

Cisco 300-420 Exam Preparation Materials

Vendor: Cisco

Exam Code: 300-420

Exam Name: Design Single & Multiple Choice: 370 (ENSLD)

Certification: CCNP Drag Drop: 25

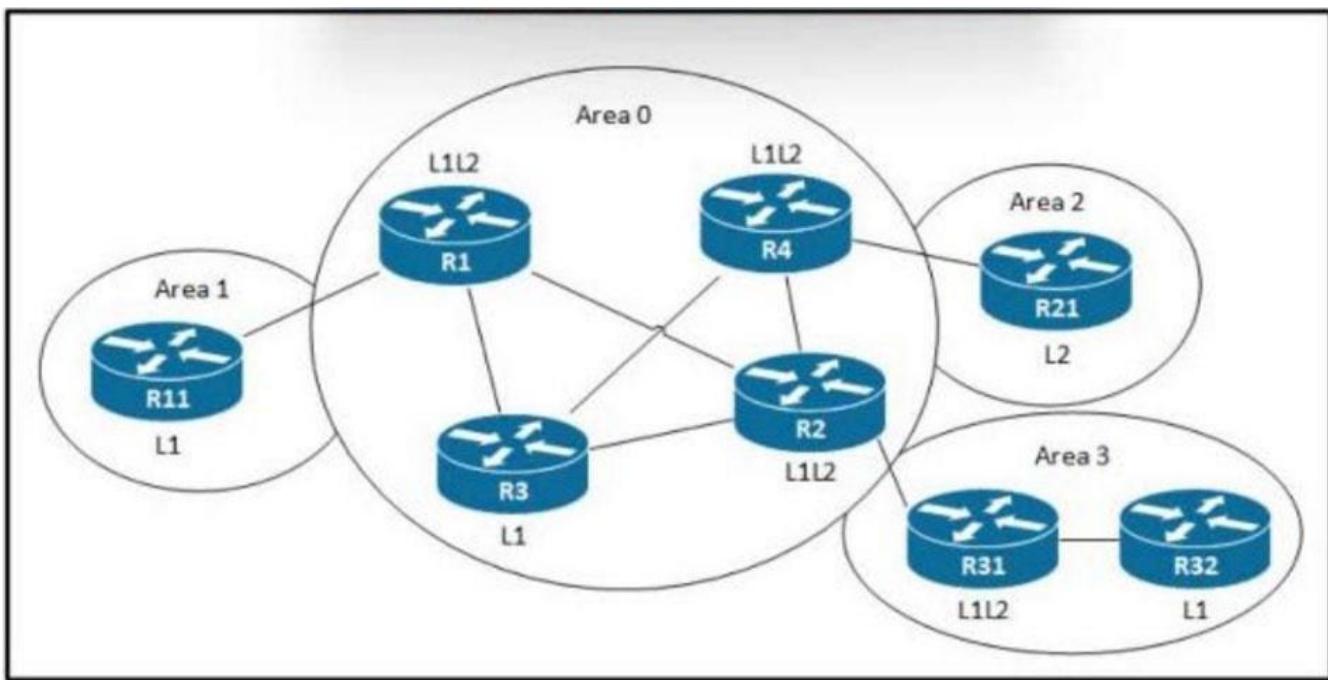
Total Questions: 395 Q&A ([View Details](#))

Updated on: Jan 22, 2026

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Question 1:

Refer to the exhibit.



A customer experienced an unexpected network outage when the link between R1 and R2 went down. An architect must design a solution to ensure network continuity in the event the link fails again. Which solution should the design include?

- A. Make R3 an L1L2 router.
- B. Make R31 an L1 router.
- C. Make Area 0 L2-only.
- D. Make R11 an L2 router.

Correct Answer: A

ENSLD 300-420 cert guide page 117. When creating a backbone there should never be L1 routers between (L2 only, or) L1/L2 routers.

Question 2:

What does the fabric data plane leverage in SD-Access Architecture?

- A. LISP protocol to resolve endpoint-to-location mapping
- B. IS-IS protocol to exchange link-state routing information
- C. MAC-in-IP encapsulation method to transport of the Layer 2 frame
- D. BGP protocol to advertise endpoint prefixes outside of the fabric

Correct Answer: C

Reference:

<https://www.cisco.com/c/en/us/td/docs/solutions/CVD/Campus/cisco-sda-design-guide.html>

Question 3:

Which two techniques improve the application experience in a Cisco SD-WAN design?
(Choose two.)

- A. utilizing forward error correction
- B. implementing a stateful application firewall
- C. implementing AMP
- D. utilizing quality of service
- E. implementing Cisco Umbrella

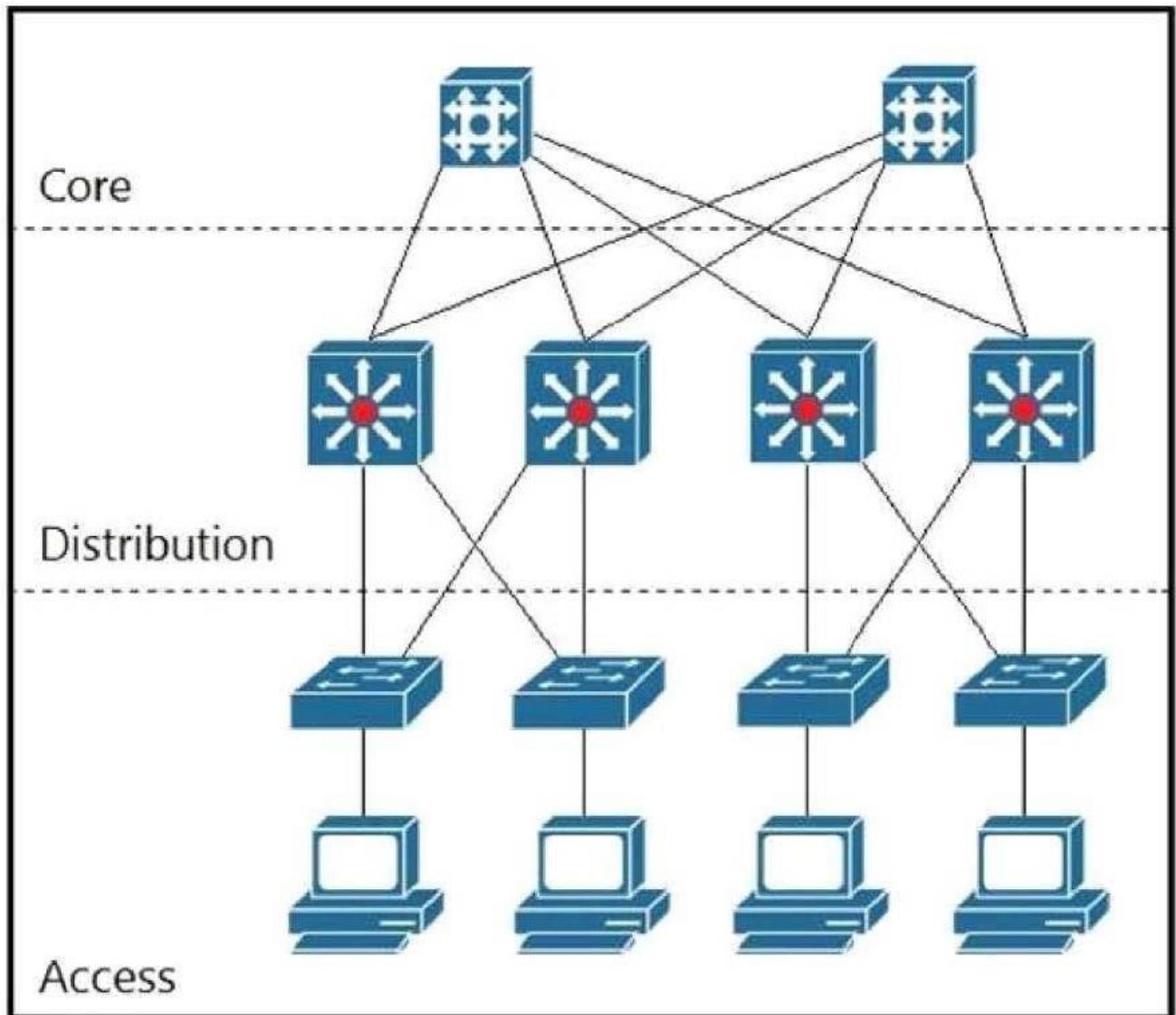
Correct Answer: AD

Reference:

<https://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise-networks/sd-wan/nb-06-cisco-sd-wan-ebook-cte-en.pdf> slide 33

Question 4:

Refer to the exhibit. Which two solutions maximize the use of the links between the core and distribution layers? (Choose two.)



- A. use multiple equal-cost links
- B. use an IGP
- C. use HSRP
- D. use RPVSTP+
- E. use multiple unequal-cost links

Correct Answer: AB

Question 5:

How is end-to-end microsegmentation enforced in a Cisco SD-Access architecture?

- A. VLANs are used to segment traffic at Layer 2.

- B. 5-tuples and ACLs are used to permit or deny traffic.
- C. SGTs and SGTACLs are used to control access to various resources.
- D. VRFs are used to segment traffic at Layer 3.

Correct Answer: C

Question 6:

Which design consideration should be observed when EIGRP is configured on Data Center switches?

- A. Perform manual summarization on all Layer 3 interfaces to minimize the size of the routing table.
- B. Prevent unnecessary EIGRP neighborships from forming across switch virtual interfaces.
- C. Lower EIGRP hello and hold timers to their minimum settings to ensure rapid route reconvergence.
- D. Configure multiple EIGRP autonomous systems to segment Data Center services and applications.

Correct Answer: A

Question 7:

An engineer uses Postman and YANG to configure a router with:

- 3.
- OSPF process ID 200
- 4.
- network 172.16.10.128/26 enabled for Area 0

Which get-config reply verifies that the model set was designed correctly?

- A.

```
<rpc-reply message-id="urn:uuid:1b3d05cd-8118-3e6a-6c05-411157936aaf" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <data>
    <native xmlns="http://cisco.com/ns/yang/ned/ios">
      <router>
        <ospf>
          <id>200</id>
          <network>
            <ip>172.16.10.128</ip>
            <mask>0.0.0.63</mask>
            <area>0</area>
          </network>
        </ospf>
      </router>
    </native>
  </data>
</rpc-reply>
```
- B.

```
<rpc-reply message-id="urn:uuid:1b3d05cd-8118-3e6a-6c05-012435678aaf" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <data>
    <native xmlns="http://cisco.com/ns/yang/ned/ios">
      <router>
        <ospf>
          <id>200</id>
          <network>
            <ip>172.16.10.128</ip>
            <mask>255.255.255.192</mask>
            <area>0</area>
          </network>
        </ospf>
      </router>
    </native>
  </data>
</rpc-reply>
```
- C.

```
<rpc-reply message-id="urn:uuid:1b3d05cd-8118-3e6a-6c05-021345678aaf" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <data>
    <native xmlns="http://cisco.com/ns/yang/ned/ios">
      <router>
        <ospf>
          <id>200</id>
          <network>
            <ip>172.16.10.128</ip>
            <mask>0.0.0.192</mask>
            <area>0</area>
          </network>
        </ospf>
      </router>
    </native>
  </data>
</rpc-reply>
```
- D.

```
<rpc-reply message-id="urn:uuid:1b3d05cd-8118-3e6a-6c05-012354678aaf" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:json:ns:netconf:base:1.0">
  <data>
    <native xmlns="http://cisco.com/ns/yang/ned/ios">
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: A

Question 8:

An engineer is designing a networking solution to allow two hosts to communicate—one host located within the company A network and the other within the company B network. The two companies have no other plans for future additional connections. Both companies want to use a single secure and encrypted internet connection, and the configuration must be as simple as possible. Which network solution must the engineer choose?

- A. policy-based IPsec tunnel with static routing
- B. routed IPsec tunnel with OSPF routing
- C. MPLS VPN provided service with BGP routing
- D. single DMVPN with EIGRP routing

Correct Answer: A

Question 9:

What are two characteristics of a migration from an IP-VPN service to a Cisco SD-WAN architecture? (Choose two.)

- A. distributed control plane
- B. increased security
- C. increased scalability
- D. centralized application policies
- E. increased solution complexity

Correct Answer: CD

Question 10:

Which design achieves SD-WAN control plane redundancy?

- A. Configuring BFD on the WAN Edge routers
- B. Using multiple instances of vManage in clusters
- C. Deploying using a virtual platform like UCS or CSP
- D. Managing the underlay network with OMP

Correct Answer: D

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/ha-scaling/ios-xe-17/high-availability-book-xe/m-high-availability-and-scaling.html>

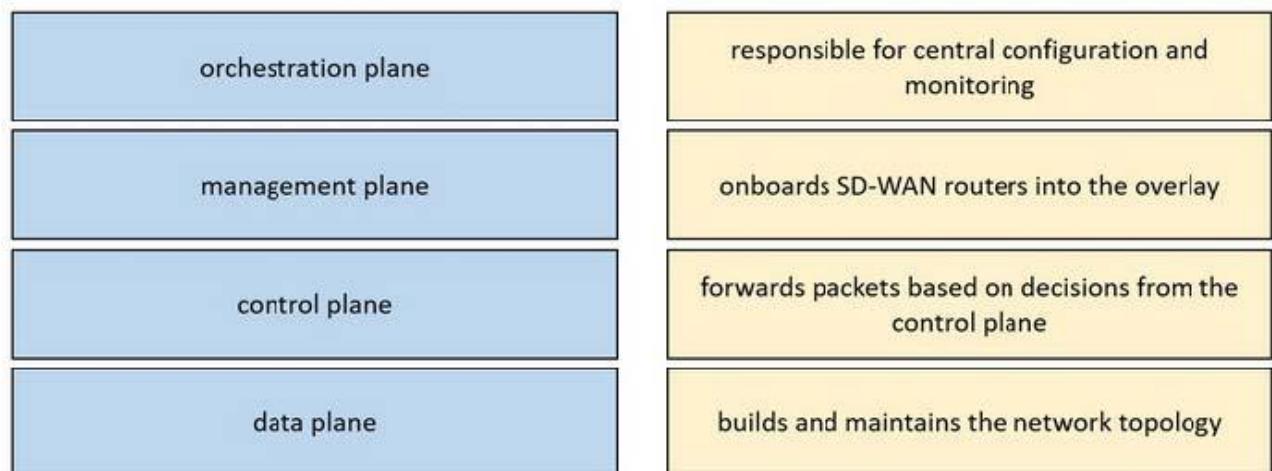
Software mechanisms ensure rapid recovery from a failure. To provide a resilient control plane, the Cisco SD-WAN Overlay Management Protocol (OMP) regularly monitors the status of all Cisco IOS XE SD-WAN devices in the network and automatically adjusts to changes in the topology as devices join and leave the network. For data plane resiliency, the Cisco SD-WAN software implements standard protocol mechanisms, specifically Bidirectional Forwarding Detection (BFD), which runs on the secure IPsec tunnels between routers.

Question 11:

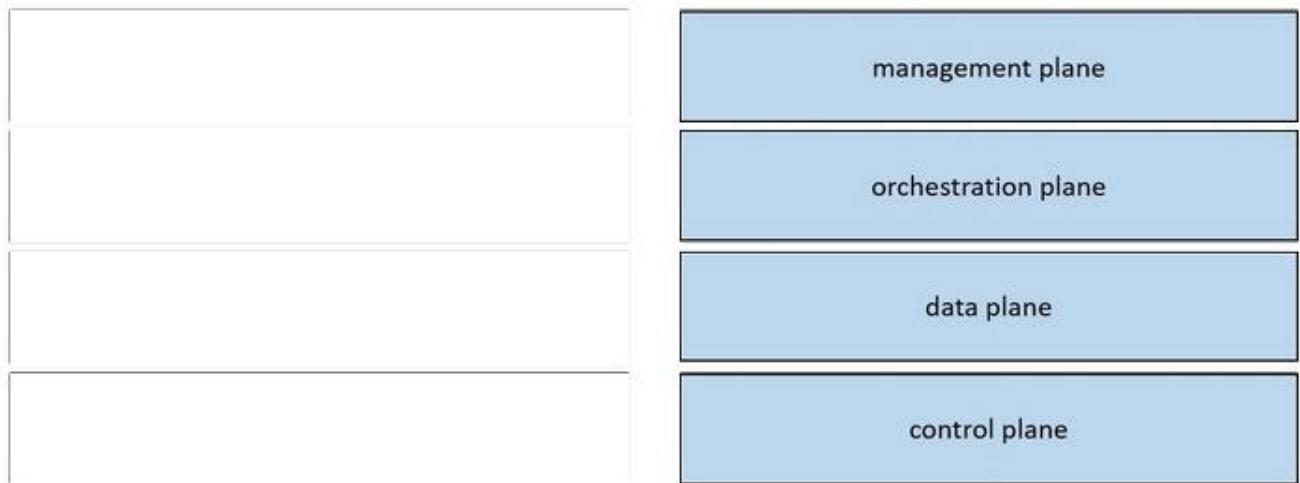
DRAG DROP

Drag and drop the Cisco SD-WAN components from the left onto their definitions on the right.

Select and Place:



Correct Answer:



Question 12:

Which two overlay network design considerations must be made for a Cisco SD-Access network? (Choose two.)

- A. LAN automation for deployment
- B. Layer 3 to the access design
- C. Reduce subnets and simplify DHCP management
- D. Dedicated IGP process for the fabric
- E. Avoid overlapping IP subnets

Correct Answer: CE

Question 13:

Which control plane protocol is responsible for EID-to-RLOC mapping concerning SO-Access Architecture?

- A. GBAC
- B. LISP
- C. CEF
- D. VXLAN

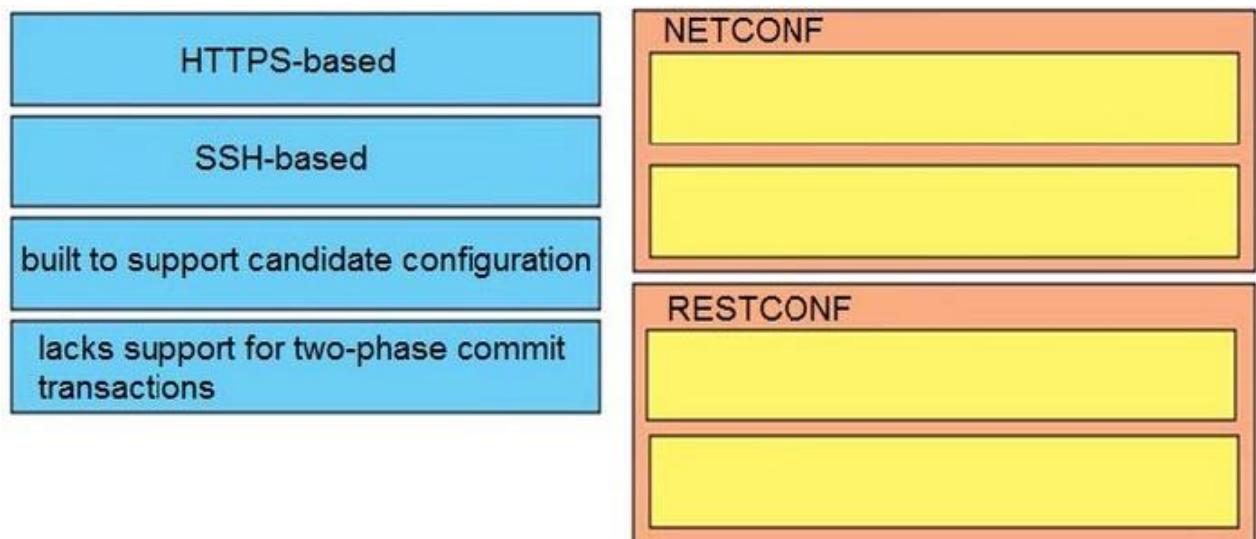
Correct Answer: B

Question 14:

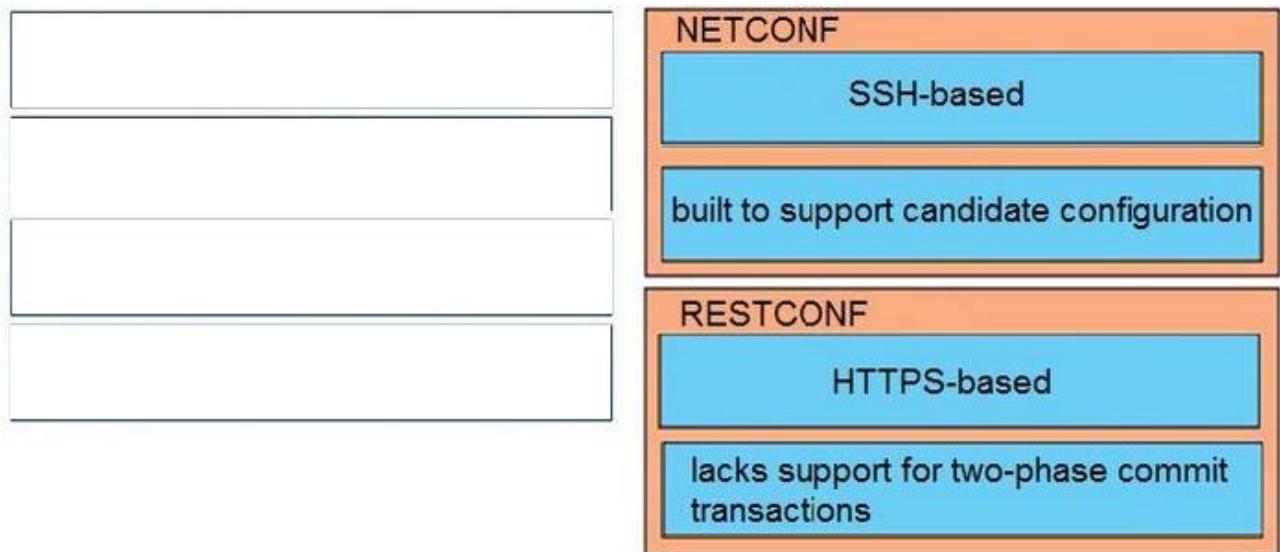
DRAG DROP

Drag and drop the properties from the left onto the protocols they describe on the right.

Select and Place:



Correct Answer:



Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/b_166_programmability_cg_chapter_01011.html

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b_169_programmability_cg/configuring_yang_datamodel.html

Question 15:

Which topology within a network underlay eliminates the need for first hop redundancy protocols while improving fault tolerance, increasing resiliency, and simplifying the network?

- A. virtualized topology
- B. routed access topology
- C. Layer 2 topology
- D. logical fabric topology

Correct Answer: B