

Cisco

Exam Questions 300-730

Implementing Secure Solutions with Virtual Private Networks (SVPN)



NEW QUESTION 1

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: B

NEW QUESTION 2

Which two features provide headend resiliency for Cisco AnyConnect clients? (Choose two.)

- A. AnyConnect Auto Reconnect
- B. AnyConnect Network Access Manager
- C. AnyConnect Backup Servers
- D. ASA failover
- E. AnyConnect Always On

Answer: CD

NEW QUESTION 3

Which command automatically initiates a smart tunnel when a user logs in to the WebVPN portal page?

- A. auto-upgrade
- B. auto-connect
- C. auto-start
- D. auto-run

Answer: C

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/security/asa/asa91/configuration/vpn/asa_91_vpn_config/webvpn-configure-policy-group.html

NEW QUESTION 4

Refer to the exhibit.



Which two commands under the tunnel-group webvpn-attributes result in a Cisco AnyConnect user receiving the AnyConnect prompt in the exhibit? (Choose two.)

- A. group-url https://172.16.31.10/General enable
- B. group-policy General internal
- C. authentication aaa
- D. authentication certificate
- E. group-alias General enable

Answer: BE

NEW QUESTION 5

Which IKE identity does an IOS/IOS-XE headend expect to receive if an IPsec Cisco AnyConnect client uses default settings?

- A. *\$SecureMobilityClient\$*

- B. *\$AnyConnectClient\$*
- C. *\$RemoteAccessVpnClient\$*
- D. *\$DfltIkeIdentity\$*

Answer: B

Explanation:

Reference: <https://www.cisco.com/c/en/us/support/docs/security/flexvpn/200555-FlexVPN-AnyConnect-IKEv2-Remote-Access.html>

NEW QUESTION 6

In a FlexVPN deployment, the spokes successfully connect to the hub, but spoke-to-spoke tunnels do not form. Which troubleshooting step solves the issue?

- A. Verify the spoke configuration to check if the NHRP redirect is enabled.
- B. Verify that the spoke receives redirect messages and sends resolution requests.
- C. Verify the hub configuration to check if the NHRP shortcut is enabled.
- D. Verify that the tunnel interface is contained within a VRF.

Answer: B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_conn_dmvpn/configuration/15-mt/sec-conn-dmvpn-15-mt-book/sec-conn-dmvpn-summaps.pdf

NEW QUESTION 7

An engineer is troubleshooting a new DMVPN setup on a Cisco IOS router. After the show crypto isakmp sa command is issued, a response is returned of "MM_NO_STATE." Why does this failure occur?

- A. The ISAKMP policy priority values are invalid.
- B. ESP traffic is being dropped.
- C. The Phase 1 policy does not match on both devices.
- D. Tunnel protection is not applied to the DMVPN tunnel.

Answer: B

NEW QUESTION 8

Refer to the exhibit.

```
tunnel-group IKEV2 type remote-access
tunnel-group IKEV2 general-attributes
  address-pool split
  default-group-policy GroupPolicy1
tunnel-group IKEV2 webvpn-attributes
  group-alias ikev2 enable

-----

-<HostEntry>
<HostName>ikev2</HostName>
<HostAddress>10.106.45.221</HostAddress>
<UserGroup>ikev2</UserGroup>
<PrimaryProtocol>IPsec</PrimaryProtocol>
</HostEntry>
```

The customer can establish a Cisco AnyConnect connection without using an XML profile. When the host "ikev2" is selected in the AnyConnect drop down, the connection fails. What is the cause of this issue?

- A. The HostName is incorrect.
- B. The IP address is incorrect.
- C. Primary protocol should be SSL.
- D. UserGroup must match connection profile.

Answer: D

Explanation:

Reference: <https://community.cisco.com/t5/security-documents/anyconnect-xml-settings/ta-p/3157891>

NEW QUESTION 9

Refer to the exhibit.

```
ISAKMP: (0):beginning Main Mode exchange
ISAKMP-PAK: (0):sending packet to 192.168.0.8 my_port 500 peer_port 500 (I) MM_NO_STATE
ISAKMP-PAK: (0):received packet from 192.168.0.8 dport 500 sport 500 Global (I) MM_NO_STATE
ISAKMP: (0):Old State = IKE_I_MM1 New State = IKE_I_MM2
ISAKMP: (0):found peer pre-shared key matching 192.168.0.8
ISAKMP: (0):local preshared key found
ISAKMP: (0):Checking ISAKMP transform 1 against priority 10 policy
ISAKMP: (0): encryption AES-CBC
ISAKMP: (0): keylength of 256
ISAKMP: (0): hash SHA256
ISAKMP: (0): default group 14
ISAKMP: (0): auth pre-share
ISAKMP: (0): life type in seconds
ISAKMP: (0): life duration (basic) of 1200
ISAKMP: (0):atts are acceptable. Next payload is 0
ISAKMP-PAK: (0):sending packet to 192.168.0.8 my_port 500 peer_port 500 (I) MM_SA_SETUP
ISAKMP: (0):Old State = IKE_I_MM2 New State = IKE_I_MM3
ISAKMP-PAK: (0):received packet from 192.168.0.8 dport 500 sport 500 Global (I) MM_SA_SETUP
ISAKMP: (0):Old State = IKE_I_MM3 New State = IKE_I_MM4
ISAKMP: (0):found peer pre-shared key matching 192.168.0.8
ISAKMP: (1005):Old State = IKE_I_MM4 New State = IKE_I_MM4
ISAKMP: (1005):pre-shared key authentication using id type ID_IPV4_ADDR
ISAKMP-PAK: (1005):sending packet to 192.168.0.8 my_port 4500 peer_port 4500 (I) MM_KEY_EXCH
ISAKMP: (1005):Old State = IKE_I_MM4 New State = IKE_I_MM5
ISAKMP-PAK: (1005):received packet from 192.168.0.8 dport 500 sport 500 Global (I) MM_KEY_EXCH
ISAKMP: (1005):phase 1 packet is a duplicate of a previous packet.
ISAKMP: (1005):retransmitting due to retransmit phase 1
ISAKMP: (1005):retransmitting phase 1 MM_KEY_EXCH...
ISAKMP: (1005):: incrementing error counter on sa, attempt 1 of 5: retransmit phase 1
ISAKMP-PAK: (1005):sending packet to 192.168.0.8 my_port 4500 peer_port 4500 (I) MM_KEY_EXCH
ISAKMP-PAK: (1005):received packet from 192.168.0.8 dport 500 sport 500 Global (I) MM_KEY_EXCH
ISAKMP: (1005):phase 1 packet is a duplicate of a previous packet.
ISAKMP: (1005):retransmitting due to retransmit phase 1
```

A site-to-site tunnel between two sites is not coming up. Based on the debugs, what is the cause of this issue?

- A. An authentication failure occurs on the remote peer.
- B. A certificate fragmentation issue occurs between both sides.
- C. UDP 4500 traffic from the peer does not reach the router.
- D. An authentication failure occurs on the router.

Answer: C

NEW QUESTION 10

Refer to the exhibit.

```
IKEv2:(SESSION ID = 17,SA ID = 1):Processing IKE_AUTH message
IKEv2:IPsec policy validate request sent for profile CloudOne with psh index 1.

IKEv2:(SESSION ID = 17,SA ID = 1):
IKEv2:(SA ID = 1):[IPsec -> IKEv2] Callback received for the validate proposal - FAILED.

IKEv2-ERROR:(SESSION ID = 17,SA ID = 1):: There was no IPSEC policy found for received TS
IKEv2:(SESSION ID = 17,SA ID = 1):Sending TS unacceptable notify
IKEv2:(SESSION ID = 17,SA ID = 1):Get my authentication method
IKEv2:(SESSION ID = 17,SA ID = 1):My authentication method is 'PSK'
IKEv2:(SESSION ID = 17,SA ID = 1):Get peer's preshared key for 68.72.250.251
IKEv2:(SESSION ID = 17,SA ID = 1):Generate my authentication data
IKEv2:(SESSION ID = 17,SA ID = 1):Use preshared key for id 68.72.250.250, key len 5
IKEv2:[IKEv2 -> Crypto Engine] Generate IKEv2 authentication data
IKEv2:[Crypto Engine -> IKEv2] IKEv2 authentication data generation PASSED
IKEv2:(SESSION ID = 17,SA ID = 1):Get my authentication method
IKEv2:(SESSION ID = 17,SA ID = 1):My authentication method is 'PSK'
IKEv2:(SESSION ID = 17,SA ID = 1):Generating IKE_AUTH message
IKEv2:(SESSION ID = 17,SA ID = 1):Constructing IDr payload: '68.72.250.250' of type 'IPv4 address'
IKEv2:(SESSION ID = 17,SA ID = 1):Building packet for encryption.
Payload contents:
VID IDr AUTH NOTIFY(TS_UNACCEPTABLE)

IKEv2:(SESSION ID = 17,SA ID = 1):Sending Packet [To 68.72.250.251:500/From 68.72.250.250:500/VRF i0:f0]
Initiator SPI : 3D527B1D50DBEEF4 - Responder SPI : 8C693F77F2656636 Message id: 1
IKEv2 IKE_AUTH Exchange RESPONSE
Payload contents:
ENCR
```

Based on the debug output, which type of mismatch is preventing the VPN from coming up?

- A. interesting traffic
- B. lifetime
- C. preshared key
- D. PFS

Answer: B

Explanation:

If the responder's policy does not allow it to accept any part of the proposed Traffic Selectors, it responds with a TS_UNACCEPTABLE Notify message.

NEW QUESTION 10

Refer to the exhibit.

```
*Nov 26 00:52:20.002: IKEv2:(SESSION ID = 1,SA ID = 1):Received Packet [From 10.10.10.1:500/To 10.10.10.2:500/VRF i0:f0]
Initiator SPI : D5684E1462991856 - Responder SPI : 2162145C95256F6A Message id: 1
IKEv2 IKE_AUTH Exchange RESPONSE
*Nov 26 00:52:20.002: IKEv2-PAK:(SESSION ID = 1,SA ID = 1):Next payload: ENCR, version: 2.0 Exchange type: IKE_AUTH, flags: RESPONDER MSG-RESPONSE Message id: 1, length: 236
Payload contents:
VID Next payload: IDr, reserved: 0x0, length: 20
IDr Next payload: AUTH, reserved: 0x0, length: 12
Id type: IPv4 address, Reserved: 0x0 0x0
AUTH Next payload: SA, reserved: 0x0, length: 28
Auth method PSK, reserved: 0x0, reserved: 0x0
SA Next payload: TSi, reserved: 0x0, length: 40
last proposal: 0x0, reserved: 0x0, length: 35
Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3 last transform: 0x3, reserved: 0x0: length: 8
type: 1, reserved: 0x0, id: 3DES
last transform: 0x3, reserved: 0x0: length: 8
type: 3, reserved: 0x0, id: SHA96
last transform: 0x0, reserved: 0x0: length: 8
type: 5, reserved: 0x0, id: Don't use ESN
TSi Next payload: TSr, reserved: 0x0, length: 24
Num of TSs: 1, reserved 0x0, reserved 0x0
TS type: TS_IPV4_ADDR_RANGE, proto id: 0, length: 16
start port: 0, end port: 65535
start addr: 30.30.30.0, end addr: 30.30.30.255
TSr Next payload: NOTIFY, reserved: 0x0, length: 24
Num of TSs: 1, reserved 0x0, reserved 0x0
TS type: TS_IPV4_ADDR_RANGE, proto id: 0, length: 16
start port: 0, end port: 65535
start addr: 20.20.20.0, end addr: 20.20.20.255
NOTIFY(SET_WINDOW_SIZE) Next payload: NOTIFY, reserved: 0x0, length: 12
Security protocol id: Unknown - 0, spi size: 0, type: SET_WINDOW_SIZE
NOTIFY(ESP_TFC_NO_SUPPORT) Next payload: NOTIFY, reserved: 0x0, length: 8
Security protocol id: Unknown - 0, spi size: 0, type: ESP_TFC_NO_SUPPORT
NOTIFY(NON_FIRST_FRAGS) Next payload: NONE, reserved: 0x0, length: 8
Security protocol id: Unknown - 0, spi size: 0, type: NON_FIRST_FRAGS

*Nov 26 00:52:20.003: IKEv2:(SESSION ID = 1,SA ID = 1):Process auth response notify
*Nov 26 00:52:20.003: IKEv2:(SESSION ID = 1,SA ID = 1):Searching policy based on peer's identity '10.10.10.1' of type 'IPv4 address'
*Nov 26 00:52:20.004: IKEv2-ERROR:(SESSION ID = 1,SA ID = 1):: Failed to locate an item in the database
*Nov 26 00:52:20.004: IKEv2:(SESSION ID = 1,SA ID = 1):Verification of peer's authentication data FAILED
*Nov 26 00:52:20.004: IKEv2:(SESSION ID = 1,SA ID = 1):Auth exchange failed
*Nov 26 00:52:20.004: IKEv2-ERROR:(SESSION ID = 1,SA ID = 1):: Auth exchange failed
Router#
*Nov 26 00:52:20.004: IKEv2:(SESSION ID = 1,SA ID = 1):Abort exchange
*Nov 26 00:52:20.004: IKEv2:(SESSION ID = 1,SA ID = 1):Deleting SA
```

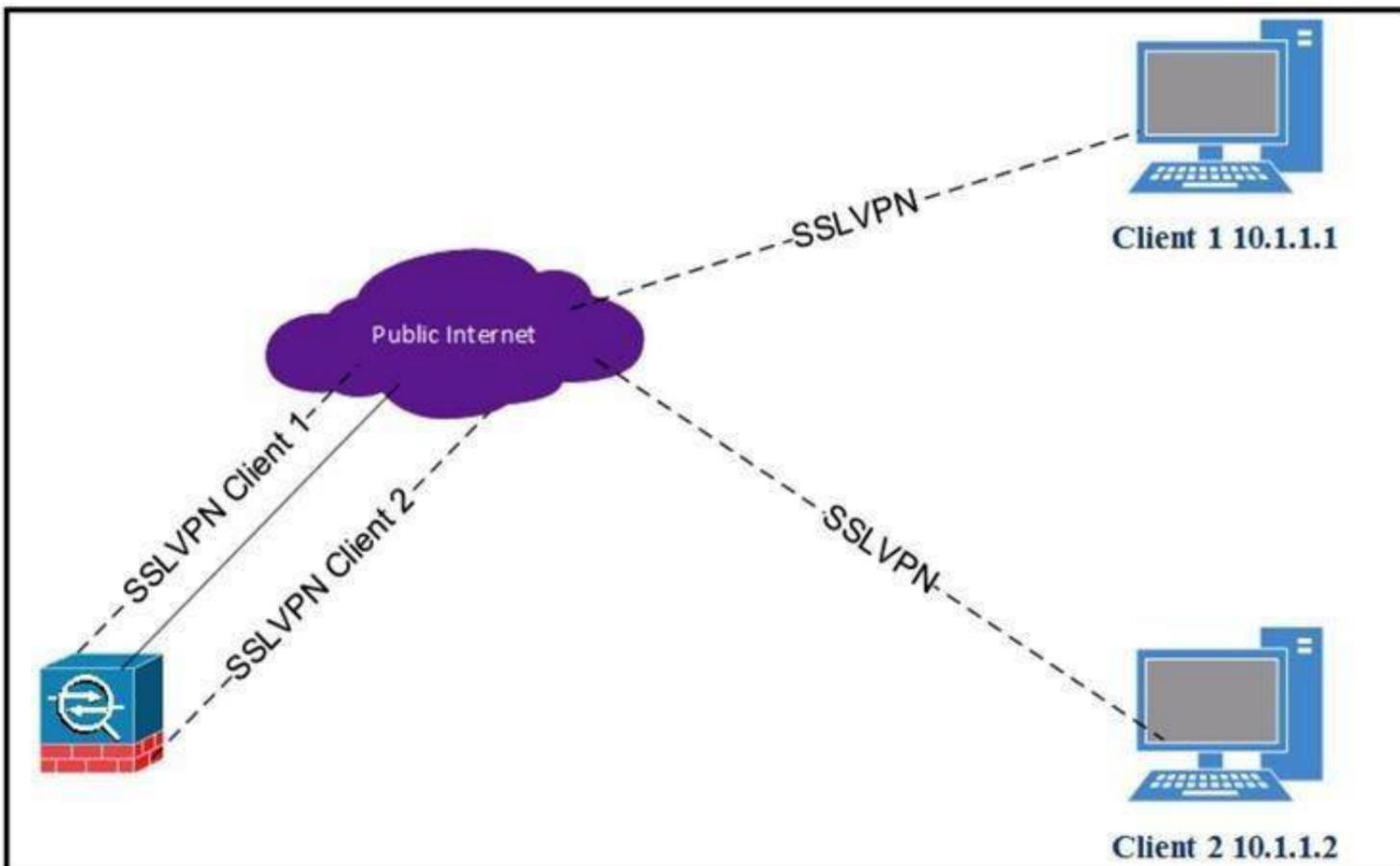
The IKEv2 site-to-site VPN tunnel between two routers is down. Based on the debug output, which type of mismatch is the problem?

- A. preshared key
- B. peer identity
- C. transform set
- D. ikv2 proposal

Answer: B

NEW QUESTION 12

Refer to the exhibit.



Client 1 cannot communicate with client 2. Both clients are using Cisco AnyConnect and have established a successful SSL VPN connection to the hub ASA.

Which command on the ASA is missing?

- A. dns-server value 10.1.1.2
- B. same-security-traffic permit intra-interface
- C. same-security-traffic permit inter-interface
- D. dns-server value 10.1.1.3

Answer: B

NEW QUESTION 15

Which technology works with IPsec stateful failover?

- A. GLBR
- B. HSRP
- C. GRE
- D. VRRP

Answer: B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/ios/12_2/12_2y/12_2yx11/feature/guide/ft_vpnha.html#wp1122512

NEW QUESTION 18

What are two functions of ECDH and ECDSA? (Choose two.)

- A. nonrepudiation
- B. revocation
- C. digital signature
- D. key exchange
- E. encryption

Answer: CD

Explanation:

Reference: https://tools.cisco.com/security/center/resources/next_generation_cryptography

NEW QUESTION 23

Refer to the exhibit.

```
crypto isakmp policy 10
  encr aes 256
  hash sha256
  authentication pre-share
  group 14

crypto isakmp key cisco address 0.0.0.0

crypto ipsec transform-set IS esp-aes 256 esp-sha256-hmac
  mode transport

crypto ipsec profile CCNP
  set transform-set IS

interface Tunnell
  ip address 10.0.0.1 255.255.255.0
  tunnel source GigabitEthernet1
  tunnel mode ipsec ipv4
  tunnel destination 172.18.10.2
  tunnel protection ipsec profile CCNP
```

Which VPN technology is used in the exhibit?

- A. DVTI
- B. VTI
- C. DMVPN
- D. GRE

Answer: B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_conn_vpnips/configuration/zZ-Archive/IPsec_Virtual_Tunnel_Interface.html#GUID-EB8C433B-2394-42B9-997F-B40803E58A91

NEW QUESTION 24

Which VPN does VPN load balancing on the ASA support?

- A. VTI
- B. IPsec site-to-site tunnels
- C. L2TP over IPsec
- D. Cisco AnyConnect

Answer: D

NEW QUESTION 27

Which parameter is initially used to elect the primary key server from a group of key servers?

- A. code version
- B. highest IP address
- C. highest-priority value
- D. lowest IP address

Answer: C

Explanation:

Reference: https://www.cisco.com/c/en/us/products/collateral/security/group-encrypted-transport-vpn/deployment_guide_c07_554713.html

NEW QUESTION 31

Where is split tunneling defined for IKEv2 remote access clients on a Cisco router?

- A. IKEv2 authorization policy
- B. Group Policy
- C. virtual template
- D. webvpn context

Answer: B

NEW QUESTION 34

Which feature of GETVPN is a limitation of DMVPN and FlexVPN?

- A. sequence numbers that enable scalable replay checking
- B. enabled use of ESP or AH
- C. design for use over public or private WAN
- D. no requirement for an overlay routing protocol

Answer: D

NEW QUESTION 39

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