet level and evaluate traffic entering and exiting a subnet. Network ACLs can be used to set both Allow and Deny rules. Network ACLs do not filter traffic between instances in the same subnet. In addition, network ACLs perform stateless filtering while security groups perform stateful filtering.
https://aws.amazon.com/vpc/faqs/#Security_and_Filtering

Question

Security groups in a VPC specify which traffic is allowed to or from an Amazon EC2 instance.

Answers

A. True
B. False

A
Security groups in a VPC specify which traffic is allowed to or from an Amazon EC2 instance. Network ACLs operate at the subnet level and evaluate traffic entering and exiting a subnet. Network ACLs can be used to set both Allow and Deny rules. Network ACLs do not filter traffic between instances in the same subnet. In addition, network ACLs perform stateless filtering while security groups perform stateful filtering.
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https://aws.amazon.com/vpc/faqs/#Security_and_Filtering