

# Implementing Secure Solutions with Virtual Private Networks Questions & Answers Demo

## Version: 6.0

Topic 1, Site-to-site Virtual Private Networks on Routers and Firewall

Question: 1	

**DRAG DROP** 

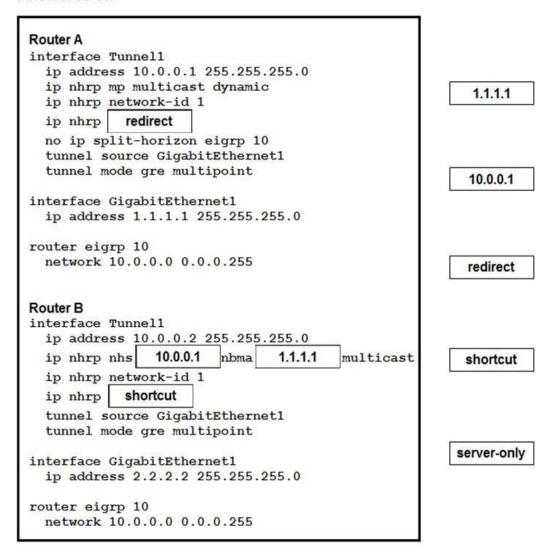
Drag and drop the correct commands from the night onto the blanks within the code on the left to implement a design that allow for dynamic spoke-to-spoke communication. Not all comments are used.

### **Answer Area**

Router A	]
interface Tunnel1	
ip address 10.0.0.1 255.255.255.0	
ip nhrp mp multicast dynamic	1.1.1.1
ip nhrp network-id 1	1.1.1.1
ip nhrp	
no ip split-horizon eigrp 10	
tunnel source GigabitEthernet1	2V 06
tunnel mode gre multipoint	10.0.0.1
interface GigabitEthernet1	
ip address 1.1.1.1 255.255.255.0	
router eigrp 10	.an
network 10.0.0.0 0.0.0.255	redirect
Router B interface Tunnel1 ip address 10.0.0.2 255.255.255.0 ip nhrp nhs nbma multicast	shortcut
ip nhrp network-id 1	Shortcut
ip nhrp	
tunnel source GigabitEthernet1 tunnel mode gre multipoint	
	server-only
interface GigabitEthernet1	T SELECTED STATE
ip address 2.2.2.2 255.255.255.0	
router eigrp 10	
network 10.0.0.0 0.0.0.255	ļ
	<del>-</del> 1.
	Answer:

Explanation:

#### **Answer Area**



Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec\_conn\_dmvpn/configuration/xe-16/sec-conn-dmvpn-xe-16-book/sec-conn-dmvpn-summ-maps.html

#### Question: 2

A second set of traffic selectors is negotiated between two peers using IKEv2. Which IKEv2 packet will contain details of the exchange?

- A. IKEv2 IKE\_SA\_INIT
- **B. IKEv2 INFORMATIONAL**
- C. IKEv2 CREATE\_CHILD\_SA
- D. IKEv2 IKE\_AUTH

Answer: C

#### Explanation:

The IKEv2 CREATE\_CHILD\_SA packet is used to establish a new security association (SA) between two peers. This packet contains the details of the exchange, including the traffic selectors, the cryptographic algorithms and keys to be used, and any other relevant information

#### **Question: 3**

Refer to the exhibit.

```
HUB#show ip nhrp

10.0.0.2/32 via 10.0.0.2

Tunnel0 created 00:02:09, expire 00:00:01

Type: dynamic, Flags: unique registered used nhop NBMA address: 2.2.2.1

10.0.0.3/32 via 10.0.0.3

Tunnel0 created 00:13:25, 01:46:34

Type: dynamic, Flags: unique registered used nhop NBMA address: 3.3.3.1
```

The DMVPN tunnel is dropping randomly and no tunnel protection is configured. Which spoke configuration mitigates tunnel drops?

**Questions & Answers PDF** 

```
A interface Tunnel0
    ip address 10.0.0.2 255.255.255.0
    no ip redirects
    ip nhrp map 10.0.0.1 1.1.1.1
    ip nhrp map multicast 1.1.1.1
    ip nhrp network-id 1
    ip nhrp holdtime 20
    ip nhrp nhs 10.0.0.1
    ip nhrp registration timeout 120
    ip nhrp shortcut
    tunnel source GigabitEthernet0/1
    tunnel mode gre multipoint
   end
B. interface Tunnel0
   ip address 10.0.0.2 255.255.255.0
   no ip redirects
   ip nhrp map 10.0.0.1 1.1.1.1
   ip nhrp map multicast 1.1.1.1
   ip nhrp network-id 1
   ip nhrp holdtime 120
   ip nhrp nhs 10.0.0.1
   ip nhrp registration timeout 120
   ip nhrp shortcut
   tunnel source GigabitEthernet0/1
   tunnel mode gre multipoint
  end
```

```
C. interface Tunnel0
    ip address 10.0.0.2 255.255.255.0
    no ip redirects
    ip nhrp map 10.0.0.1 1.1.1.1
    ip nhrp map multicast 1.1.1.1
    ip nhrp network-id 1
    ip nhrp holdtime 120
    ip nhrp nhs 10.0.0.1
    ip nhrp registration timeout 20
    ip nhrp shortcut
    tunnel source GigabitEthernet0/1
    tunnel mode gre multipoint
   end
D. interface Tunnel0
    ip address 10.0.0.2 255.255.255.0
   no ip redirects
    ip nhrp map 10.0.0.1 1.1.1.1
    ip nhrp map multicast 1.1.1.1
    ip nhrp network-id 1
   ip nhrp holdtime 120
    ip nhrp nhs 10.0.0.1
    ip nhrp registration timeout 150
   ip nhrp shortcut
    tunnel source GigabitEthernet0/1
    tunnel mode gre multipoint
   end
A. Option A
B. Option B
C. Option C
D. Option D
                                                Answer: C
```

Explanation:

https://www.globalknowledge.com/us-en/resources/resource-library/articles/understanding-next-hop-

reso	lution-	protoco	I-commands	/

On a FlexVPN hub-and-spoke topology where spoke-to-spoke tunnels are not allowed, which command is needed for the hub to be able to terminate FlexVPN tunnels?

- A. interface virtual-access
- B. ip nhrp redirect
- C. interface tunnel
- D. interface virtual-template

Answer:	D

#### Explanation:

On a FlexVPN hub-and-spoke topology where spoke-to-spoke tunnels are not allowed, the command that is needed for the hub to be able to terminate FlexVPN tunnels is interface virtual-template. The interface virtual-template command is used to configure a virtual template interface which provides a secure tunnel for FlexVPN connections. The other commands listed - interface virtual-access, ip nhrp redirect, and interface tunnel - are not related to FlexVPN and are not used to terminate FlexVPN tunnels.

#### **Question: 5**

Which statement about GETVPN is true?

- A. The configuration that defines which traffic to encrypt originates from the key server.
- B. TEK rekeys can be load-balanced between two key servers operating in COOP.
- C. The pseudotime that is used for replay checking is synchronized via NTP.
- D. Group members must acknowledge all KEK and TEK rekeys, regardless of configuration.

Answer: A

#### Explanation:

KS (key server) is 'caretaker' of the GM group. Group registrations and authentication of GMs is taken care of by KS server. Any GM who wants to join the group is required to be successfully authenticated in the group and sends encryption keys and policy to be used within the group.

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https://ipwithease.com/introduction-to-getvpn/