https://www.leads4pass.com/300-410.html

Vendor: Cisco
Exam Code: 300-410
Exam Name: Implementing Cisco Enterprise Advanced Routing and Services (ENARSI)
Certification: CCNP Enterprise
Total Questions: 955 Q&A
Updated on: Feb 20, 2026

Question 1:
You have configured policy-based routing on router R1 to force some traffic to go over an alternate link. In order to verify the configuration, which debug command should be used to verify that the specific traffic is taking the intended path?

A. Debug policy routing

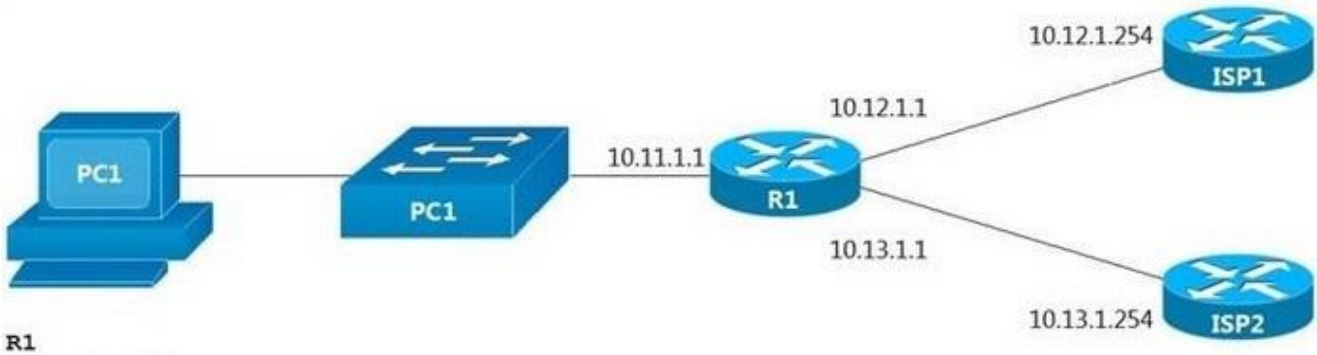
B. Debug ip routing

C. Debug ip policy

D. Debug policy map

Correct Answer: C

Question 2:
Refer to the exhibit.




```
R1
 ip sla 100
  icmp-echo 10.12.1.254
 !
 track 10 ip sla 100 reachability
 !
 ip route 0.0.0.0 0.0.0.0 10.12.1.254 track 10
 ip route 0.0.0.0 0.0.0.0 10.13.1.254 10
 !

R1#show ip route
 (Output Omitted)
 Gateway of last resort is 10.13.1.254 to network 0.0.0.0

 S* 0.0.0.0/0 [10/0] via 10.13.1.254
    10.0.0.0/8 is variably subnetted, 6 subsets, 2 masks
 C      10.11.1.0/24 is directly connected, GigabitEthernet0/1
 L      10.11.1.1/32 is directly connected, GigabitEthernet0/1
 C      10.12.1.0/24 is directly connected, GigabitEthernet0/0
 L      10.12.1.1/32 is directly connected, GigabitEthernet0/0
 C      10.13.1.0/24 is directly connected, GigabitEthernet0/2
 L      10.13.1.1/32 is directly connected, GigabitEthernet0/2
```

An engineer is monitoring reachability of the configured default routes to ISP1 and ISP2. The default route from ISP1 is preferred if available.

How is this issue resolved?

A. Use the icmp-echo command to track both default routes

B. Use the same AD for both default routes

C. Start IP SLA by matching numbers for track and ip sla commands

D. Start IP SLA by defining frequency and scheduling it

Correct Answer: D

In the above configuration we have not had activated our IP SLA operation.

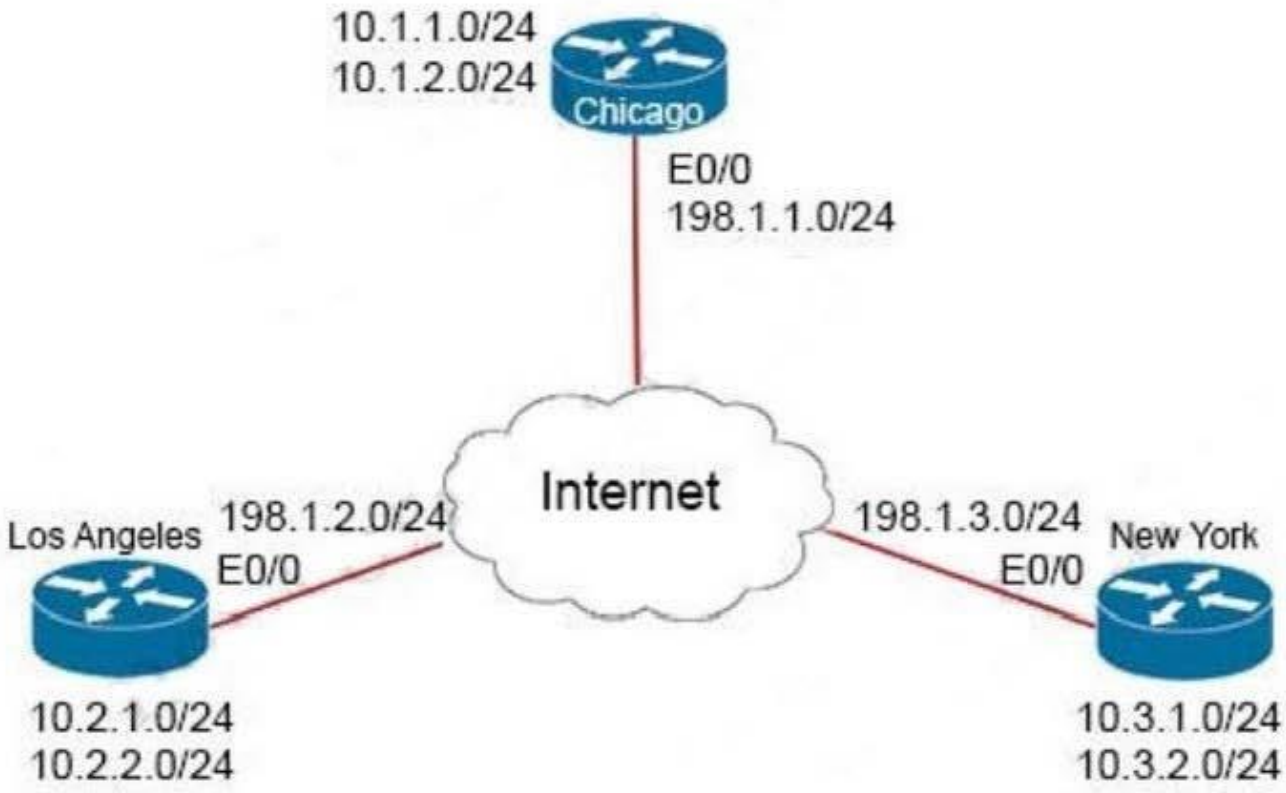
We can start it with this command:

R1(config)#ip sla schedule 100 life forever start-time now

Also we should specific the rate of ICMP echo:

R1(config-ip-sla-echo)#frequency 5 // Send ICMP echo every 5 seconds

Question 3:
Refer to the exhibit. The Los Angeles and New York routers are receiving routes from Chicago but not from each other Which configuration fixes the issue?



Chicago

```
interface Tunnel 1
 ip address 192.168.1.1 255.255.255.0
 tunnel source E0/0
 tunnel mode gre multipoint
 ip nhrp network-id 1
 ip nhrp map multicast dynamic
 no ip next-hop-self eigrp 111
 tunnel protection ipsec profile IPSec-PROFILE
!
router eigrp 111
 network 192.168.1.0
 network 10.0.0.0
```

A. Interface Tunnel1 no ip split-horizon eigrp 111

B. Interface Tunnel1 Ip next-hop-self elgrp 111

C. Interface Tunnel1 tunnel mode Ipsec Ipv4

D. Interface Tunnel1 tunnel protection ipsec profile IPSec-PROFILE

Correct Answer: A

In this topology, Chicago router (Hub) will receive advertisements from Los Angeles (Spoke1) router on its tunnel interface. The problem here is that it also has a connection with New York (Spoke2) on that same tunnel interface. If we don\'t disable EIGRP split-horizon, then the Hub will not relay routes from Spoke1 to Spoke2 and the other way around. That is because it received those routes on interface Tunnel1 and therefore it cannot advertise back out that same interface (splithorizon rule). Therefore we must disable split-horizon on the Hub router to make sure the Spokes know about each other.

Question 4:
Which of the following are used to validate the source of IPv6 traffic and are considered IPv6 layer 2 snooping features? (Choose two.)

A. DHCPv6 Guard

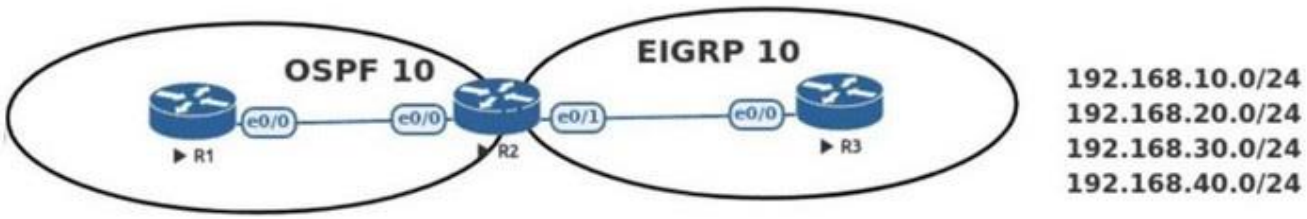
B. DHCPv6 Root Guard

C. IPv6 Source Guard

D. IPv6 Prefix Guard

Correct Answer: CD

Question 5:
Refer to the exhibit.



An engineer must redistribute networks 192.168.10.0/24 and 192.168.20.0/24 into OSPF from EIGRP. where the metric must be added when traversing through multiple hops to

start an external route of 20 The engineer notices that the external metric is fixed and does not add at each hop.

Which configuration resolves the issue?

A. R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R2(config)#route-map RD permit 10 R2(config-route-map)#match ip address 10 R2(config-route-map)#set metric 20 R2(config-route-map)#set metric-type type-2 ! R2(config)#router ospf 10 R2(confjg-router)#redistribute eigrp 10 subnets route-map RD

B. R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R2(config)#route-map RD permit 10 R2(config-route-map)#match ip address 10 R2(config-route-map)#set metric 20 R2(config-route-map)#set metric-type type-1 ! R2(config)#router ospf 10 R2(config-router)#redistribute eigrp 10 subnets route-map RD

C. R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R1(config)#route-map RD permit 10 R1(config-route-map)#match ip address 10 R1(config-route-map)#set metric 20 R1(config-route-map)#set metric-type type-1 ! R1(config)#router ospf 10 R1(config-router)#redistribute eigrp 10 subnets route-map RD

D. R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R1(config)#route-map RD permit 10 R1(config-route-map)#match ip address 10 R1(config-route-map)#set metric 20 R1(config-route-map)#set metric-type type-2 ! R1(config)#router ospf 10 R1(config-router)#redistribute eigrp 10 subnets route-map RD

Correct Answer: B

Question 6:
What is the function of penultimate hop popping?

A. The last P router in the path pops off the transport label before traffic is forwarded toward the PE.

B. The VPN label is popped off at the egress LSR, and unlabeled traffic is forwarded toward the CE.

C. The transport label is popped off at the egress LSR, and unlabeled traffic is forwarded toward the CE.

D. The second to last P router in the path pops off the VPN label before traffic is forwarded to the last P router.

Correct Answer: A

Question 7:
Router R1 is configured using VRF\'s to support customer VPN\'s. Some customers are using the same private IP address space. Which of the following is used to ensure that these routes are unique when advertised throughout the VPN?

A. Route Distinguisher

B. Route Targets

C. MP-BGP

D. LDP

Correct Answer: A

Question 8:
What is a function of the IPv6 DHCP Guard feature for DHCP messages?

A. If the device is configured as a DHCP server, no message is switched.

B. All client messages are always switched regardless of the device role.

C. It blocks only DHCP request messages.

D. Only access lists are supported for matching traffic.

Correct Answer: B

DHCPv6 Guard Overview The DHCPv6 Guard feature blocks reply and advertisement messages that come from unauthorized DHCP servers and relay agents. Packets are classified into one of the three DHCP type messages. All client messages are always switched regardless of device role. DHCP server messages are only processed further if the device role is set to server. Further processing of server messages includes DHCP server advertisements(for source validation and server preference) and DHCP server replies (for permitted prefixes). If the device is configured as a DHCP server, all the messages need to be switched, regardless of the device role configuration. https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/15-sy/dhcp-15-sy-book/ip6-dhcpv6-guard.pdf

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Question 9:

Which attribute eliminates LFAs that belong to protected paths in situations where links in a network are connected through a common fiber?

A. Shared Risk Link Group (SRLG)-disjoint

B. linecard-disjoint

C. lowest-repair-path-metric

D. interface-disjoint

Correct Answer: A

LFA Tie-Breaking Rules

When there are multiple candidate LFAs for a given primary path, EIGRP uses a tie-breaking rule to select one LFA per primary path per prefix. A tie-breaking rule considers LFAs that satisfy certain conditions or have certain attributes.

EIGRP uses the following four attributes to implement tie-breaking rules:

Interface-disjoint-Eliminates LFAs that share the outgoing interface with the protected path.

Linecard-disjoint-Eliminates LFAs that share the line card with the protected path.

Lowest-repair-path-metric-Eliminates LFAs whose metric to the protected prefix is high. Multiple LFAs with the same lowest path metric may remain in the routing table after this tie-breaker is applied.

- Shared Risk Link Group (SRLG)-disjoint-Eliminates LFAs that belong to any of the protected path SRLGs. SRLGs refer to situations where links in a network share a common fiber (or a common physical attribute). If one link fails, other links in the group may also fail. Therefore, links in a group share risks.

Source :
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_eigrp/configuration/xe-3s/asr1000/ire-xe-3s-asr1000/ire-ipfrr.html

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Question 10:
Which of the following are valid TFTP error codes? (Choose two.)

A. Error Code 1 ?File not found

B. Error Code 2 ?Unknown error

C. Error code 3 ?Invalid user

D. Error code 6 ?File already exists

E. Error code 8 ?Undefined error

Correct Answer: AD

Question 11:
A network engineer receives a fault ticket about traffic drops from BANK SITE to BANK

Users can reach BANK SITE Y from router RA as a source. Routers RB and RD are acting as route reflectors.

Which configuration resolves the issue?

A. RC(config)#router bgp 65201 RC(config-router)#neighbor 10.10.10.4 route-reflector-client

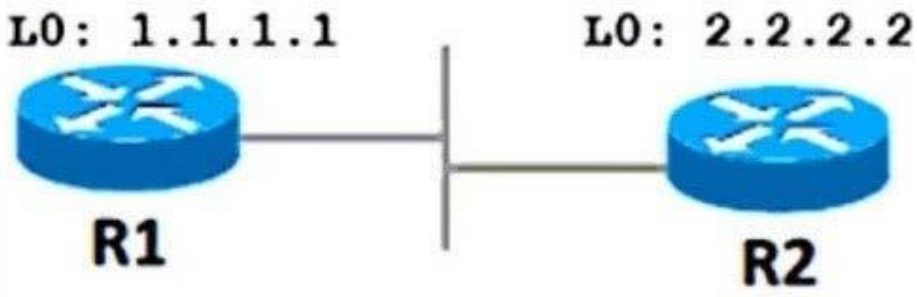
B. RF(config)#router bgp 65201 RF(config-router)#neighbor 10.10.10.6 route-reflector-client

C. RC(config)#router bgp 65201 RC(config-router)#neighbor 10.10.10.2 route-reflector-client

D. RB(config)router bgp 65201 RB(config-router)#neighbor 10.10.10.3 route-reflector-client

Correct Answer: A

Question 12:
Refer to the exhibit.




```
R1#debug ip ospf adj
23:42:08.259: OSPF: Send DBD to 2.2.2.2 on Ethernet0/0
              seq u opt 0x52 flag 0x7 len 32
23:42:08.339: OSPF: Rcv DBD from 2.2.2.2 on Ethernet0/0
              seq 0x836 opt 0x52 flag 0x7 len
32 mtu 1532 state EXSTART
```

```
R2#debug ip ospf adj
23:42:08.423: OSPF: Send DBD to 1.1.1.1 on Ethernet0/0
              seq 0x836 opt 0x52 flag 0x7 len 32
23:42:08.423: OSPF: First DBD and we are not SLAVE
23:42:08.511: OSPF: Rcv DBD from 1.1.1.1 on Ethernet0/0
              seq 0x836 opt 0x52 flag 0x2 len
52 mtu 1500 state EXSTART
```

R1 cannot establish a neighbor relationship with R2. Which action resolves the issue?

A. Configure the mtu ignore command on the interfaces of R1 and R2.

B. Configure the ip ospf network point-to-point command on the interfaces of R1 and R2.

C. Configure the neighbor 2.2.2.2 command on R1 under the OSPF process.

D. Configure the ip ospf network broadcast command on the interfaces of R1 and R2.

Correct Answer: A

Question 13:
Refer to the exhibit.

```
R3(config-ipv6-acl) #do show ipv6 access-list
IPv6 access list Block PC1 to PC2
permit ipv6 2001:DB8:/16 2001:DB8:/16 sequence 20
deny ipv6 host 2001:DB8:0:10::3B host 2001:DB8:A:A::19 sequence 30
```

An IPv6 ACL is applied to restrict PC1 from communicating with PC2 and allow all other traffic. Which configuration resolves the issue?

A. R3(config-ipv6-acl)#no sequence 20 R3(config-ipv6-acl)#deny ipv6 host 2001:DB8:0:10::3B host 2001:DB8:A:A::19 sequence 10

B. R3(ccnfig-ipv6-acl)#no sequence 30 R3(config-ipv6-acl)#deny ipv6 host 2001:DB8:0:10::3B host 2001:DB8:A:A::19 sequence 10

C. R3(config-lpv6-acl)#no sequence 20 R3(config-ipv6-acl)#deny ipv6 host 2001:DB8:0:10::3B any sequence 10

D. R3(config-ipv6-acl)#no sequence 30 R3(config-ipv6-acl)#deny ipv6 host 2001:DB8:0:10::3B any sequence 10

Correct Answer: B

Question 14:
Refer to the exhibit.

```
ip sla 1
 icmp-echo 8.8.8.8
 threshold 1000
 timeout 2000
 frequency 5
ip sla schedule 1 life forever start-time now
!
track 1 ip sla 1
!
ip route 0.0.0.0 0.0.0.0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 198.51.100.1 name ISP2 track 1
```

An administrator configures a router to stop using a particular default route if the DNS server 8.8.8.8 is not reachable through that route. However, this configuration did not work as desired and the default route still works even if the DNS server 8.8.8 8 is unreachable.

Which two configuration changes resolve the issue? (Choose two.)

A. Configure two static routes for the 8.8.8.8/32 destination to match the IP SLA probe for each ISP.

B. Associate every IP SLA probe with the proper WAN address of the router.

C. Reference the proper exit interfaces along with the next hops in both static default routes.

D. Use a separate track object to reference the existing IP SLA 1 probe for every static route.

E. Use a separate IP SLA probe and track object for every static route

Correct Answer: BE

Question 15:
Which statement about MPLS LDP router ID is true?

A. If not configured, the operational physical interface is chosen as the router ID even if a loopback is configured.

B. The loopback with the highest IP address is selected as the router ID.

C. The MPLS LDP router ID must match the IGP router ID.

D. The force keyword changes the router ID to the specified address without causing any impact.

Correct Answer: B

In an MPLS (Multiprotocol Label Switching) network, the LDP (Label Distribution Protocol) router ID is used to uniquely identify a router within the MPLS domain. The correct statement about the LDP router ID is:

The loopback with the highest IP address is selected as the router ID: By default, the LDP router ID is determined based on the loopback interface with the highest IP address configured on the router. This provides a stable and predictable router ID that is not tied to the operational state of physical interfaces.