300-440 Q&As

Designing and Implementing Cloud Connectivity (ENCC)

Pass Cisco 300-440 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

https://www.leads4pass.com/300-440.html

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by Cisco Official Exam Center

QUESTION 1

An engineer must configure an IPsec tunnel to the cloud VPN gateway. Which Two actions send traffic into the tunnel? (Choose two.)

A. Configure access lists that match the interesting user traffic.

B. Configure a static route.

C. Configure a local policy in Cisco vManage.

D. Configure an IPsec profile and match the remote peer IP address.

E. Configure policy-based routing.

Correct Answer: AE

To send traffic into an IPsec tunnel to the cloud VPN gateway, the engineer must configure two actions:

Configure access lists that match the interesting user traffic. This is the traffic that needs to be encrypted and sent over the IPsec tunnel. The access lists are applied to the crypto map that defines the IPsec parameters for the tunnel.

Configure policy-based routing (PBR). This is a technique that allows the engineer to override the routing table and forward packets based on a defined policy. PBR can be used to send specific traffic to the IPsec tunnel interface, regardless

of the destination IP address. This is useful when the cloud VPN gateway has a dynamic IP address or when multiple cloud VPN gateways are available for load balancing or redundancy.

References:

Designing and Implementing Cloud Connectivity (ENCC) v1.0, Module 3:

Implementing Cloud Connectivity, Lesson 3: Implementing IPsec VPNs to the Cloud, Topic: Configuring IPsec VPNs on Cisco IOS XE Routers Security for VPNs with IPsec Configuration Guide, Cisco IOS XE, Chapter:

Configuring IPsec VPNs, Topic: Configuring Crypto Maps [Cisco IOS XE Gibraltar 16.12.x Feature Guide], Chapter: Policy-Based Routing, Topic: Policy-Based Routing Overview

QUESTION 2

A company has multiple branch offices across different geographic locations and a centralized data center. The company plans to migrate Its critical business applications to the public cloud infrastructure that is hosted in Microsoft Azure. The company requires high availability, redundancy, and low latency for its business applications. Which connectivity model meets these requirements?

A. ExpressRoute with private peering using SDCI

B. hybrid connectivity with SD-WAN

C. AWS Direct Connect with dedicated connections

D. site-to-site VPN with Azure VPN gateway

Correct Answer: A

The connectivity model that meets the requirements of high availability, redundancy, and low latency for the company\\'s business applications is ExpressRoute with private peering using SDCI.

ExpressRoute is a service that provides a dedicated, private, and high-bandwidth connection between the customer\\'s on-premises network and Microsoft Azure cloud network.

Private peering is a type of ExpressRoute circuit that allows the customer to access Azure services that are hosted in a virtual network, such as virtual machines, storage, and databases.

SDCI (Secure Data Center Interconnect) is a Cisco solution that enables secure and scalable connectivity between multiple data centers and cloud providers, using technologies such as MPLS, IPsec, and SD-WAN3.

By using ExpressRoute with private peering and SDCI, the company can achieve the following benefits:

References:

What is Azure ExpressRoute?

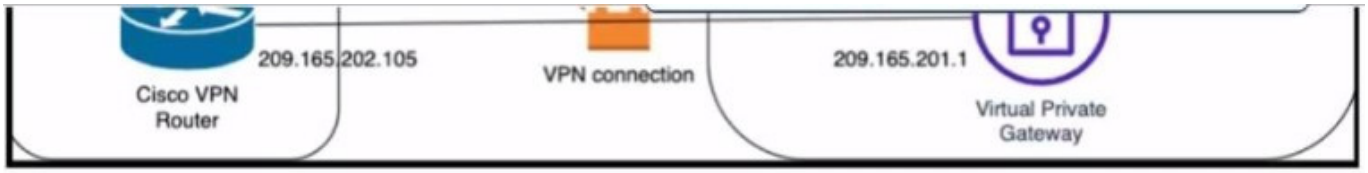
Azure ExpressRoute peering

Cisco Secure Data Center Interconnect

ExpressRoute circuit and routing domain

QUESTION 3

Refer to the exhibit.



Which Cisco IKEv2 configuration brings up the IPsec tunnel between the remote office router and the AWS virtual private gateway?

A.
```
crypto ikev2 proposal Prop-DEMO
 encryption aes-cbc-128
 integrity sha1
 group 2
!
crypto ikev2 policy POL-DEMO
 match address local 209.165.202.105
 proposal Prop-POC
!
crypto ikev2 keyring DEMO-Keyring
  peer Cisco-AWS
   address 209.165.201.1
   pre-shared-key DEMOlabCisco12345
 !
!
crypto ikev2 profile PROFILE-PoC
  match address local 209.165.202.105
  match identity remote address 209.165.201.1 255.255.255.255
  authentication remote pre-share
  authentication local pre-share
  keyring local DEMO-Keyring
!
```

B.
```
crypto ikev2 proposal Prop-DEMO
 encryption aes-cbc-128
 integrity sha1
 group 2
!
crypto ikev2 policy POL-DEMO
 match address local 209.165.202.105
 proposal Prop-DEMO
!
crypto ikev2 keyring DEMO-Keyring
  peer Cisco-AWS
   address 209.165.201.1
   pre-shared-key DEMOlabCisco12345
 !
!
crypto ikev2 profile PROFILE-PoC
  match address local 209.165.202.105
  match identity remote address 209.165.201.1 255.255.255.255
  authentication remote pre-share
  authentication local pre-share
  keyring local DEMO-Keyring
!
```

C.
```
crypto ikev2 proposal Prop-DEMO
 encryption aes-cbc-128
 integrity sha1
 group 2
!
crypto ikev2 policy POL-DEMO
 match address local 209.165.202.105
 proposal Prop-DEMO
!
crypto ikev2 keyring DEMO-Keyring
  peer Cisco-AWS
   address 209.165.201.1
   pre-shared-key DEMOlabCisco12345
 !
!
crypto ikev2 profile PROFILE-PoC
  match address local 209.165.201.1
  match identity remote address 209.165.202.105 255.255.255.255
  authentication remote pre-share
  authentication local pre-share
  keyring local DEMO-Keyring
!
```

A. Option A

B. Option B

C. Option C

Correct Answer: C

Option C is the correct answer because it configures the IKEv2 profile with the correct match identity, authentication, and keyring parameters. It also configures the IPsecprofile with the correct transform set and lifetime parameters. Option A is incorrect because it does not specify the match identity remote address in the IKEv2 profile, which is required to match the AWS virtual private gateway IP address. Option B is incorrect because it does not specify the authentication preshare in the IKEv2 profile, which is required to authenticate the IKEv2 peers using a pre-shared key. Option C also matches the configuration example provided by AWS and Cisco for setting up an IKEv2 IPsec site-to- site VPN between a Cisco IOS-XE router and an AWS virtual private gateway.

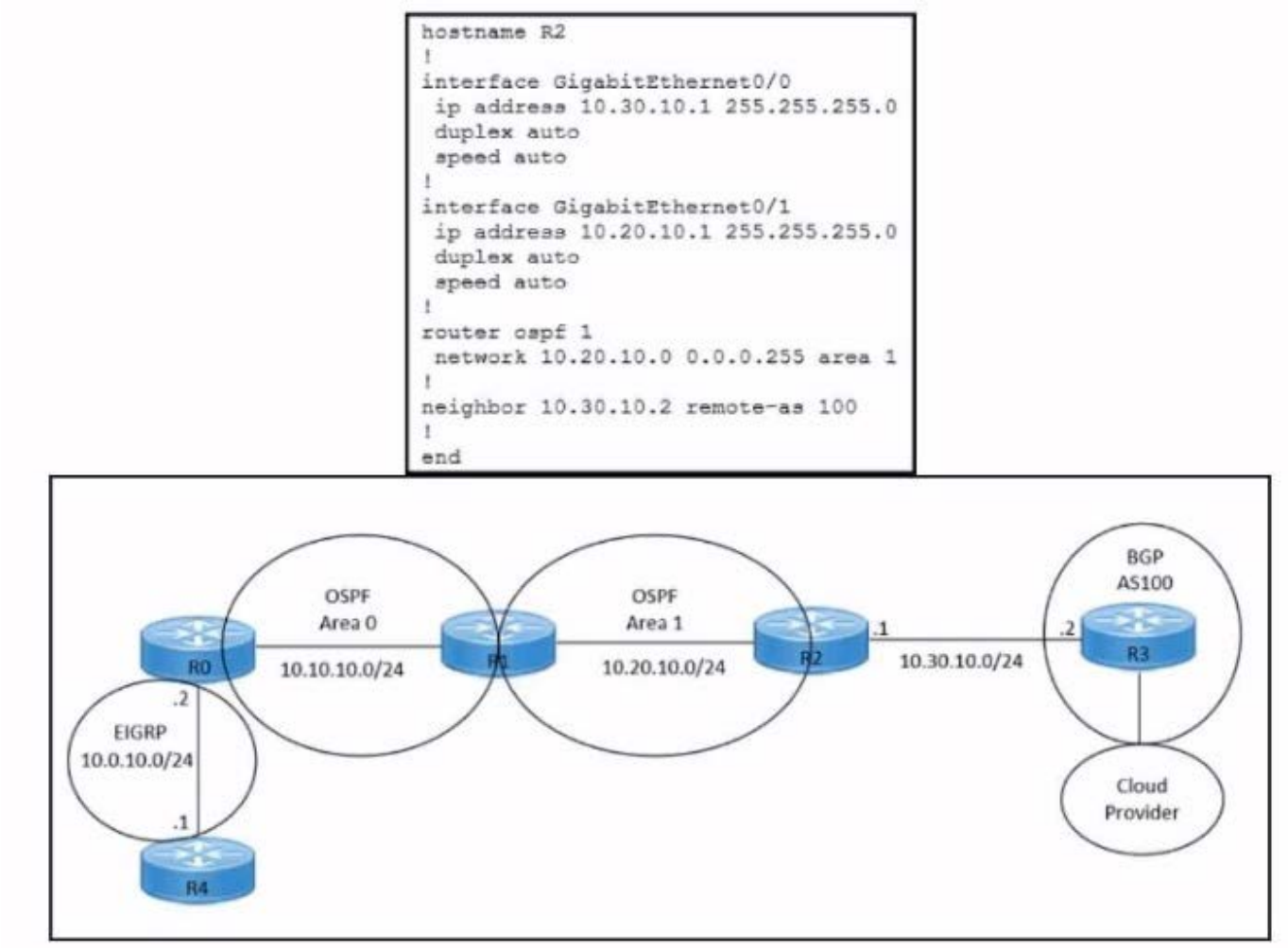
References:

1: AWS VPN Configuration Guide for Cisco IOS-XE

2: Configure IOS-XE Site-to-Site VPN Connection to Amazon Web Services

QUESTION 4

Refer to the exhibits.



An engineer must redistribute OSPF internal routes into BGP to connect an on-premises network to a cloud provider without introducing extra routes. Which two commands must be configured on router R2? (Choose two.)

A. router ospf 1

B. router bgp 100

C. redistribute ospf 1

D. redistribute bgp 100

E. redistribute ospf 1 match internal external

Correct Answer: BE

To redistribute OSPF internal routes into BGP, the engineer needs to configure two commands on router R2. The first command is router bgp 100, which enables BGP routing process and specifies the autonomous system number of 100.

The second command is redistribute ospf 1 match internal external, which redistributes the routes from OSPF process into BGP, and matches both internal and external OSPF routes. This way, the engineer can avoid introducing extra routes

that are not part of OSPF process 1, such as the default route or the connected routes.

References:

Designing and Implementing Cloud Connectivity (ENCC) v1.0, [ENCC: Configuring IPsec VPN from Cisco IOS XE to AWS], [Deploying Cisco IOS VTI-Based Point-to-Point IPsec VPNs]

QUESTION 5

A company with multiple branch offices wants a connectivity model to meet its network architecture requirements. The company focuses on ensuring low latency and efficient routing for its critical business applications. Which connectivity model meets these requirements?

A. hub-and-spoke topology with SD-WAN technology, using dynamic routing and OSPF as the routing protocol

B. fully meshed topology with SD-WAN technology, using dynamic routing and BGP as the routing protocol

C. point-to-point topology using dedicated leased lines and static routing

D. star topology with internet-based VPN connections and static routing

Correct Answer: B

A fully meshed topology with SD-WAN technology, using dynamic routing and BGP as the routing protocol, meets the requirements of the company because it provides the following benefits

It allows direct and secure connectivity between any two branch offices, without the need for a central hub or intermediary devices. This reduces the latency and improves the performance of the critical business applications. It leverages SDWAN technology to optimize the traffic flow and application quality of service (QoS) across the WAN. SD-WAN can dynamically select the best path for each application based on the network conditions and policies. SD- WAN can also provide redundancy, security, and visibility for the WAN. It uses dynamic routing and BGP as the routing protocol to exchange routing information and establish connectivity between the branch offices. BGP is a scalable and flexible protocol that can support multiple address families, such as IPv4 and IPv6, and multiple routing policies, such as local preference and route filtering. BGP can also enable seamless integration with the cloud service providers (CSPs) and internet service providers (ISPs).

References :

1: Designing and Implementing Cloud Connectivity (ENCC, Track 1 of 5) (Cisco U.login required)

2: Cisco SD-WAN Design Guide