

The background is a vibrant, abstract graphic. It features a central bright white light source from which numerous colorful rays emanate, creating a sunburst or starburst effect. The rays transition through a spectrum of colors including yellow, orange, red, and various shades of blue and green. Overlaid on this are several large, semi-transparent, wavy shapes in similar color tones, giving the overall image a sense of motion and energy.

cisco *Live!*

Let's go

#CiscoLive



The bridge to possible

How to Prepare for the CCNP Enterprise Adv-Routing Concentration Certification

What you need to know

Muhammad Aamir, Exam Program Manager, CCIE Enterprise 11429
BRKCRT-2016



Cisco Webex App

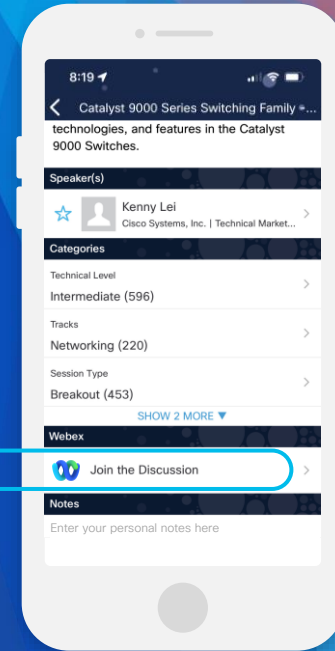
Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
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Webex spaces will be moderated by the speaker until June 9, 2023.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCRT-2016>

Agenda

- Value of the Cisco Certification
- Understand the Adv-Routing Blueprint and sample questions
- Demo Lab based question
- Learning Resources and Roadmap
- Q&A

Value of the Cisco Certification

Certified employees are valued assets

- Certification shortlists candidates for a job
- Gives confidence to the employer to bring a candidate in, meaning, in most cases, it gets you an interview 😊
- Positions a job seeker for skills to a job match
- Represents a job seeker virtually through a resume/LinkedIn prescreening

Certified employees are valued assets

Cisco Certified in North America
1,160 results

Set alert ☐

**Sr. Network Engineer**
General Dynamics Information Technology
Tampa, FL (On-site)
 1 connection works here
4 weeks ago · 0 applicants

**Senior Network Architect with Security Clearance**
ClearanceJobs
Lorton, VA
2 weeks ago · 0 applicants

**Sr. Network Engineer with Security Clearance**
ClearanceJobs
Washington, DC (On-site)
3 weeks ago · 0 applicants

**Senior Network Engineer**
General Dynamics Information Technology
Fort Bragg, North Carolina, United States (On-site)
 1 connection works here

Senior Network Engineer (USA REMOTE)

Turnitin · Phoenix, AZ (Remote) 3 days ago · **14 applicants**

 Full-time · Mid-Senior level

 501-1,000 employees · Software Development

 5 company alumni · 1 school alum

 See how you compare to 14 applicants. [Try Premium for free](#)

 Skills: EIGRP, Open Shortest Path First (OSPF), +8 more

[Easy Apply](#) [Save](#)

About the job

Company Description

USA CANDIDATES ONLY (REMOTE)

Certified employees are valued assets

Senior Network Engineer

LivePerson · NAMER (Remote)

Apply ↗

Save



- Relevant courses and certifications (CCNA, CCNP, etc) - Advantage

Benefits

The salary range for this role will be between \$140000 to \$160000. Final compensation will be determined by a variety of factors, including but not limited to, your location, and your skills, experience, education, and/or certifications. During the phone screening, the recruiter will provide the location-specific salary range for this role. The compensation package also includes the following benefits, which may be updated from time to time:

Understand the Adv-Routing Blueprint

Cisco Certifications

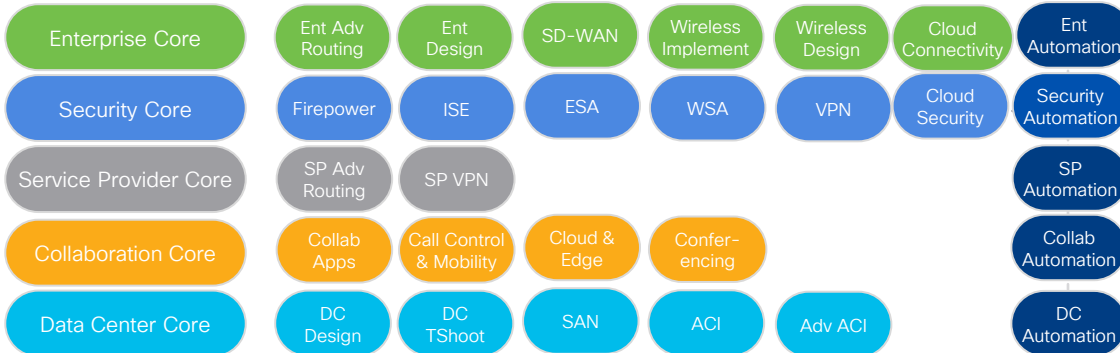


One Exam

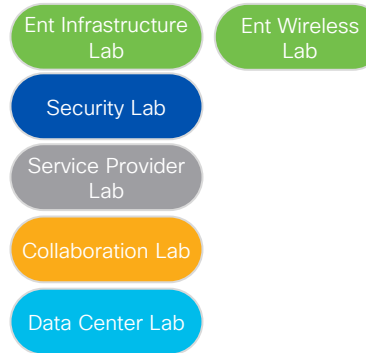
CCNA



Two Exams: Core + 1 Concentration



Core + Lab



One Exam

DevNet Associate



Two Exams: Core + 1 Concentration



Core + Lab



One Exam

CyberOps Associate



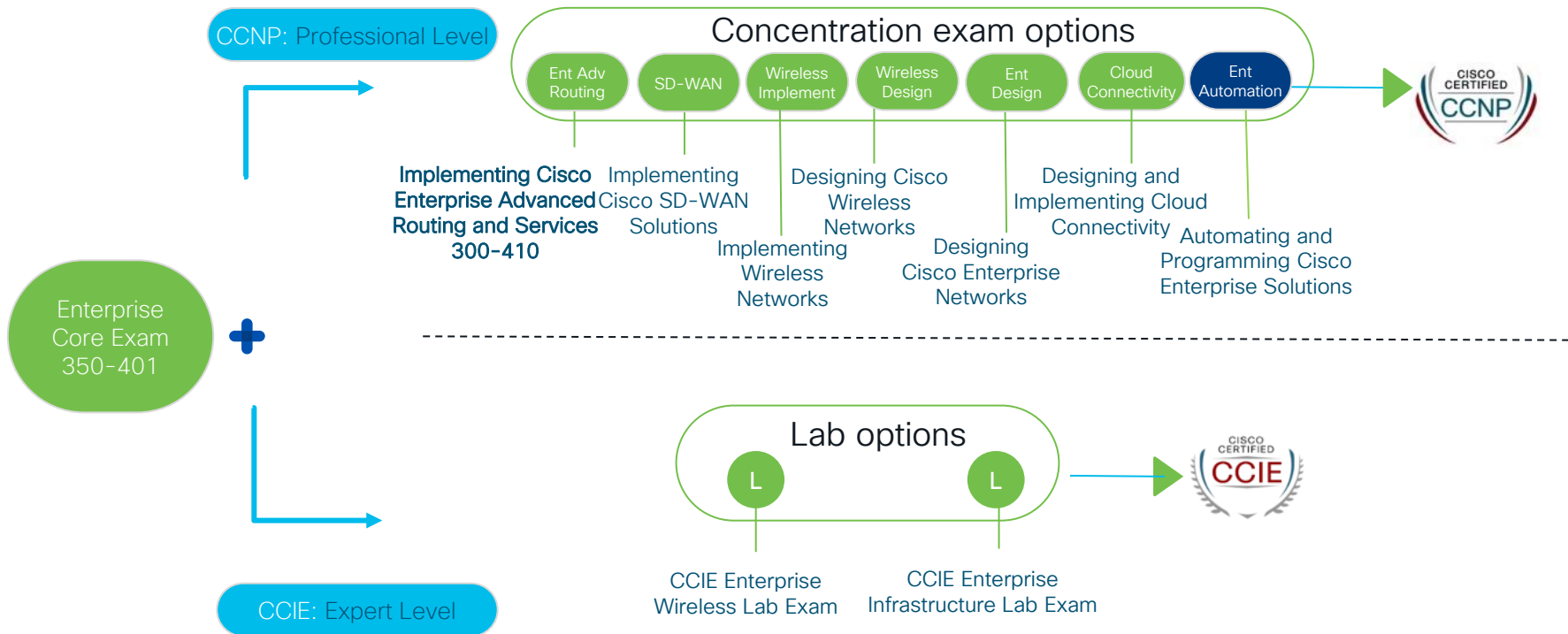
Two Exams: Core + 1 Concentration



CyberOps Expert

Future Offering

Cisco Enterprise certification track



Cisco Certifications Roadmap

How it works:

1. Cisco **reviews** each technology on the same quarterly schedule each year to make sure our exams align with the latest Cisco technologies.
2. We **announce** blueprint changes 3 months in advance along with revised exam topics and release notes.
3. We **publish** the updated exam 3 months after the exam blueprint publication.



● = Review certification exams ● = Announce blueprint changes ● = Publish updated exam

Dates shown reflect Cisco's fiscal year calendar.

- Annual, iterative, agile model
- Cadence-based systemic approach
- Align with rapid technology evolution
- Ensure relevancy for today
- Prepare for the future
- Add new technologies
- Remove obsolete technologies
- Predictable cadence for planning

www.cisco.com/go/CertRoadmap

Don't be scared...



Be prepared



Preparing for your Exam

Get to know the Exam:

- Blueprint
- Learning Resources
- Hands-on Lab practice

300-410 ENARSI Exam Blueprint

[3004-10 ENARSI Blueprint](#)

<https://learningnetwork.cisco.com/s/enarsi-exam-topics>

[300-40 ENARSI Blueprint Ver 1.1 Release Notes](#)

https://learningcontent.cisco.com/documents/marketing/exam-topics/CCNP_Enterprise_v1.1_Release_Notes.pdf

[Cisco Certification Roadmaps](#)

<https://learningnetwork.cisco.com/s/cisco-certification-roadmaps?tabset-07517=1>

300-410 ENARSI Exam Topics



Cisco Enterprise Exam Updates

As part of our Certification Roadmaps review cycle, our CCNP Enterprise exams will be updating soon. The last date to test for the current exams is September 19, 2023. Candidates can expect to be tested on the new exam material starting September 20, 2023.

[Learn more](#)

Exam Description

To earn your CCNP Enterprise certification you must pass the **350-401 ENCOR** exam and an eligible concentration exam of your choice, such as **300-410 ENARSI**. Passing this exam also earns you the **Cisco Certified Specialist - Enterprise Advanced Infrastructure Implementation** certification. You will be tested on your knowledge of:



Layer 3 Technologies



VPN Technologies



Infrastructure Security



Infrastructure Services

Expand each item below to view related exam topics.

1.0 Layer 3 Technologies	35%	▼
2.0 VPN Technologies	20%	▼
3.0 Infrastructure Security	20%	▼
4.0 Infrastructure Services	25%	▼

300-410 ENARSI Ver 1.1 Exam Blueprint Release Notes

300-410 Implementing Cisco Enterprise Advanced Routing and Services

v1.0		v1.1	
1.9	Troubleshoot EIGRP (classic and named mode)	1.9	Troubleshoot EIGRP (classic and named mode; VRF and global)
1.9.a	Address families (IPv4, IPv6)	1.9.a	Address families (IPv4, IPv6)
1.9.b	Neighbor relationship and authentication	1.9.b	Neighbor relationship and authentication
1.9.c	Loop-free path selections (RD, FD, FC, successor, feasible successor, stuck in active)	1.9.c	Loop-free path selections (RD, FD, FC, successor, feasible successor, stuck in active)
1.9.d	Stubs	1.9.d	Stubs
1.9.e	Load balancing (equal and unequal cost)	1.9.e	Load balancing (equal and unequal cost)
1.9.f	Metrics	1.9.f	Metrics
1.11	Troubleshoot BGP (Internal and External)	1.11	Troubleshoot BGP (Internal and External; unicast and VRF-Lite)
1.11.a	Address families (IPv4, IPv6)	1.11.a	Address families (IPv4, IPv6)
1.11.b	Neighbor relationship and authentication (next-hop, mulithop, 4-byte AS, private AS, route refresh, synchronization, operation, peer group, states and timers)	1.11.b	Neighbor relationship and authentication (next-hop, mulithop, 4-byte AS, private AS, route refresh, synchronization, operation, peer group, states and timers)
1.11.c	Path preference (attributes and best-path)	1.11.c	Path preference (attributes and best-path)
1.11.d	Route reflector (excluding multiple route reflectors, confederations, dynamic peer)	1.11.d	Route reflector (excluding multiple route reflectors, confederations, dynamic peer)
1.11.e	Policies (inbound/outbound filtering, path manipulation)	1.11.e	Policies (inbound/outbound filtering, path manipulation)

Deciphering the Blueprint:

Implementing Cisco Enterprise Advanced Routing and Services (300-410)

35% 1.0 Layer 3 Technologies — Domain

1.10 Troubleshoot OSPF (v2/v3) — Task

Domain
Weight

1.10.a Address families (IPv4, IPv6) — Subtask

1.10.b Neighbor relationship and authentication

1.10.c Network types, area types, and router types

1.10.c (i) Point-to-point, multipoint, broadcast, nonbroadcast — Subtask

1.10.c (ii) Area type: backbone, normal, transit, stub, NSSA, totally stub

1.10.c (iii) Internal router, backbone router, ABR, ASBR

1.10.c (iv) Virtual link

1.7 Configure and verify VRF-Lite — Task

1.8 Describe Bidirectional Forwarding Detection — Task

Blueprint Verbs

Describe

Configure

Troubleshoot

Depth of Knowledge

Implementing Cisco Enterprise Advanced Routing and Services

Exam Blueprint

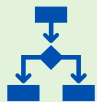
300-410

Domain / Weight

Four major areas of knowledge

1. Layer 3 Technologies 35%
2. VPN Technologies 20%
3. Infrastructure Security 20%
4. Infrastructure Services 25%

Types of questions



Multiple choice



Drag and drop



Performance-based Lab question

Tasks

Sample Tasks on Multiple Domains

- 2.1 Describe MPLS operations (LSR, LDP, label switching, LSP)
- 1.6 Configure and verify VRF-Lite
- 1.7 Configure and verify Policy-based Routing
- 1.4 Troubleshoot redistribution between any routing protocols or routing sources
- 1.10 Troubleshoot OSPF (v2/v3)
 - 1.10.d Path preference

Multiple Choice

Task

2.1 Describe MPLS operations (LSR, LDP, label switching, LSP)

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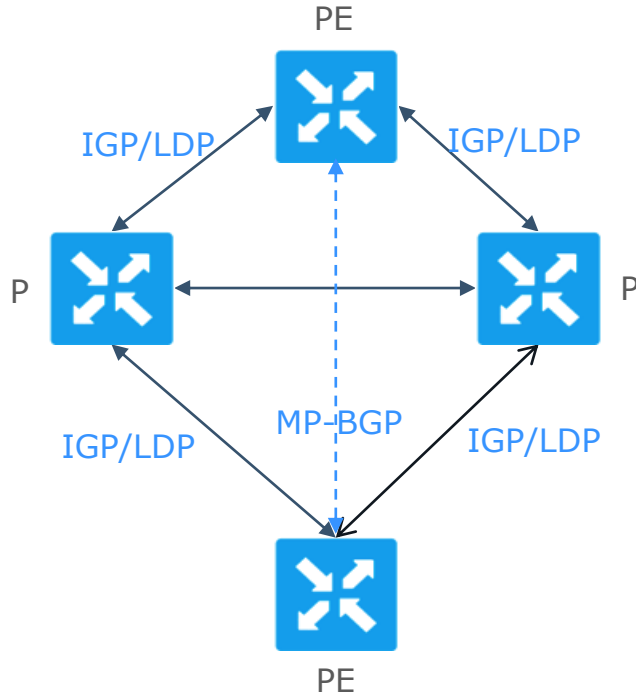


Question

Which protocols does a P router use to transfer VPN traffic between PE routers in an MPLS network?

- A. OSPF and MP-BGP
- B. OSPF and LDP
- C. LDP and MP-BGP
- D. LDP and RSVP

MPLS Operation



- IGP is used to build an end-to-end layer 3 network and LDP is used to establish hop-by-hop forwarding between LSRs using labels
- LDP distributes labels for prefixes advertised by unicast routing protocols
- BGP to support VPNs and establish communication between a set of sites using the same criteria (customer) – Label mapping info carried as part of NLRI (Network Layer Reachability Information)
- Forwarding plane consists of label imposition, swapping, and disposition – Regardless of the control plane (BGP, LDP, RSVP)

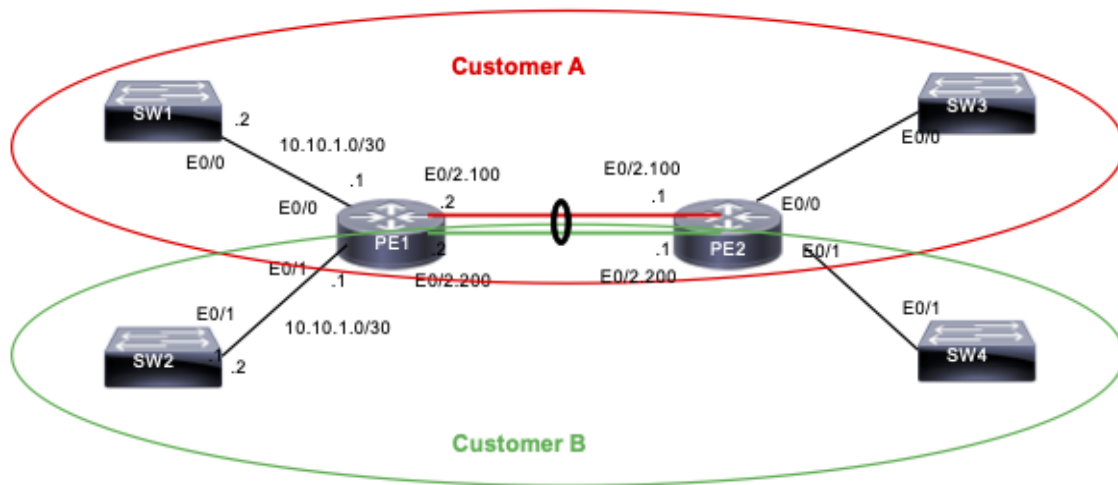
Multiple Choice

Task

Question

1.7 Configure and verify VRF-Lite

Refer to the exhibit. An engineer is required to configure overlapping IP addresses (10.10.1.1/30) for multiple customers on a Customer Edge (CE) router for IPv4 and IPv6. Which configuration is required to connect customer A (Cust_A) on the PE1 router for IPv4, assuming PE2 and remote Cust_A devices are configured properly?



Multiple Choice

Task

1.7 Configure and verify VRF-Lite

<https://app.sli.do/event/g7n2kkM958A9zXxLZSywbh>



A

```
vrf definition Cust_A
rd 10:1
!
interface Ethernet0/0
description Cust_A
vrf forwarding Cust_A
ip address 10.10.1.1
255.255.255.252
```

B

```
vrf definition Cust_A
!
interface Ethernet0/0
description Cust_A
ip vrf forwarding Cust_A
ip address 10.10.1.1
255.255.255.252
```

C

```
vrf definition Cust_A
!
address-family ipv4
!
interface Ethernet0/0
description Cust_A
ip vrf forwarding Cust_A
ip address 10.10.1.1
255.255.255.252
```

D

```
vrf definition Cust_A
!
address-family ipv4
!
interface Ethernet0/0
description Cust_A
vrf forwarding Cust_A
ip address 10.10.1.1
255.255.255.252
```

Configuring VRF-Lite

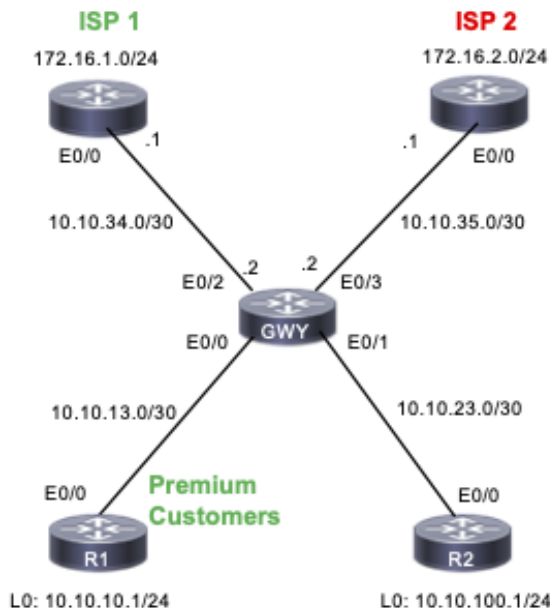
- Allows overlapping IP addresses on the same router using VRF
- Address-family aware VRF-Lite must use ***address-family ipv4/ipv6*** under the VRF definition
- Show ip route must use vrf aware show command to display routing i.e. ***show ip route vrf cust_A***
- Dynamic routing is supported over VRF-Lite e.g. EIGRP, OSPF, BGP
- When using OSPF, ***capability vrf-lite*** must be configured under ***router ospf*** command.
- https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9500/software/release/17-1/configuration_guide/rtnng/b_171_rtnng_9500_cg/configuring_vrf_lite.html

Multiple Choice

Task

Question

Refer to the exhibit. An engineer is required to direct all premier customers to ISP1 regardless of the routes in the routing table. Which configuration meets the requirement?



1.6 Configure and verify policy-based routing

<https://app.sli.do/event/g7n2kkM958A9zXxLZSywbh>



1.6 Configure and verify policy-based routing

Contd.

A

```
access-list 1 permit ip 10.10.10.0 255.255.255.0
!
interface e0/0
 ip policy route-map premium_cust
!
route-map premium_cust permit 10
 match ip address 1
 set ip default next-hop 10.10.34.1
!
ip route 172.16.1.0 255.255.255.0 10.10.35.1
ip route 172.16.2.0 255.255.255.0 10.10.34.1
```

B

```
access-list 1 permit ip 10.10.10.0 255.255.255.0
!
interface e0/0
 ip policy route-map premium_cust
!
route-map premium_cust permit 10
 match ip address 1
 set ip default next-hop 10.10.34.1
!
ip route 172.16.1.0 255.255.255.0 10.10.35.1
ip route 0.0.0.0 255.255.255.0 10.10.34.1
```

C

```
access-list 1 permit ip 10.10.10.0 255.255.255.0
!
interface e0/0
 ip policy route-map premium_cust
!
route-map premium_cust permit 10
 match ip address 1
 set ip next-hop 10.10.34.1
!
ip route 172.16.1.0 255.255.255.0 10.10.35.1
ip route 172.16.2.0 255.255.255.0 10.10.34.1
```

D

```
access-list 1 permit ip 10.10.10.0 255.255.255.0
!
interface e0/1
 ip policy route-map premium_cust
!
route-map premium_cust permit 10
 match ip address 1
 set ip next-hop 10.10.34.1
!
ip route 172.16.1.0 255.255.255.0 10.10.35.1
ip route 172.16.2.0 255.255.255.0 10.10.34.1
```



Configuring Policy-based Routing

- Identify traffic to be routed through specific requirements rather than default CEF exit
- Create a *route-map* for the required traffic
- Set next-hop using *set ip next-hop ip-address [ip-address]* OR *set ip default next-hop ip-address [ip-address]*
- Apply the policy map on the interface using *ip policy route-map map-tag* command
- The **set ip next-hop** and **set ip default next-hop** commands are similar but have a different order of operation. Configuring the **set ip next-hop** command causes the system to first use policy routing and then use the routing table. Configuring the **set ip default next-hop** command causes the system to first use the routing table and then the policy-route-specified next hop.
- https://www.cisco.com/c/en/us/td/docs/routers/ios/config/17-x/ip-routing/b-ip-routing/m_iri-pbr.html

Multiple Choice

Task

Question

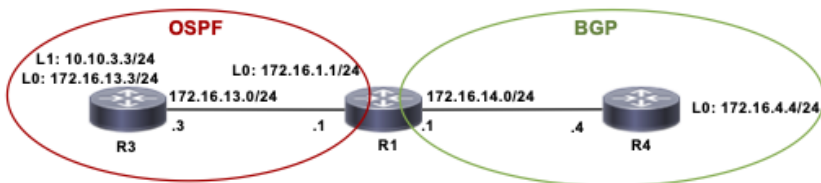
1.4 Troubleshoot redistribution between any routing protocols or routing sources.

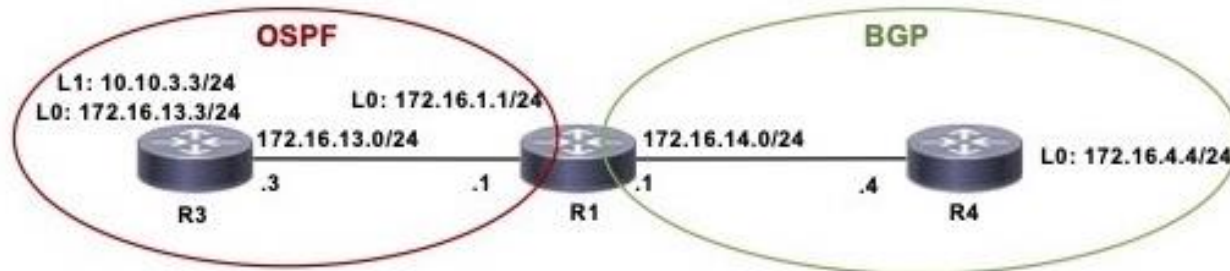
<https://app.sli.do/event/g7n2kkM958A9zXxLZ/Sywbh>



Refer to the exhibit. An engineer redistributes OSPF into BGP, but not all the routes are redistributed. Which action resolves the issue on R1 with minimum configuration?

- A. Configure /32 network statement under BGP for R3 Loopback1.
- B. Configure metric with the redistribute command to advertise external routes.
- C. Configure route map to redistribute OSPF internal and external routes into BGP.
- D. Configure to match OSPF internal external routes with the redistribute command.





```
R1#sh run | s bgp
router bgp 65000
bgp log-neighbor-changes
redistribute ospf 1
neighbor 172.16.14.4 remote-as 65000
```

```
R1#sh ip ro
Gateway of last resort is not set
```

```
10.0.0.0/24 is subnetted, 1 subnets
O E2 10.10.3.0 [110/20] via 172.16.13.3, 00:15:47, Ethernet0/1
172.16.0.0/16 is variably subnetted, 8 subnets, 2 masks
C 172.16.1.0/24 is directly connected, Loopback0
O 172.16.3.3/32 [110/11] via 172.16.13.3, 00:15:47, Ethernet0/1
B 172.16.4.0/24 [200/0] via 172.16.14.4, 00:00:53
C 172.16.13.0/24 is directly connected, Ethernet0/1
C 172.16.14.0/24 is directly connected, Ethernet0/2
R1#
```

```
R1#sh ip bgp nei 172.16.14.4 advertised-routes
```

Network	Next Hop	Metric	LocPrf	Weight	Path
*> 172.16.1.1/32	0.0.0.0	0	32768	?	
*> 172.16.3.3/32	172.16.13.3	11	32768	?	
*> 172.16.13.0/24	0.0.0.0	0	32768	?	
*> 172.16.14.0/24	0.0.0.0	0	32768	?	

Total number of prefixes 4

```
R4#sh ip bgp
```

Network	Next Hop	Metric	LocPrf	Weight	Path
*>i 172.16.1.0/24	172.16.14.1	0	100	0	?
*>i 172.16.3.3/32	172.16.13.3	11	100	0	?
*> 172.16.4.0/24	0.0.0.0	0	32768	i	
*>i 172.16.13.0/24	172.16.14.1	0	100	0	?

```
R4#
```


Redistributing OSPF into BGP

- OSPF intra-area and inter-area routes (internal) are redistributed by default if no keyword is mentioned with the redistribute OSPF command
- OSPF external routes must be defined in the match statement on the redistribute command
- Both External type-1 and type-2 must be matched to redistribute both types
 - redistribute OSPF 1 match internal external
 - redistribute OSPF 1 match internal external 1 external 2
- In order to redistribute all OSPF routes, internal external type-1 and type-2 routes must be matched on the redistribute OSPF command under BGP
- https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_bgp/command/irg-cr-book/bgp-n1.html

Multiple Choice

Task

1.10 Troubleshoot OSPF (v2/v3) 1.10.d Path preference

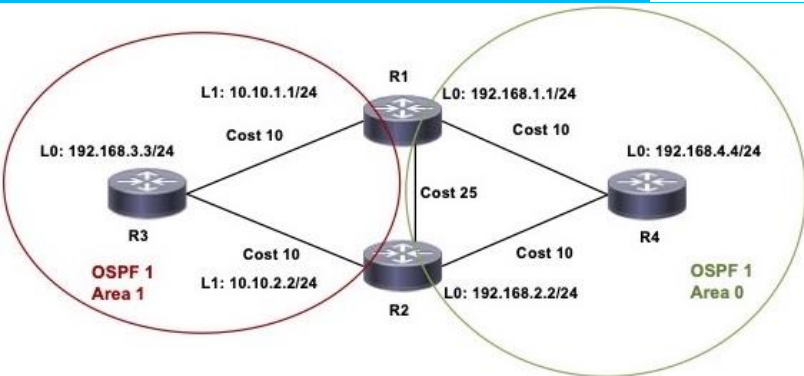
<https://app.sli.do/event/g7n2kkM958A9zXxLZSywbh>

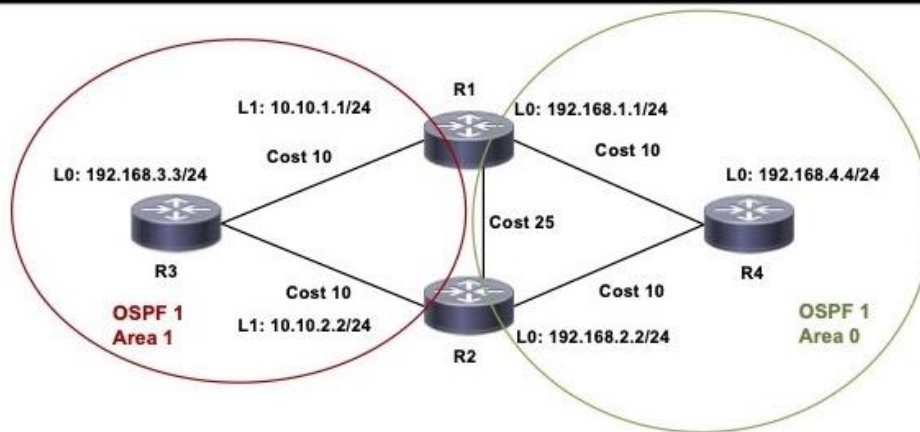


Question

Refer to the exhibit. The network 10.10.1.1 on R1 reaches network 10.10.2.2 on R2 through the link to R3 instead of the directly connected link between R1 and R2. Which action resolves the issue?

- A. Reduce OSPF link cost to 10 between R1 and R2 in area 0.
- B. Increase OSPF link cost to 20 between R1 and R3 in area 1.
- C. Move link between R1 and R2 to area 1 with OSPF link cost to 10.
- D. Change OSPF link type to point-to-point with a link cost of 10 between R1 and R2.





R1#sh ip route ospf
Gateway of last resort is not set

```

10.0.0.0/8 is variably subnetted, 3 subnets, 2 masks
O   10.10.2.2/32 [110/21] via 192.168.13.3, 00:03:52, Ethernet0/1
O   192.168.2.0/32 is subnetted, 1 subnets
O   192.168.2.2 [110/11] via 192.168.12.2, 00:03:16, Ethernet0/0
O   192.168.3.0/32 is subnetted, 1 subnets
O   192.168.3.3 [110/11] via 192.168.13.3, 00:03:52, Ethernet0/1
O   192.168.4.0/32 is subnetted, 1 subnets
O   192.168.4.4 [110/11] via 192.168.14.4, 00:03:52, Ethernet0/2
O   192.168.23.0/24 [110/20] via 192.168.13.3, 00:03:52, Ethernet0/1
O   192.168.24.0/24 [110/20] via 192.168.14.4, 00:03:52, Ethernet0/2
    [110/20] via 192.168.12.1, 00:07:28, Ethernet0/0

```

```

R1#trace 10.10.2.2 source 10.10.1.1
Type escape sequence to abort.
Tracing the route to 10.10.2.2
VRF info: (vrf in name/id, vrf out name/id)
 1 192.168.13.3 1 msec 0 msec 0 msec
 2 192.168.23.2 0 msec * 2 msec
R1#

```

R2#sh ip route ospf
Gateway of last resort is not set

```

10.0.0.0/8 is variably subnetted, 3 subnets, 2 masks
O   10.10.1.1/32 [110/21] via 192.168.23.3, 00:08:03, Ethernet0/2
O   192.168.1.0/32 is subnetted, 1 subnets
O   192.168.1.1 [110/11] via 192.168.12.1, 00:07:28, Ethernet0/0
O   192.168.3.0/32 is subnetted, 1 subnets
O   192.168.3.3 [110/11] via 192.168.23.3, 00:08:33, Ethernet0/2
O   192.168.4.0/32 is subnetted, 1 subnets
O   192.168.4.4 [110/11] via 192.168.24.4, 00:08:33, Ethernet0/1
O   192.168.13.0/24 [110/20] via 192.168.23.3, 00:08:33, Ethernet0/2
O   192.168.14.0/24 [110/20] via 192.168.24.4, 00:08:33, Ethernet0/1
    [110/20] via 192.168.12.1, 00:07:28, Ethernet0/0

```

```

R2#trace 10.10.1.1 source 10.10.2.2
Type escape sequence to abort.
Tracing the route to 10.10.1.1
VRF info: (vrf in name/id, vrf out name/id)
 1 192.168.23.3 1 msec 0 msec 1 msec
 2 192.168.13.1 1 msec * 1 msec
R2#

```

OSPF Path Selection

- Routes in the same area are called intra-area routes (O).
- Routes crossing an ABR (between areas) are called inter-area routes (IA).
- Routes from an ASBR or from other protocols to OSPF are external routes. There are two types of external routes; E1 and E2.
- The cost of an E2 route is always the external cost, irrespective of the interior cost to reach that route. An E1 route cost is the addition of the external cost and the internal cost used to reach that route.
- Multiple routes to the same destination are preferred in the following order: intra-area (O), inter-area (IA), external E1, external E2.
- <https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/7039-1.html>

New Performance-Based Lab Exam Items

<https://blogs.cisco.com/learning/new-performance-based-lab-exam-items-build-opportunities>

Lablet - Candidate Name

Time Remaining 01:29:28

Comment

1 of 1

Topology Tasks Guidelines

Topology Diagram

DSW1 DSW2

```
DSW1>enable
DSW1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
DSW1(config)#*z
DSW1#
*Apr 13 17:13:59.776: %SYS-5-CONFIG_I: Configured from console by console
DSW1#show ip int br
Interface      IP-Address      OK? Method Status  Protocol
Ethernet0/0    unassigned      YES unset  up      up
Ethernet0/1    unassigned      YES unset  up      up
Ethernet0/2    unassigned      YES unset  up      up
Ethernet0/3    unassigned      YES unset  up      up
Vlan10         unassigned      YES unset  administratively down down
Vlan110        unassigned      YES unset  administratively down down
Vlan210        unassigned      YES unset  administratively down down
Vlan900        unassigned      YES unset  administratively down down
DSW1#
```

Exam Info

Next

New Performance-Based Lab Exam Items Demo

(Contd.)

GuidelinesTopologyTasks

Guidelines

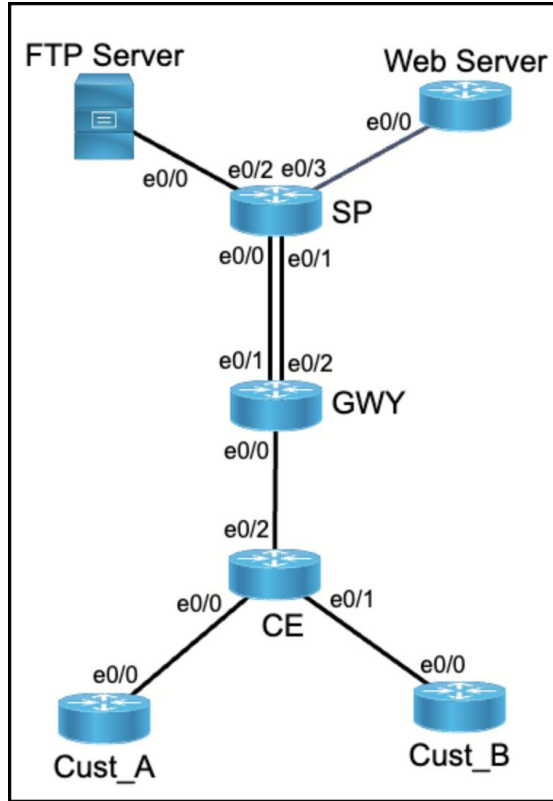
This is a lab item in which tasks will be performed on virtual devices.

- 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.

GWYCECust_Acust_BSP

GWY>

New Performance-Based Lab Exam Items Demo

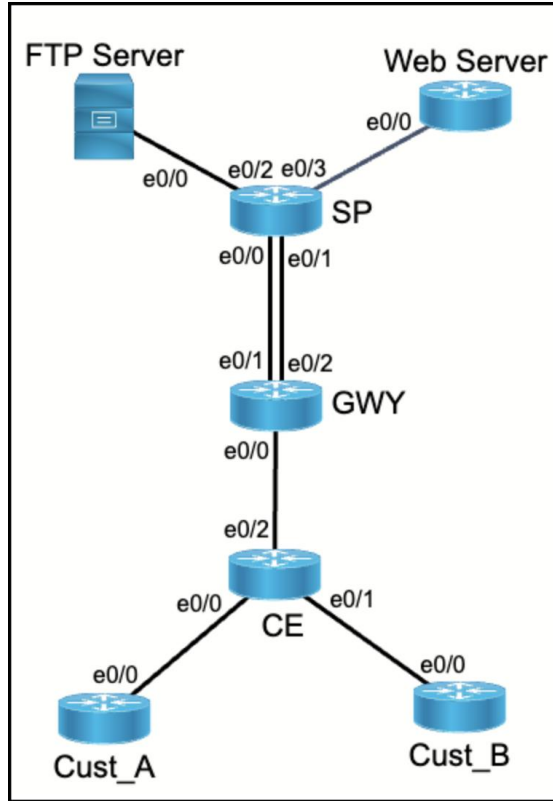


Configure the routers for each customer to meet these requirements:

1. Configure CE router interfaces facing Cust_A and Cust_B routers with IP address 10.10.1.1/30 and should be able to support IPv6 if required. Use "Cust_A" and "Cust_B" as variables for any related configuration.
2. Configure CE router interfaces for Cust_A and Cust_B to ping the corresponding interface IP address on the GWY router. Configure static routes to reach Cust_A loopback 0 and Cust_B loopback 0. Configure default routes for Cust_A to reach FTP Server and Cust_B to reach Web Server without introducing dynamic routing. Do not change IP addresses or dot1q configurations on interfaces connecting GWY and CE routers.

New Performance-Based Lab Exam Items Demo

(Contd.)



Configure the routers for each customer to meet these requirements (Contd.):

3. Configure the GWY router so that Cust_A always uses next-hop 10.10.10.2 to reach FTP Server (192.168.10.1). Do not add, remove, or modify preconfigured static routes to achieve results. Verify the results using extended ping from loopback0 to FTP Server on Cust_A router.
4. Configure GWY router so that Cust_B always uses next-hop 10.10.20.2 for Web Server (192.168.20.1). Do not add, remove, or modify preconfigured static routes to achieve results. Verify the results using extended ping from loopback0 to Web Server on Cust_B router.

Cisco Certification Exam Tutorial Videos

<https://learningnetwork.cisco.com/s/certification-exam-tutorials>

Exam Tutorial for Associate and Professional Certifications



Learning Resources

Learning Resources

- Config/Design/Study Guides
- Cisco U
- Cisco Press
- Cisco Live Sessions
- Webinars/Podcasts
- Training Videos

Cisco U

The screenshot shows the Cisco U website interface. At the top, there's a navigation bar with 'Cisco U.' logo, links for 'For You', 'Explore', and 'Community', and a search bar labeled 'Search Here'. Below the navigation bar, there are three main content sections:

- RECOMMENDATIONS** (Green background):
 - Text: 'Tell us more about your Interests'
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 - Button: 'Retake survey'
- Live!** (Orange background):
 - Text: 'June 4-8, 2023 | Las Vegas'
 - Text: 'Join us in person digitally, or on demand.'
 - Button: 'Learn More'
 - Callout: 'Register Today!'
- CERTIFICATIONS** (Blue background):
 - Text: 'Exam prep, step by step'
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 - Button: 'Explore Learning Paths'

Cisco U ENARSI

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Learning Path Completion 0%

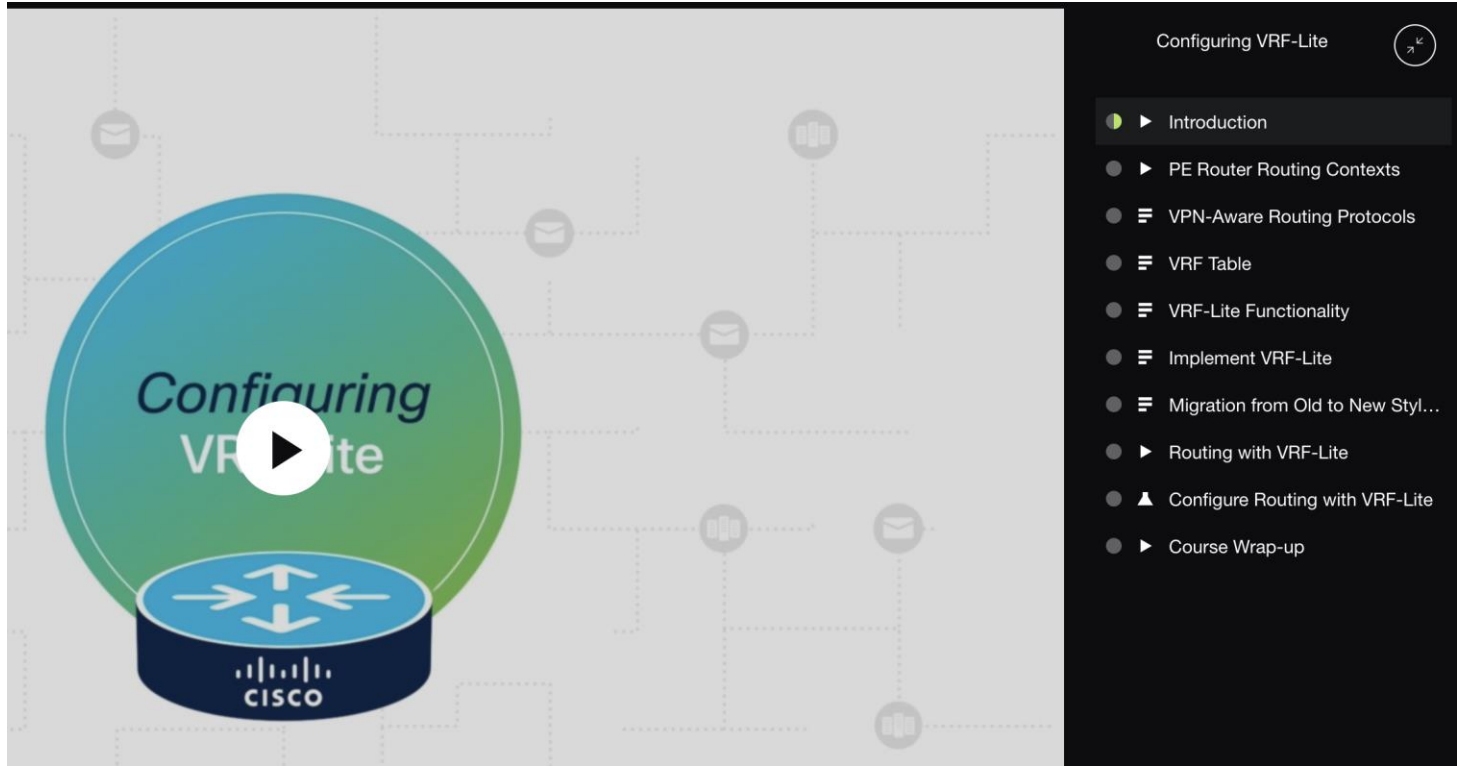
Learning Path Curriculum

Expand All

1	✓ Layer 3 Technologies - EIGRP	7h
2	✓ Layer 3 Technologies - OSPF	7h 30m
3	✓ Routing Manipulation	5h 30m
4	✓ Technologies - BGP	9h
5	✓ MPLS and VPN Technologies	5h 15m
6	✓ Infrastructure Security and Services	8h

Cisco UENARSI Lab

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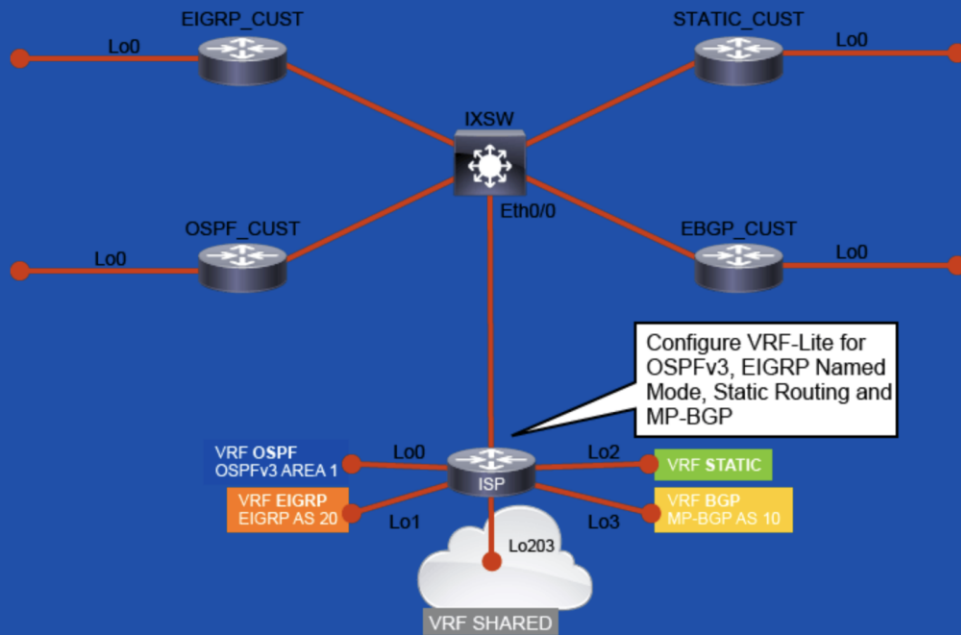
Cisco U ENARSI – VRF-Lite Lab

https://ondemandlearning.cisco.com/apollo-alpha/mc_enarsi10_17/pages/9



Your configuration tasks are as follows:

- Define VRFs on the ISP router
- Assign interfaces to appropriate VRFs on the ISP router
- Enable VRF-Lite routing on the ISP router
- Configure inter-VRF route leaking on the ISP router



ENARSI – VRF – Lite Lab

https://ondemandlearning.cisco.com/apollo-alpha/mc_enarsi10_17/pages/9



Define VRFs on the ISP Router

In this task, you will create the following VRFs that will be used to isolate customer traffic on the ISP router.

VRF Name	Address Family	Parameters
OSPF	IPv4 and IPv6	—
EIGRP	IPv4 and IPv6	—
STATIC	IPv4 and IPv6	—
BGP	IPv4 and IPv6	RD 10:10 RT import 10:203 RT export 10:10
SHARED	IPv4	RD 10:203 RT import 10:10 RT export 10:203

Step 1

[Show Me](#)

On ISP, configure the VRFs according to table above.

ENARSI – VRF-Lite Lab

https://ondemandlearning.cisco.com/apollo-alpha/mc_enarsi10_17/pages/9



Step 1

On ISP, configure the VRFs according to table above.

Answer

```
ISP(config)# vrf definition OSPF
ISP(config-vrf)# address-family ipv4
ISP(config-vrf-af)# exit
ISP(config-vrf)# address-family ipv6
ISP(config-vrf-af)# exit
ISP(config-vrf)# exit
ISP(config)# vrf definition EIGRP
ISP(config-vrf)# address-family ipv4
ISP(config-vrf-af)# exit
ISP(config-vrf)# address-family ipv6
ISP(config-vrf-af)# exit
ISP(config-vrf)# exit
```

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☒ Intermediate

☐ Advanced

☐ General

Language

11 sessions

2022 Melbourne

Troubleshooting Routing Protocols – BRKENT-2085

☆

Event: 2022 Melbourne

Julius Nasr, High Touch Engineer, Cisco Systems, Inc.

Routing protocols such as OSPF and BGP are still widely used in networks across the world, and if you work with any of these protocols then this session will help you in your journey. This intermediate session will assume you understand the...

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2020 Digital

OSPF Deployment in Modern Networks – DGTL-BRKST-2337

☆

Event: 2020 Digital

Nick Russo, TECHNICAL LEADER.CUSTOMER DELIVERY, Cisco Systems, Inc. – Distinguished Speaker

This session covers the OSPF topics relevant for modern networks. Join me as we analyze requirements, develop designs, implement features, and optimize performance by following a realistic business scenario. Together, we'll solve problems

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<https://www.cisco.com/c/en/us/products/cloud-systems-management/modeling-labs/index.html#~licensing>

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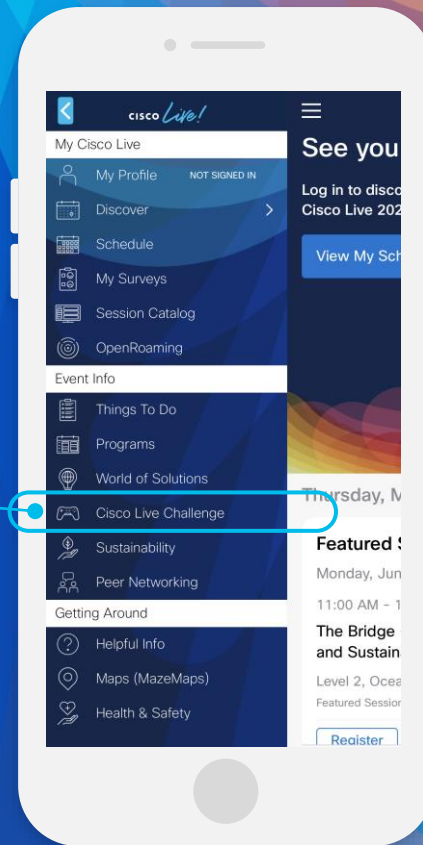
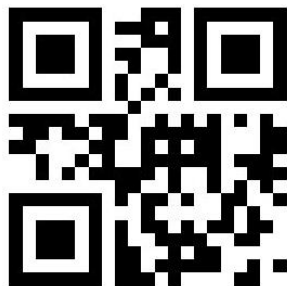
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The background features a vibrant, multi-colored abstract design. On the left, there are overlapping, wavy, organic shapes in shades of red, orange, and yellow. On the right, a bright white light source emits a series of sharp, radiating lines in various colors, including blue, green, and yellow, creating a sunburst or starburst effect. The overall color palette is a spectrum of rainbow colors.

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