



300-510^{Q&As}

Implementing Cisco Service Provider Advanced Routing Solutions
(SPRI)

Pass Cisco 300-510 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.passapply.com/300-510.html>

100% Passing Guarantee
100% Money Back Assurance

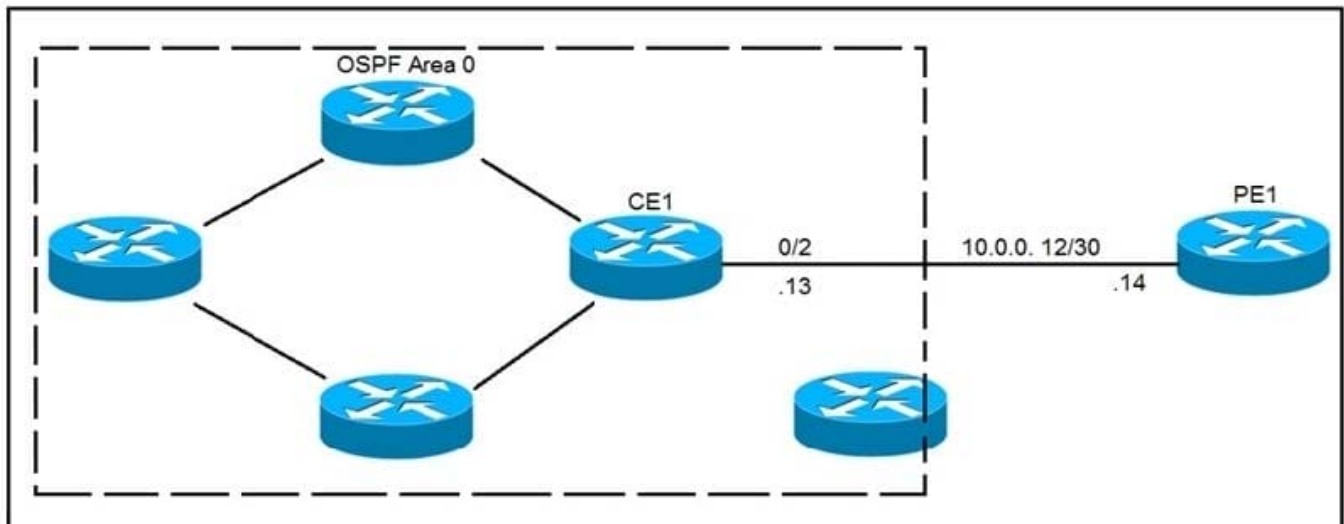
Following Questions and Answers are all new published by Cisco
Official Exam Center

- ⚙️ **Instant Download** After Purchase
- ⚙️ **100% Money Back** Guarantee
- ⚙️ **365 Days** Free Update
- ⚙️ **800,000+** Satisfied Customers



**QUESTION 1**

Refer to the exhibit.



CE1 is the gateway router into the provider network via PE1. A network operator must inject a default route into OSPF area 0. All devices inside area 0 must be able to reach PE1. Which configuration achieves this goal?

- A. #CE1
router ospf 1
default-information originate always
- B. #CE1
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/2 10.0.0.14
!
router ospf 1
redistribute static
- C. #CE1
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/2 10.0.0.14
!
router ospf 1
default-information originate
- D. #CE1
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/2 10.0.0.14
!
router ospf 1
redistribute static subnets



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

Correct Answer: C

Reference: <https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/47868-ospfdb9.html>

QUESTION 2

Refer to the exhibit.

```
R1
interface g0/0
 ip address 192.168.1.1 255.255.255.0
 ip router isis
router isis
 net 49.0022.1111.1111.1111.00
 area-password ciSCo

R2
interface g0/1
 ip address 192.168.1.2 255.255.255.0
 ip router isis
router isis
 net 49.0022.1111.1111.1111.00
 area-password ciSCo
```

After you applied these configurations to routers R1 and R2, the two devices could not form a neighbor relationship. Which reason for the problem is the most likely?

- A. The two routers cannot authenticate with one another.
- B. The two routers have the same area ID.
- C. The two routers have the same network ID.
- D. The two routers have different IS-types.

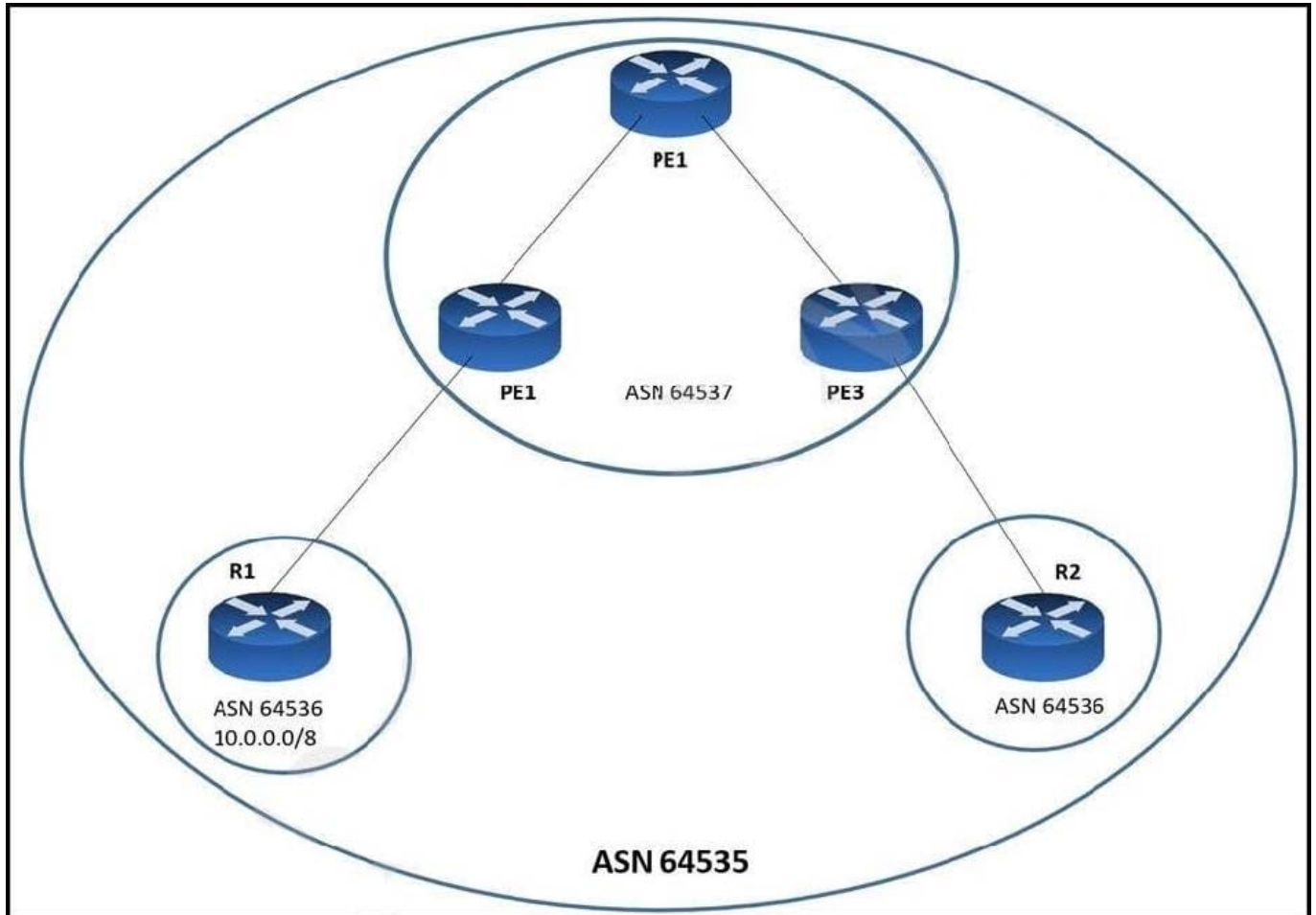
Correct Answer: C

For those asking about the password, area authentication doesn't prevent neighboring to come up because it is carried only in LSP, CSNP and PSNP messages and not in IIH messages. <https://www.cisco.com/c/en/us/support/docs/ip/integrated-intermediate-system-to-intermediate-system-is-is/13792-isis-authent.html>



QUESTION 3

Refer to the exhibit.



A network engineer has divided AS into confederations. Due to repeated ASN, when the 10.0.0.0/8 prefix from R1 arrives to R2, BGP automatically rejects it. What should the engineer do to fix the problem so that BGP allows that prefix on R2?

- A. Configure the command as-override on R1.
- B. Configure the command allowas-in on R2.
- C. Configure the command allowas-in on all the PE routers.
- D. Configure the command as-override on R2.

Correct Answer: B

Reference: <https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/112236-allowas-in-bgp-config-example.html>

QUESTION 4



CORRECT TEXT

Guidelines

This is a lab item in which tasks will be performed on virtual devices.

Refer to the Tasks tab to view the tasks for this lab item.

Refer to the Topology tab to access the device console(s) and perform the tasks.

Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.

All necessary preconfigurations have been applied.

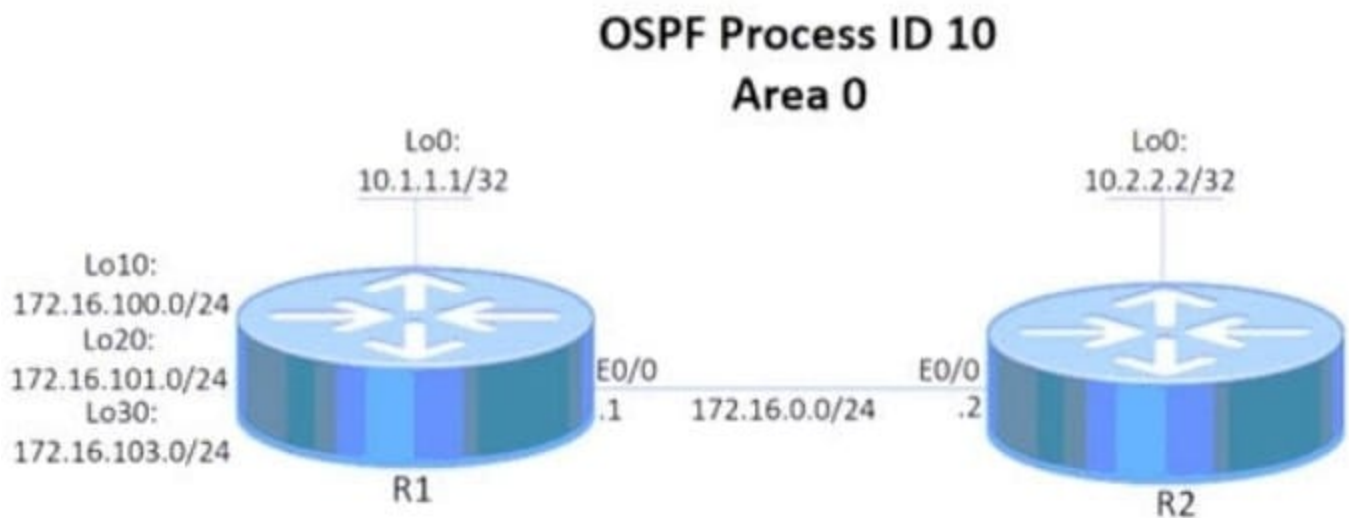
Do not change the enable password or hostname for any device.

Save your configurations to NVRAM before moving to the next item.

Click Next at the bottom of the screen to submit this lab and move to the next question.

When Next is clicked, the lab closes and cannot be reopened.

Topology



Tasks

Configure and verify an OSPF neighbor adjacency between R1 and R2 in OSPF area 0 according to the topology to achieve these goals:

1.

R1 pings the Loopback0 interface of R2. Use interface-level configuration to complete this task.

2.

R2 pings the Loopback0 interface of R1. Use interface-level configuration to complete this task.



A. Check the answer in the explanation

B. Placeholder

C. Placeholder

D. Placeholder

Correct Answer: A



R1

R2

```
R2>
R2>
R2>en
R2#config t
Enter configuration commands, one per line.  End with CNTL/Z.
R2(config)#int lo
R2(config)#int lo0
R2(config-if)#ip ospf 10 area 0
R2(config-if)#^Z
R2#
R2#
R2#c
*Aug 26 11:44:48.122: %SYS-5-CONFIG_I: Configured from console by
console
R2#copy run start
R2#copy run startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R2#
R2#sh ip route ospf
Codes: L - local, C - connected, S - static, R - RIP, M - mobile,
B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter
area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external ty
pe 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS
-IS level-2
        ia - IS-IS inter area, * - candidate default, U - per-user
static route
        o - ODR, P - periodic downloaded static route, H - NHRP, l
- LISP
        a - application route
        + - replicated route, % - next hop override, p - overrides
from Pfr
Gateway of last resort is not set
```

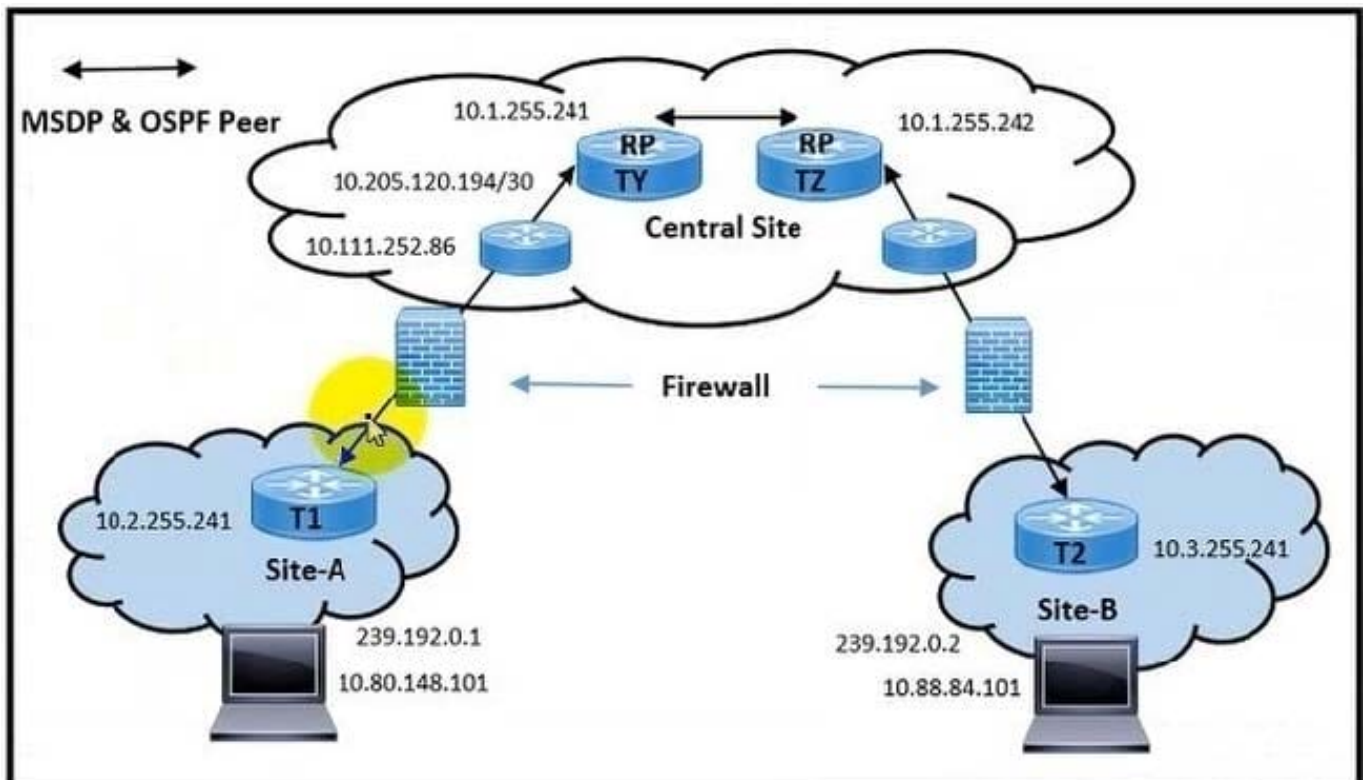


3.

R2 receives a single summary route 172.16.100.0/22 for networks 172.16.100.0/24, 172.16.101.0/24, and 172.16.103.0/24.

QUESTION 5

Refer to the exhibit.





```
TZ# show ip msdp sa-cache rejected-SA det read-only <snip>
86854209.328, (10.80.148.101, 239.192.0.1), RP: 10.2.255.241, Peer:
10.1.255.241, Reason: rpf-fail -> learned from central site RT1 but not
accepted (originated from site A RT1)
86854209.328, (10.88.84.101, 239.192.0.2), RP: 10.3.255.241, Peer:
10.1.255.241, Reason: rpf-fail -> learned from central site RT1 but not
accepted (originated from site B RT1)

TZ# show ip rpf 10.1.255.241
RPF information for ? (10.1.255.241)
RPF interface: Vlan10
RPF neighbor: ? (10.111.254.9)
RPF route/mask: 10.1.255.241/32
RPF type: unicast (ospf 15)
Doing distance-preferred lookups across tables
RPF topology: ipv4 multicast base, originated from ipv4 unicast base

TZ# show ip route 10.1.255.241
Routing Table: CENT1
Routing entry for 10.1.255.241/32
Known via "ospf 15", distance 110, metric 3, type intra area
Last update from 10.111.254.9 on Vlan10, 1d22h ago
Routing Descriptor Blocks:
* 10.111.254.9, from 10.205.0.197, 1d22h ago, via Vlan10
Route metric is 3, traffic share count is 1
```

```
TY# sh ip msdp sa-cache
MSDP Source-Active Cache - 2 entries
(10.80.148.101, 239.192.0.1), RP 10.2.255.241, AS ?, 1d23h/00:05:42, Peer
10.2.255.241 -> learned from RT1 at site A (which is 10.2.255.241)
(10.88.84.101, 239.192.0.2), RP 10.3.255.241, AS ?, 1d21h/00:05:31, Peer
10.3.255.241 -> learned from RT1 at site B (which is 10.3.255.241)

TY# sh ip rpf 10.2.255.241
RPF information for ? (10.2.255.241)
RPF interface: Fo9/1.1035
RPF neighbor: ? (10.111.252.86)
RPF route/mask: 10.2.255.241/32
RPF type: unicast (ospf 15)
Doing distance-preferred lookups across tables
RPF topology: ipv4 multicast base, originated from ipv4 unicast base

TY# sh ip route 10.2.255.241
Routing Table: CLNT1
Routing entry for 10.2.255.241/32
Known via "ospf 15", distance 110, metric 150, type extern 2, forward
metric 2
Last update from 10.111.252.86 on FortyGigabitEthernet9/1.1035, 04:06:26
ago
Routing Descriptor Blocks:
* 10.111.252.86, from 10.205.120.195, 04:06:26 ago, via
FortyGigabitEthernet9/1.1035
Route metric is 150, traffic share count is 1
```

Multicast traffic destined from T1 and T2 routers to RP routers works well. A network engineer observes problems with multicast traffic flows between Site-A and Site-B. Site-A users fail to receive multicast stream on Site-B via RPTY site, while Site-B users fail to receive multicast stream on Site-A via RPTZ site.

Which action must be implemented to resolve the issues?

- A. Establish MSDP peering with interface IP subnet.
- B. Configure Site-A and Site-B in 10.80.148.0/24.
- C. Allow the OSPF and MSDP packets on the firewall.



D. Configure direct OSPF peering between Site-A and Ste-B

Correct Answer: C

[Latest 300-510 Dumps](#)

[300-510 Practice Test](#)

[300-510 Exam Questions](#)