Troubleshooting Cisco Data Center Infrastructure (DCIT)

1. A vPC Type-1 inconsistency between two vPC peers in a VXLAN EVPN setup is discovered. Which two actions need to be attempted to resolve the issue? (Choose two.)

- [ ] A. Configure the NVE interfaces to be Up on both switches.
- [ ] B. Set a different distributed gateway virtual MAC address.
- [ ] C. Set a different secondary IP addresses on NVE source-interface.
- [ ] D. Configure the same VNI to multicast group maping.
- [ ] E. Set a different primary IP addresses on NVE source-interface.

Answer(s): A D

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2. A mission-critical server is connected to siteA. Connectivity to this server is lost from site B because the MACroute is missing in the OTV VDC of the Cisco Nexus 7000 in site B due to MAC aging. Which action allows theflooding of the unknown unicast MAC on the Nexus 7000 in the OTV VDC?

A. Use route map to statically advertise this MAC and redistribute with IS-IS.

B. Unknown unicast flooding is not allowed.

C. Use the otv flood mac <> command to selectively flood traffic for a given MA

D. Use the otvisisbfd<> command to configure BFD protocol.

Answer(s): B

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3. Refer to the exhibit. After a failover occurs, which two actions must be performed on Switch-B to manuallypreempt the operational primary role back to Switch-A? (Choose two.)

- [ ] A. Configure the local vPC role priority to have a lower value than Switch-

- [ ] B. Configure the local vPC role priority to have a higher value than Switch-A.
- [ ] C. Disable and then re-enable the vPC peer-keepalive link.
- [ ] D. Configure the local vPC role priority to have the same value as Switch-A.
- [ ] E. Disable and then re-enable the vPC peer link.

Answer(s): B E

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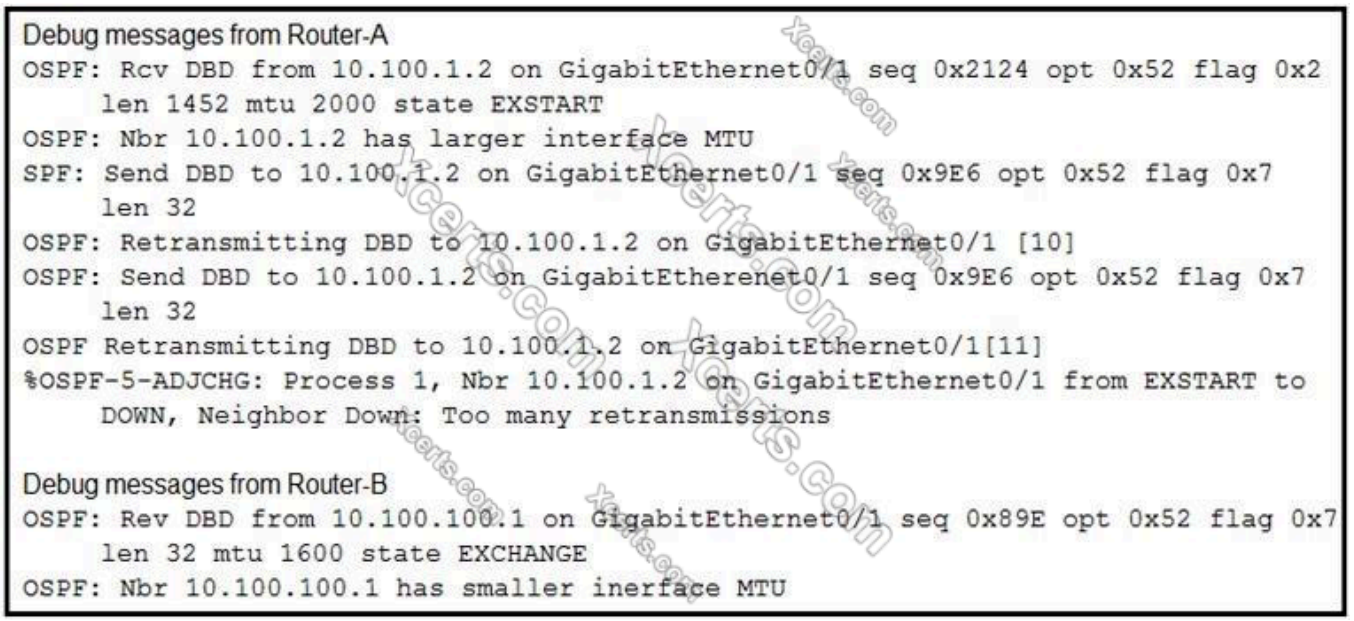
4. Refer to the exhibit. An OSPF adjacency between Router-A and Router-B fails to reach the FULL state. Which action resolves the issue?



- [ ] A. Adjust the MTU on Router-A to 1600.
- [ ] B. Disable the check of the MTU value.
- [ ] C. Set the OSPF media type to point-to-point.
- [ ] D. Adjust the MTU on Router-B to 1604.

Answer(s): B

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5. The Cisco Nexus switch is connected to a peer switch that is not running Cisco NX-OS. The switches are connected using port channel and are experiencing packet loss. Which action should be performed on the Cisco Nexus switch ports to resolve this issue?

- [ ] A. Turn on lacp suspend-individual.

B. Turn on lacp graceful-convergence.

C. Turn off lacp graceful-convergence.

D. Turn off lacp suspend-individual.

Answer(s): C

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6. Refer to the exhibit. The HSRP configuration in the exhibit fails to function. Which action resolves this issue?

A. Enable IP redirects.

B. Set the MTU to 1500 bytes.

C. Configure HSRP version 2.

D. Configure the same HSRP group on both devices.

Answer(s): A

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7. Refer to the exhibit. The HSRP instance on both switches is showing as active. Which action resolves the issue?

```
N9K-A                                N9K-B
interface Vlan100                    interface Vlan100
ip address 10.10.100.194/26          ip address 10.10.100.195/26
ip router eigrp 50                   ip router eigrp 50
ip passive-interface eigrp 50        ip passive-interface eigrp 50
hsrp 100                             hsrp 100
authentication text pa$$word         authentication text pa$$word
preempt                              preempt
priority 150                         priority 120
timers msec 500 msec 1000            timers msec 300 msec 1500
ip 10.10.100.193                     ip 10.10.100.193
no shutdown                          no shutdown

N9K-A# sh hsrp brief
*:IPv6 group   #:group belongs to a bundle
                         P indicates configured to preempt.
Interface  Grp  Prio    P State  Active addr  Standby  addr  Group addr
Vlan100    100  150     P Active local        unknown  10.10.100.193  (conf)

N9K-B# sh hsrp brief
*:IPv6 group   #:group belongs to a bundle
                         P indicates configured to preempt.
Interface  Grp  Prio    P State  Active addr Standby  addr  Group addr
Vlan100    100  120     P Active local      unknown  10.10.100.193  (conf)
```

A. Configure the HSRP timers to be the same.

B. Allow VLAN 100 between the switches.

C. Configure the IP address of N9K-B on the same subnet as N9K-A.

D. Configure preempt on only one of the switches.

Answer(s): B

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8. An engineer troubleshoots a fabric discovery failure. Which two requirements about switch connectivity must be verified to solve the problem? (Choose two.)

- [ ] A. A Cisco APIC must be attached to a spine node only.
- [ ] B. A Cisco APIC must be attached to leaf nodes.
- [ ] C. Spine nodes must connect to other spine nodes.
- [ ] D. A Cisco APIC must be dual-attached to two separate spine nodes.

- [ ] E. Leaf nodes must connect to spine nodes only.

Answer(s): B E

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9. Refer to the exhibit. A network engineer connects the Cisco Nexus switch management port to the Internet using DHCP to allow the Guest shell that runs on the switch to download Python packages. The engineer can ping google.com from the Cisco Nexus switch, but the Guest shell fails to download Python packages. Which action resolves the problem?

```
vrf context management
 ip name-server 4.2.2.2
 ip route 0.0.0.0/0 192.168.30.2

interface mgmt0
 ip address dhcp
 vrf member management

N9K-Core# ping google.com vrf management
PING google.com (216.58.209.238): 56 data bytes
64 bytes fron 216.58.209.238: icmp_seq=0 ttl=127 time=151.982 ms
64 bytes fron 216.58.209.238: icmp_seq=1 ttl=127 time=136.198 ms
64 bytes fron 216.58.209.238: icmp_seq=2 ttl=127 time=224.796 ms
64 bytes fron 216.58.209.238: icmp_seq=3 ttl=127 time=148.458 ms
64 bytes fron 216.58.209.238: icmp_seq=4 ttl=127 time=129.98 ms

- - - google.com ping statistics - - -
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 129.98/158.282/224.796 ms
```

A. Update the Python packages directly on the Cisco Nexus switch.

B. Manually configure DNS in the Guest shell, even if it is claimed on the Cisco Nexus switch through DHCP.

C. Manually configure NTP in the Guest shell.

D. Connect the Guest shell to data plane interfaces to be able to connect to the networks outside of the Cisco Nexus switch.

Answer(s): B

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10. Refer to the exhibit. The vPC between switch1 and switch2 does not work. Which two actions resolve the problem? (Choose two.)

```
switch1# show vpc brief
Legend:
(*) - local vPC is down, forwarding via vPC peer-link

vPC domain id : 500
Peer status : peer link is down
vPC keep-alive status : Suspened (Destination IP not reachable)
Configuration consistency status : success
vPC role : secondary, operational primary
Number of vPCs configured : 4
Peer Gateway : Disabled
Dual-active exluded VLANs : -

vPC Peer-link status
---------------------------------------------------------------------
id   Port   Status  Active  vlans
---  -----  ------  ------------------------------------------------
1    Po500  down    -

switch2# show vpc brief
Legend:
(*) - local vPC is down, forwarding via vPC peer-link

vPC domain id : 20
Peer status : peer link is down
vPC keep-alive status : Suspened (Destination IP not reachable)
Configuration consistency status : success
vPC role : secondary, operational primary
Number of vPCs configured : 4
Peer Gateway : Disabled
Dual-active exluded VLANs : -

vPC Peer-link status
---------------------------------------------------------------------
id   Port   Status  Active  vlans
---  -----  ------  ------------------------------------------------
1    Po500  down    -
```

- [ ] A. Match the vPC domain ID between the two devices.
- [ ] B. Configure the IP address on the interface.
- [ ] C. Activate VLANs on the vP
- [ ] D. Correct the configuration of the vPC peer link and the vPC peer keepalive.
- [ ] E. Configure one of the switches as primary for the vPC.

Answer(s): A C

11. Refer to the exhibit. Sw1 and Sw2 are Cisco Nexus 9000 Series Switches that run Cisco NX-OS. They are VTEPs in the same vPC domain. What occurs in this scenario?

```
Sw1(config) # sh ip mroute
IP Multicast Routing Table for VRF "default"

(*, 239.0.23.89/32), uptime: 6w2d, ip pim nve
     Incoming interface: Ethernet2/2, RPF nbr: 192.168.21.1
     Outgoing interface list: (count: 1)
          nvel, uptime: 2d01h, nve


(9.9.3.12/32, 239.0.23.89/32),uptime: 6w2d, mrib ip pim nve
     Incoming interface: loopback1, RPF nbr: 9.9.3.12
     Outgoing interface list: (count: 1)
          Ethernet2/2, uptime: 18:58:44, pim


Sw2# sh ip mroute
IP Multicast Routing Table for VRF "default"

(*, 239.0.23.89/32), uptime: 24w3d, ip pim nve
     Incoming interface: Ethernet2/2, RPF nbr: 192.168.22.1
     Outgoing interface list: (count: 1)
          nvel, uptime: 19w1d, nve

(9.9.3.12/32, 239.0.23.89/32),uptime: 24w3d, mrib ip pim nve
     Incoming interface: loopback1, RPF nbr: 9.9.3.12
     Outgoing interface list: (count: 0)
```

A. Sw1 drops all traffic because there is no (S, G) OIF list to encapsulate VXLAN multicast packets and send them to the underlay network through the uplink interfaces.

B. Sw1 performs the VXLAN multicast encapsulation and decapsulation for all traffic associated with the VXLAN VNIs.

C. Sw1 and Sw2 perform the VXLAN multicast encapsulation and decapsulation for all traffic that is associated with the VXLAN VNIs, depending on the hashing.

D. Sw2 does not send an IP PIM register to the rendezvous point for the multicast group of the VXLAN VNI.

Answer(s): B

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12. A customer configures HSRP between two data centers that are interconnected with OTV. The configuration succeeds, but traffic between two ESXi virtual hosts on the same site is routed suboptimally through the OTV overlay. Which two actions optimize the traffic? (Choose two.)

- [ ] A. Disable first-hop redundancy.
- [ ] B. Filter HSRP traffic by using a Layer 3 VACL on the OTV edge devices.
- [ ] C. Filter HSRP by using a Layer 2 MAC list on the ESXivSwitch.
- [ ] D. Filter HSRP traffic by using a Layer 3 VACL on the ESXivSwitch.
- [ ] E. Filter HSRP by using a Layer 2 MAC list on the OTV edge devices.

Answer(s): A B

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13. An engineer removes a VMM domain from an endpoint group called ‘EPG-1â€ , but the distributed port group fails to be deleted. Which action resolves the issue?

A. Manually remove the port group.

B. Migrate all virtual machines in the EPG-1 to different hypervisors.

C. Remove the remaining EPGs from the VMM domain.

D. Migrate all virtual machines in the EPG-1 to different port groups.

Answer(s): C

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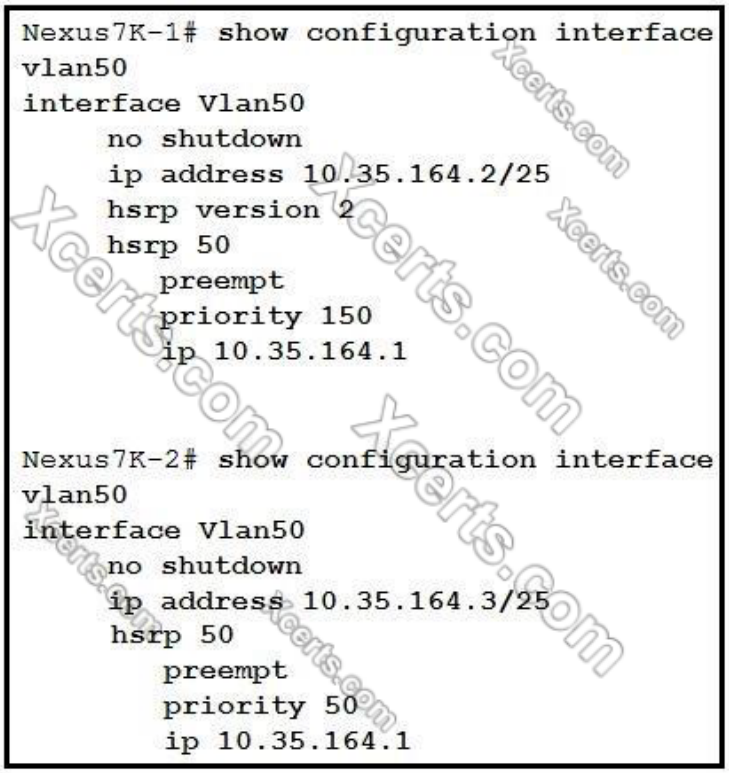
14. Refer to the exhibit. HSRP adjacency fails to form between Nexus7K-1 and Nexus7K-2. Which action shouldbe taken to solve the problem?



A. Configure preempt on one of the switches in the HSRP group.

B. Configure the same HSRP priority between the two switches.

C. Configure the correct subnet mask on Nexus7K-1.

D. Configure HSRP version 2 on Nexus7K-2.

Answer(s): D

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15. An engineer troubleshoots a packet flow from an access leaf to a spine. Which EVPN routes are expected on this connection?

A. EVPN Type 1-5

B. EVPN Type 0, 9, and 15

C. EVPN Type 9-15

D. EVPN Type 0 and 16

Answer(s): A

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16. Refer to the exhibit. An engineer troubleshoots the HSRP configuration and notes that the remote end uses HSRP version 1. The engineer sets the local HSRP to version 1, but the problem continues. Which

action resolves the issue?

A. Change the local group number to 255 or less and request that the remote data center matches the group number in its configuration.

B. Set the local group number as 300 in the remote data center configuration.

C. Run version 1 and version 2 HSRP on VLAN300 in the local data center.

D. Reduce the priority of the local HSRP to below 100 to force the local HSRP to standby and then change the version to version 1.

Answer(s): A

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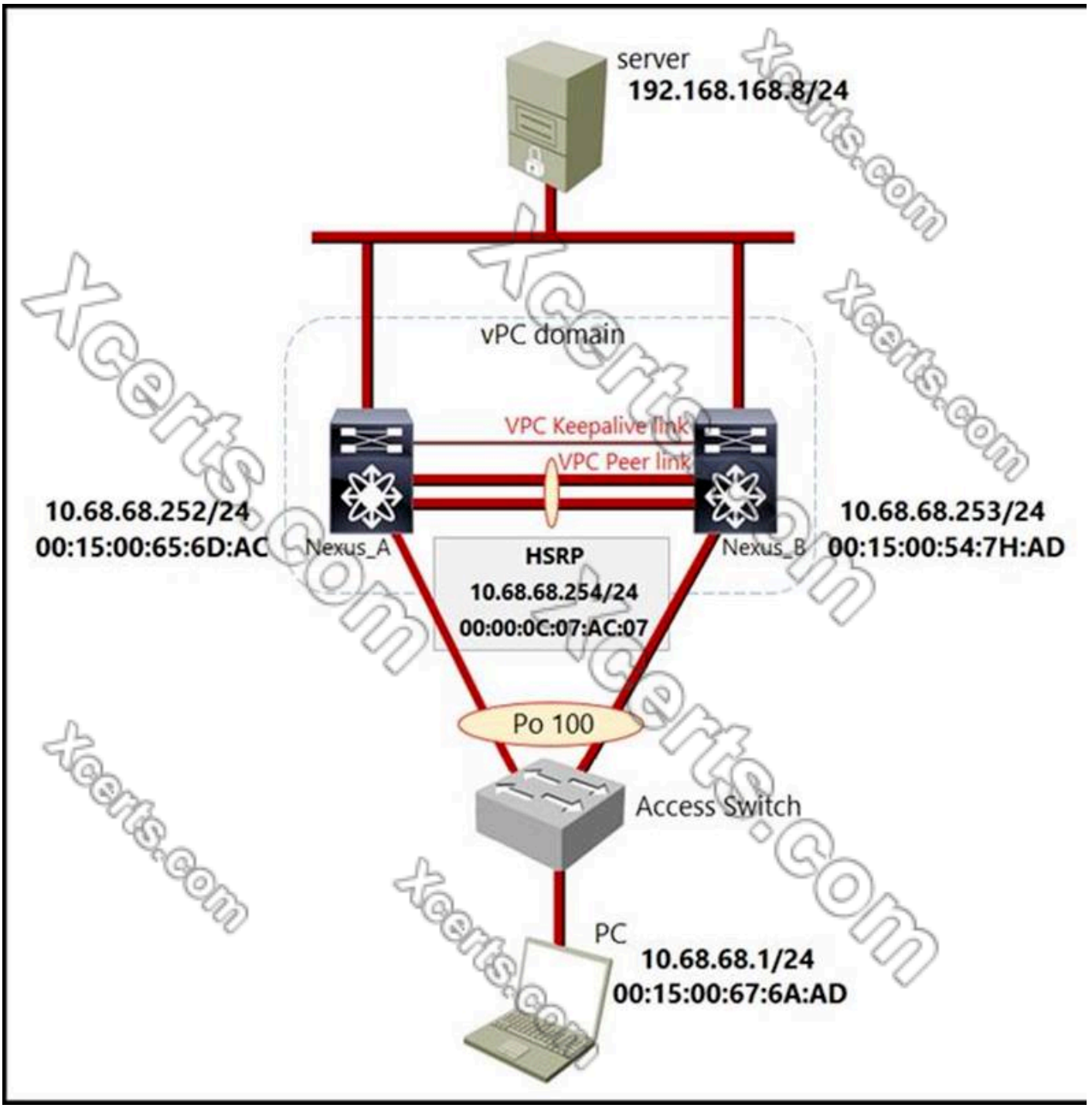
17. Refer to the exhibit. A PC belongs to VLAN 68. The user experiences a large amount of packet loss when communicating with hosts that are outside of VLAN 68. Which action resolves the problem?



A. Replace HSRP with GLBP.

B. Remove the HSRP configuration.

C. Enable the peer-gateway feature.

D. Configure iparp synchronization on both switches.

Answer(s): C

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18. An engineer troubleshoots a VXLAN EVPN data center. The applications in the data center fail to reach the DNS server that is located at IP 10.10.10.10. The engineer examines the BGP EVPN routing table and

notes that the IP prefix route that covers the DNS server is missing. Which action resolves the issue?

A. Set the IP prefix route to represent [5]:[0]:[0]:[32]:[10.10.10.10]/224 in the routing table.

B. Set the IP prefix route to represent [2]:[0]:[0]:[48]:[0050.569f.1285]:[0]:[0.0.0.0]/216 in the routing table.

C. Configure an IP ARP entry to represent [2]:[0]:[0]:[48]:[0050.569f.1285]:[32]:[10.10.10.10]/272 in the routing table.

D. Configure an IP ARP entry to represent [4]:[0300.0000.00fc.bd00.0309]:[32]:[10.10.10.10]/136 in the routing table.

Answer(s): A

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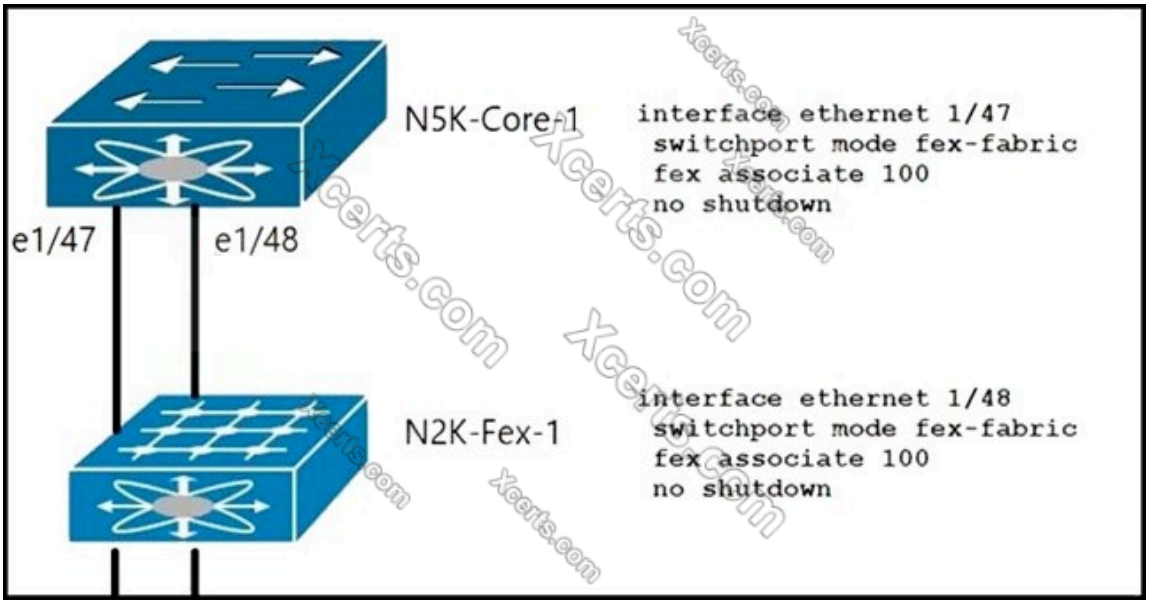
19. Refer to the exhibit. An engineer must connect N2K-Fex-1 and N5K-Core-1 so that the traffic flow between the two devices uses load balancing. After inspecting the statistics of the interconnecting interfaces, the engineer concludes that only one link is used. Which action resolves the problem?



A. Configure each uplink to be a member of a separate LACP port channel.

B. Configure the pinning max-link as 2.

C. Configure destination-mac load balancing on N5K-Core-1.

D. Configure source-destination load balancing on N5K-Core-1.

Answer(s): B

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20. The external routes fail to propagate to leaf switches in Cisco ACI fabric. Which two actions resolve the issue? (Choose two.)

- [ ] A. Enable the VTEP pool in the fabric.
- [ ] B. Assign an MP-BGP AS number to the fabric.
- [ ] C. Specify the spine nodes as route reflectors.
- [ ] D. Associate the correct contract to the L3Out.
- [ ] E. Configure an MP-BGP area.

Answer(s): B C
