100-105^{Q&As}

Interconnecting Cisco Networking Devices Part 1 (ICND1)

Pass Cisco 100-105 Exam with 100% Guarantee

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

https://www.geekcert.com/100-105.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

You work for a company that provides managed network services, and of your real estate clients running a small office is experiencing network issues, Troubleshoot the network issues.

Server1 and Server2 are placed in VLAN 100 and 200 respectively, and dare still running router on stick configuration with router R2.

You have console access on R1, R2, R3, and L2SW1 devices.

Use only show commands to troubleshoot the issues.

Instructions

Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.

This task does not require device configuration.

Click the device icon to gain access to the console of the device. No console or enable passwords are required.

To access the multiple-choice questions, click the numbered boxes on the left of the top panel.

There are four multiple-choice questions with this task. Be sure to answer all four questions before clicking Next.

Topology

Internet

ISP

Main office

209.165.201.2/27
209.165.201.1/27

Server1 - 192.168.100.250/24

172.16.16.0/24

R1

RIPv2

VLAN 100

172.16.14.0/30

Router on a Stick

L2SW1

R2

172.16.11.0/30

R3

10.10.12.0/24

VLAN 200

10.10.10.0/24

Server2 - 192.168.200.250/24

R1

```
R1#show r
R1#show run
R1#show running-config
Building configuration…

Current configuration : 1438 bytes
!
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R1
!
Boot-start-marker
Boot-end-marker
!
!
!
no aaa new-model
clock timezone PST -8 0
nni polling-interval 60
no nni auto-configure
no nni pvc
nni snmp-timeout 180
!
!
!
!
```

R1

```
!
!
!
!
ip cef
no ipv6 cef
!
multilink bundle-name authenticated
!
!
!
!
!
!
!
!
Redundancy
!
!
!
!
!
!
!
!
!
!
!
```

R1

```
interface Ethernet0/0
  description ***Link to ISP***
  ip address 209.165.201.1  255.255.255.224
  ip nat outside
  ip virtual-reassembly in
!
interface Ethernet0/1
  description ***Link to LAN***
  ip address 172.16.16.1  255.255.255.0
  ip nat inside
  ip virtual-reassembly in
!
interface Ethernet0/2
  description ***Link to R2***
  ip address 172.16.14.1  255.255.255.252
  ip nat inside
  ip virtual-reassembly in
!
interface Ethernet0/3
  no ip address
  shutdown
!
router rip
  version 2
  network 172.16.0.0
  default-information originate
  no auto-summary
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
```

R1

```
ip nat inside source list LOCAL interface Ethernet0/0 overload
ip route 10.10.10.0  255.255.255.0  172.16.14.2  200
!
ip access-list standard LOCAL
  permit 10.0.0.0  0.255.255.255
  permit 172.16.0.0  0.0.255.255
  permit 192.168.0.0  0.0.255.255
!
!
!
!
control-plane
!
!
line con 0
  logging synchronous
line aux 0
line vty 0  4
  login
  transport input all
!
!
end
R1#show interfaces
Ethernet0/0 is up, line protocol s up
  Hardware is AudP2, address is aabb.cc00.4100 (bia aabb.cc00.4100)
  Description: ***Link to ISP***
  Internet address is 209.165.201.1/27
  MTU 1500 bytes, BU 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, txload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
```

R1

```
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:53, output 00:00:07, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (site/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
     40 packets input, 11786 bytes, 0 no buffer
     Received 39 broadcasts (0 IP multicasts)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 input packets with dribble condition detected
     191 packets output, 20271 bytes, 0 underruns
     0 output errors, 0 collisions, 1 interface resets
     4 unknown protocol drops
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier
     0 output buffer failures, 0 output buffers swapped out
Ethernet0/1 is up, line protocol is up
   Hardware is AudP2, address is aabb.cc00.4110 (bia aabb.cc00.4110)
   Description: ***Link to LAN***
   Internet address is 172.16.16.1/24
   MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
```

R1

```
     0 packets input, 0 bytes, 0 no buffer
     Received 0 broadcasts (0 IP multicasts)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 input packets with dribble condition detected
     245 packets output, 30725 bytes, 0 underruns
     0 output errors, 0 collisions, 4 interface resets
     0 unknown protocol drops
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier
     0 output buffer failures, 0 output buffers swapped out
Ethernet0/2 is up, line protocol is up
   Hardware is AudP2, address is aabb.cc00.4120 (bia aabb.cc00.4120)
   Description: ***Link to R2***
   Internet address is 172.16.14.1/30
   MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:16, output 00:00:07, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
     98 packets input, 20097 bytes, 0 no buffer
     Received 97 broadcasts (54 IP multicasts)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 input packets with dribble condition detected
     247 packets output, 25359 bytes, 0 underruns
     0 output errors, 0 collisions, 1 interface resets
     4 unknown protocol drops
     0 babbles, 0 late collision, 0 deferred
```

R1

```
        0 lost carrier, 0 no carrier
        0 output buffer failures, 0 output buffers swapped out
Ethernet0/3 is administratively down, line protocol is down
    Hardware is AudP2, address is aabb.cc00.4130 (bia aabb.cc00.4130)
    MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation ARPA, loopback not set
    Keepalive set (10 sec)
    ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
        0 packets input, 0 bytes, 0 no buffer
        Received 0 broadcasts (0 IP multicasts)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
        0 input packets with dribble condition detected
        0 packets output, 0 bytes, 0 underruns
        0 output errors, 0 collisions, 0 interface resets
        0 unknown protocol drops
        0 babbles, 0 late collision, 0 deferred
        0 lost carrier, 0 no carrier
        0 output buffer failures, 0 output buffers swapped out
NVI0 is up, line protocol is up
    Hardware is NVI
    Interface is unnumbered. Using address of Ethernet0/0 (209.165.201.1)
    MTU 1514 bytes, BW 56 Kbit/sec, DLY 5000 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation UNKNOWN, loopback not set
    Keepalive set (10 sec)
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
```

R1

```
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
        0 packets input, 0 bytes, 0 no buffer
        Received 0 broadcasts (0 IP multicasts)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
        0 packets output, 0 bytes, 0 underruns
        0 output errors, 0 collisions, 0 interface resets
        0 unknown protocol drops
        0 output buffer failures, 0 output buffers swapped out
R1#
R1# show ip interface brief
Interface       IP-Address      OK? Method  Status                  Protocol
Ethernet0/0     209.165.201.1   Yes NVRAM   up                      up
Ethernet0/1     172.16.16.1     Yes NVRAM   up                      up
Ethernet0/2     172.16.14.1     Yes NVRAM   up                      up
Ethernet0/3     unassigned      Yes NVRAM   administratively down   down
NVI0            209.165.201.1   Yes unset   up                      up
R1#
R1#
R1#show ip route
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 type 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
        + - replicated route, % - next hop override

Gateway of last resort is not set

        10.0.0.0/24 is subnetted, 1 subnets
R       10.10.10.0 [120/1] via 172.16.14.2, 00:00:20, Ethernet0/2
```

R1

```
        172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
R       172.16.11.0/30 [120/1] via 172.16.14.2, 00:00:20, Ethernet0/2
C       172.16.14.0/30 is directly connected, Ethernet 0/2
L       172.16.14.1/32 is directly connected, Ethernet 0/2
C       172.16.16.0/24 is directly connected, Ethernet 0/1
L       172.16.16.1/32 is directly connected, Ethernet 0/1
R       192.168.1.0/24 [120/1] via 172.16.14.2, 00:00:20, Ethernet0/2
R       192.168.100.0/24 [120/1] via 172.16.14.2, 00:00:20, Ethernet0/2
R       192.168.200.0/24 [120/1] via 172.16.14.2, 00:00:20, Ethernet0/2
        209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       209.165.201.0/27 is directly connected, Ethernet0/0
L       209.165.201.1/32 is directly connected, Ethernet0/0
R1#
R1#
```

R2

```
R2#show run
R2#show running-config
Building configuration…

Current configuration : 1505 bytes
!
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R2
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
clock timezone PST -8 0
nni polling-interval 60
no nni auto-configure
no nni pvc
nni snmp-timeout 180
!
!
!
!




!
!
!
!
ip cef
no ipv6 cef
!
```

R2

```
multilink bundle-name authenticated
!
!
!
!
!
!
!
!
redundancy
!
!
!
!
!
!
!
!
!
!
!
!
interface Ethernet0/0
   description ***Link to R3***
   ip address 172.16.11.1  255.255.255.252
!
interface Ethernet0/1
   no ip address
!
interface Ethernet0/1.1
   description ***Link to Management Segment***
   encapsulation dot1Q 1 native
   ip address 192.168.1.1  255.255.255.0
!
```

R2
```
interface Ethernet0/1.100
  description ***Link to Server1 Segment***
  encapsulation dot1Q 200
  ip address 192.168.100.1 255.255.255.0
!
interface Ethernet0/1.200
  description ***Link to Server2 Segment***
  encapsulation dot1Q 100
  ip address 192.168.200.1 255.255.255.0
!
interface Ethernet0/2
  description ***Link to R1***
  ip address 172.16.14.2 255.255.255.252
!
interface Ethernet0/3
  description ***Link to LAN***
  ip address 10.10.10.1 255.255.255.0
!
router rip
  version 2
  network 10.0.0.0
  network 172.16.0.0
  network 192.168.1.0
  network 192.168.100.0
  network 192.168.200.0
  no auto-summry
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
!
control-plane
!
!
```

R2
```
!
!
!
!
!
line con 0
  logging synchronous
line aux 0
line vty 0  4
  login
  transport input all
!
!
end
R2#show interfaces
Ethernet0/0 is up, line protocol is up
  Hardware is AudP2, address is aabb.cc00.4200 (bia aabb.cc00.4200)
  Description: ***Link to R3***
  Internet address is 172.16.11.1/30
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:32, output 00:00:08, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    50 packets input, 15683 bytes, 0 no buffer
    Received 50 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    343 packets output, 42566 bytes, 0 underruns
    0 output errors, 0 collisions, 1 interface resets
```

R 2

```
    2 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/1 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4210 (bia aabb.cc00.4210)
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:00, output 00:00:08, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 1000 bits/sec, 2 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    4632 packets input, 308536 bytes, 0 no buffer
    Received 4421 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    512 packets output, 73148 bytes, 0 underruns
    0 output errors, 0 collisions, 0 interface resets
    73 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/1.1 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4210 (bia aabb.cc00.4210)
  Description: ***Link to Management Segment***
  Internet address is 192.168.1.1/24
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation 802.1Q Virtual LAN, Vlan ID 1.
  ARP type: ARPA, ARP Timeout 04:00:00
  Keepalive set (10 sec)
```

R 2

```
Last clearing of ''show interface'' counters never
Ethernet0/1.100 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4210 (bia aabb.cc00.4210)
  Description: ***Link to Server Segment***
  Internet address is 192.168.100.1/24
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation 802.1Q Virtual LAN, Vlan ID 200.
  ARP type: ARPA, ARP Timeout 04:00:00
  Keepalive set (10 sec)
Last clearing of ''show interface'' counters never
Ethernet0/1.200 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4210 (bia aabb.cc00.4210)
  Description: ***Link to Server2 Segment***
  Internet address is 192.168.200.1/24
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation 802.1Q Virtual LAN, Vlan ID 100.
  ARP type: ARPA, ARP Timeout 04:00:00
  Keepalive set (10 sec)
Last clearing of ''show interface'' counters never
Ethernet0/2 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4220 (bia aabb.cc00.4220)
  Description: ***Link to R1***
  Internet address is 172.16.14.2/30
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:08, output 00:00:02, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
```

R2
```
    128 packets input, 21994 bytes, 0 no buffer
    Received 127 broadcasts (77 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    345 packets output, 39952 bytes, 0 underruns
    0 output errors, 0 collisions, 1 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/3 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4230 (bia aabb.cc00.4230)
  Description: ***Link to LAN***
  Internet address is 10.10.1/24
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    0 packets input, 0 bytes, 0 no buffer
    Received 0 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    344 packets output, 42752 bytes, 0 underruns
    0 output errors, 0 collisions, 6 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
```

R2
```
R2#
R2#
R2# show ip interface brief
Interface       IP-Address      OK?  Method   Status   Protocol
Ethernet0/0     172.16.11.1     Yes  NVRAM    up       up
Ethernet0/1     unassigned      Yes  NVRAM    up       up
Ethernet0/1.1   192.168.1.1     Yes  NVRAM    up       up
Ethernet0/1.100 192.168.100.1   Yes  NVRAM    up       up
Ethernet0/1.200 192.168.200.1   Yes  NVRAM    up       up
Ethernet0/2     172.16.14.2     Yes  NVRAM    up       up
Ethernet0/3     10.10.10.1      Yes  NVRAM    up       up

R2#
R2#
R2#show ip route
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 type 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, 1 – LISP
        + - replicated route, % - next hop override

Gateway of last resort is 172.16.14.1 to network 0.0.0.0

R*      0.0.0.0 [120/1] via 172.16.14.1, 00:00:23, Ethernet0/2
        10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.10.10.0/24 is directly connected, Ethernet 0/3
L       10.10.10.1/32 is directly connected, Ethernet 0/3
        172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
C       172.16.11.0/30 is directly connected, Ethernet 0/0
L       172.16.11.1/32 is directly connected, Ethernet 0/0
C       172.16.14.0/30 is directly connected, Ethernet 0/2
L       172.16.14.2/32 is directly connected, Ethernet 0/2
R       172.16.16.0/24 [120/1] via 172.16.14.1, 00:00:23, Ethernet0/2
        192.168.1.0/24 is variably subnetted, 2 subnets, 3 masks
```

R2
```
C       192.168.1.0/24 is directly connected, Ethernet 0/1.1
L       192.168.1.1/32 is directly connected, Ethernet 0/1.1
        192.168.100.0/24 is variably subnetted, 2 subnets, 3 masks
C       192.168.100.0/24 is directly connected, Ethernet 0/1.100
L       192.168.100.1/32 is directly connected, Ethernet 0/1.100
        192.168.200.0/24 is variably subnetted, 2 subnets, 3 masks
C       192.168.200.0/24 is directly connected, Ethernet 0/1.200
L       192.168.200.1/32 is directly connected, Ethernet 0/1.200
R2#
```

```
R3
R3#show run
R3#show running-config
Building configuration…

Current configuration : 913 bytes
!
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R3
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
clock timezone PST -8 0
nni polling-interval 60
no nni auto-configure
no nni pvc
nni snmp-timeout 180
!
!
!


!
!
!
!
ip cef
no ipv6 cef
!
```

```
R3
!
!
!
!
!
!
!
redundancy
!
!
!
!
!
!
!
!
!
!
interface Ethernet0/0
   description ***Link to LAN***
   ip address 10.10.12.1  255.255.255.252
!
interface Ethernet0/1
   description ***Link to R2***
   ip address 172.16.11.2  255.255.255.252
!
interface Ethernet0/2
   no ip address
   shutdown
!
interface Ethernet0/3
   no ip address
   shutdown
```

R3

```
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
!
!
!
control-plane
!
!
!
!
!
!
!
line con 0
    logging synchronous
line aux 0
line vty 0  4
    login
    transport input all
!
!
end
R3#show interfaces
Ethernet0/0 is up, line protocol is up
    Hardware is AmdP2, address is aabb.cc00.4300 (bia aabb.cc00.4300)
    Description: ***Link to LAN***
    Internet address is 10.10.12.1/24
    MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation ARPA, loopback not set
    Keepalive set (10 sec)
    ARP type: ARPA, ARP Timeout 04:00:00
```

R3

Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    0 packets input, 0 bytes, 0 no buffer
    Received 0 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    666 packets output, 71699 bytes, 0 underruns
    0 output errors, 0 collisions, 11 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/1 is up, line protocol is up
  Hardware is AmdP2, address is aabb.cc00.4310 (bia aabb.cc00.4310)
  Description: ***Link to R2***
  Internet address is 172.16.11.2/30
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:21, output 00:00:05, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    316 packets input, 74089 bytes, 0 no buffer
    Received 316 broadcasts (200 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored

R3

    0 input packets with dribble condition detected
    669 packets output, 71888 bytes, 0 underruns
    0 output errors, 0 collisions, 1 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/2 is administratively down, line protocol is down
  Hardware is AmdP2, address is aabb.cc00.4320 (bia aabb.cc00.4320)
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
 Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    0 packets input, 0 bytes, 0 no buffer
    Received 0 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 input packets with dribble condition detected
    0 packets output, 0 bytes, 0 underruns
    0 output errors, 0 collisions, 0 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier
    0 output buffer failures, 0 output buffers swapped out
Ethernet0/3 is administratively down, line protocol is down
  Hardware is AmdP2, address is aabb.cc00.4330 (bia aabb.cc00.4330)
  MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)

```
 R3
  ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output never, output hang never
Last clearing of ''show interface'' counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
     0 packets input, 0 bytes, 0 no buffer
     Received 0 broadcasts (0 IP multicasts)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 input packets with dribble condition detected
     0 packets output, 0 bytes, 0 underruns
     0 output errors, 0 collisions, 0 interface resets
     0 unknown protocol drops
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier
     0 output buffer failures, 0 output buffers swapped out
R3#
R3#
R3# show ip interface brief
Interface     IP-Address    OK?   Method    Status
Protocol
Ethernet0/0   10.10.12.1    Yes   NVRAM     up
up
Ethernet0/1   172.16.11.2   Yes   NVRAM     up
up
Ethernet0/2   unassigned    Yes   NVRAM     administratively down
down
Ethernet0/3   unassigned    Yes   NVRAM     administratively down
down
R3#
R3#
R3#show ip route
Codes : L – local, C – connected, S – static, R – RIP, M – mobile, B - BGP
        D – EIGRP, EX – EIGRP external, 0 – OSPF, IA – OSPF inter area
        N1 – OSPF NSSA external type 1, N2 – OSPF NSSA external type 2
```

```
 R3
     E1 – OSPF external type 1, E2 – OSPF external type 2
     i – IS-IS, su – IS-IS summary, LI – 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, 1 – LISP
     + - replicated route, % - next hop override

Gateway of last resort is not set

       10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C         10.10.12.0/24 is directly connected, Ethernet 0/0
L         10.10.12.1/32 is directly connected, Ethernet 0/0
       172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C         172.16.11.0/30 is directly connected, Ethernet 0/1
L         172.16.11.2/32 is directly connected, Ethernet 0/1
R3#
R3#
R3#
```
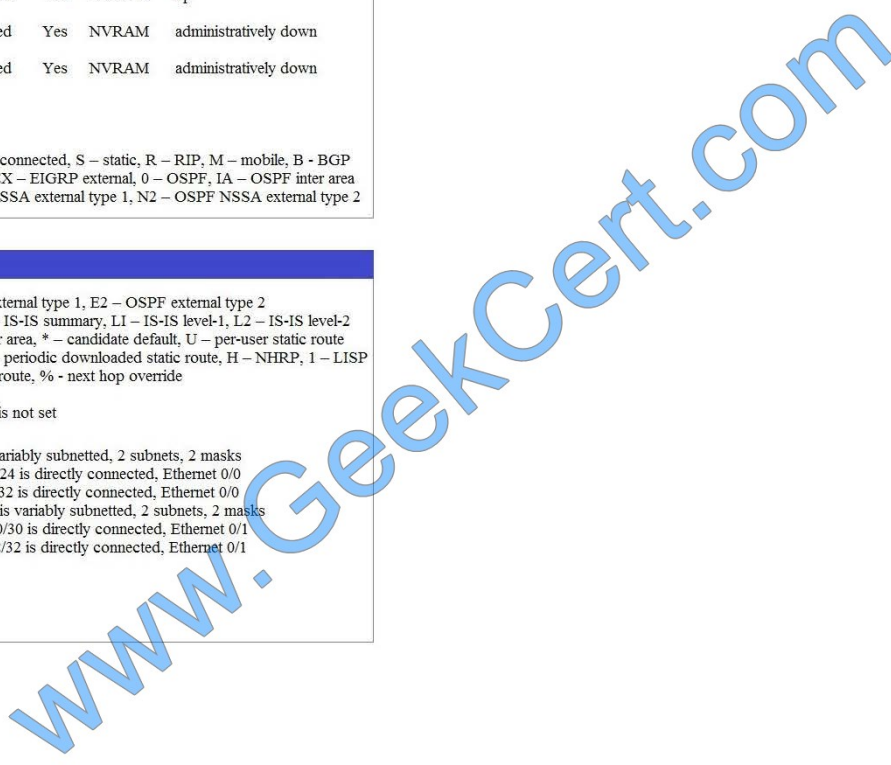
L2SW1

```
L2SW1#show run
L2SW1#show running-config
Building configuration…

Current configuration : 1074 bytes
!
version 15.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2SW1
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
clock timezone PST -8 0
!
ip cef
!
interface Vlan1
   ip address 192.168.1.254  255.255.255.0
!
ip default-gateway 192.168.1.1
!
no ip http server
!
!
!
!
control-plane
!
!
```

L2SW1

```
line con 0
   logging synchronous
line aux
line vty 0  4
   login
!
End
L2SW1#
L2SW1#
L2SW1#show interfaces
Ethernet0/0 is up, line protocol is up (connected)
!
interface Ethernet0/0
   description ***Link to R2***
   switchport trunk encapsulation dot1q
   switchport mode trunk
   duplex auto
!
interface Ethernet0/1
   description ***Link to Server1 segment***
   switchport access vlan 100
   switchport mode access
   duplex auto
!
interface Ethernet0/2
   description ***Link to Server2 segment***
   switchport access vlan 200
   switchport mode access
   duplex auto
!
interface Ethernet0/3
   duplex auto
!
interface Vlan1
   ip address 192.168.1.254  255.255.255.0
!
L2SW1#show interfaces
Ethernet0/0 is up, line protocol is up (connected)
```

L2SW1

Hardware is AmdP2, address is aabb.cc00.4500 (bia aabb.cc00.4500)
Description: ***Link to R2***
MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
   reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is unknown
input flow-control is off, output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:07, output 00:00:00, output hang never
Last clearing of ''show interface'' counters never
   Input queue: 12/2000/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/00 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 2 packets/sec
      1447 packets input, 208877 bytes, 0 no buffer
      Received 139 broadcasts (0 multicasts)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 input packets with dribble condition detected
      13457 packets output, 919293 bytes, 0 underruns
      0 output errors, 0 collisions, 0 interface resets
      0 unknown protocol drops
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier
      0 output buffer failures, 0 output buffers swapped out
Ethernet0/1 is up, line protocol is up (connected)
   Hardware is AmdP2, address is aabb.cc00.4510 (bia aabb.cc00.4510)
   Description: ***Link to Sercer1 segment***
   MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is unknown
   input flow-control is off, output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:07, output 00:00:01, output hang never

L2SW1

Last clearing of ''show interface'' counters never
   Input queue: 5/2000/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
   Output queue: 0/0 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
      755 packets input, 80219 bytes, 0 no buffer
      Received 123 broadcasts (0 multicasts)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 input packets with dribble condition detected
      3867 packets output, 268544 bytes, 0 underruns
      0 output errors, 0 collisions, 1 interface resets
      0 unknown protocol drops
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier
      0 output buffer failures, 0 output buffers swapped out
Ethernet0/2 is up, line protocol is up (connected)
   Hardware is AmdP2, address is aabb.cc00.4520 (bia aabb.cc00.4520)
   Description: ***Link to Sercer2 segment***
   MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is unknown
   input flow-control is off, output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:07, output 00:00:01, output hang never
Last clearing of ''show interface'' counters never
   Input queue: 5/2000/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
   Output queue: 0/0 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
      758 packets input, 81010 bytes, 0 no buffer
      Received 125 broadcasts (0 multicasts)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored

L2SW1

```
        0 input packets with dribble condition detected
        3867 packets output, 268544 bytes, 0 underruns
        0 output errors, 0 collisions, 0 interface resets
        0 unknown protocol drops
        0 babbles, 0 late collision, 0 deferred
        0 lost carrier, 0 no carrier
        0 output buffer failures, 0 output buffers swapped out
Ethernet0/3 is up, line protocol is up (connected)
        Hardware is AmdP2, address is aabb.cc00.4530 (bia aabb.cc00.4530)
        MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
          reliability 255/255, txload 1/255, rxload 1/255
        Encapsulation ARPA, loopback not set
        Keepalive set (10 sec)
        Auto-duplex, Auto-speed, media type is unknown
        input flow-control is off, output flow-control is unsupported
        ARP type: ARPA, ARP Timeout 04:00:00
        Last input never, output never, output hang never
        Last clearing of ''show interface'' counters never
        Input queue: 0/2000/0/0 (size/max/drops/flushes); Total output drops: 0
        Queueing strategy: fifo
        Output queue: 0/0 (size/max)
        5 minute input rate 0 bits/sec, 0 packets/sec
        5 minute output rate 0 bits/sec, 0 packets/sec
          0 packets input, 0 bytes, 0 no buffer
          Received 0 broadcasts (0 multicasts)
          0 runts, 0 giants, 0 throttles
          0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
          0 input packets with dribble condition detected
          3566 packets output, 252186 bytes, 0 underruns
          0 output errors, 0 collisions, 55 interface resets
          0 unknown protocol drops
          0 babbles, 0 late collision, 0 deferred
          0 lost carrier, 0 no carrier
          0 output buffer failures, 0 output buffers swapped out
Vlan1 is up, line protocol is up
        Hardware is Ethernet SVI, address is aabb.cc80.4500 (bia aabb.cc80.4500)
        Internet address is 192.168.1.254/24
```

L2SW1

```
        MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
          reliability 255/255, txload 1/255, rxload 1/255
        Encapsulation ARPA, loopback not set
        Keepalive not supported
        ARP type: ARPA, ARP Timeout 04:00:00
        Last input 00:00:12, output never, output hang never
        Last clearing of ''show interface'' counters never
        Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
        Queueing strategy: fifo
        Output queue: 0/40 (size/max)
        5 minute input rate 0 bits/sec, 0 packets/sec
        5 minute output rate 0 bits/sec, 0 packets/sec
          235 packets input, 42480 bytes, 0 no buffer
          Received 235 broadcasts (0 IP multicasts)
          0 runts, 0 giants, 0 throttles
          0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
          11 packets output, 830 bytes, 0 underruns
          0 output errors, 0 interface resets
          0 unknown protocol drops
          0 output buffer failures, 0 output buffers swapped out
L2SW1#
L2SW1#
L2SW1# show ip interface brief
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
Vlan1          192.168.1.254   Yes   NVRAM    up        up
L2SW1#
L2SW1#
L2SW1#show ip route
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 type 2
        E1 – OSPF external type 1, E2 – OSPF external type 2
        i – IS-IS, su – IS-IS summary, LI – IS-IS level-1, L2 – IS-IS level-2
        ia – IS-IS inter area, * – candidate default, U – per-user static route
```

L2SW1

o – ODR, P – periodic downloaded static route, H – NHRP, 1 – LISP
+ - replicated route, % - next hop override

Gateway of last resort is not set

192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C   192.168.1.0/24 is directly connected, Vlan1
L   192.168.1.254/32 is directly connected, Vlan1
L2SW1#
L2SW1#
L2SW1#

What is the correct statement below after examining the R1 routing table?

A. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses static route instead RIPv2 because the static route AD that is configured is less than the AD of RIPv2

B. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses RIPv2 instead static route because the static route AD that is configured is higher than the AD of RIPv2

C. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses static route instead RIPv2 But the traffic is forwarded to the ISP instead of the internal network.

D. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses RIPv2 instead static route because the static route AD that is configured is 255

Correct Answer: B

Surely we have to use the "show ip route" command to check the R1 routing table.

```
R1#show ip route
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 type 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

Gateway of last resort is not set

        10.0.0.0/24 is subnetted, 1 subnets
R       10.10.10.0 [120/1] via 172.16.14.2, 00:00:06, Ethernet0/2
        172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
R       172.16.11.0/30 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
C       172.16.14.0/30 is directly connected, Ethernet0/2
L       172.16.14.1/32 is directly connected, Ethernet0/2
C       172.16.16.0/24 is directly connected, Ethernet0/1
L       172.16.16.1/32 is directly connected, Ethernet0/1
R     192.168.100.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
R     192.168.200.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
        209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       209.165.201.0/27 is directly connected, Ethernet0/0
L       209.165.201.1/32 is directly connected, Ethernet0/0
```

As we see here, 10.10.10/24 is learned from RIP. Notice that although there is a static route on R1 to this destination (you can check with the "show running-config" on R1 to see the line "ip route 10.10.10.0 255. 255.255.0 172.16.14.2 200"), this static route is not installed to the routing table because it is not the best path because the Administrative Distance (AD) of this static route is 200 while the AD of RIP is 120 -> R1 chose the path with lowest AD so it chose path advertised via RIP.

QUESTION 2

DRAG DROP

Drag and drop the Ethernet types from the left onto the correct service descriptions on the right.

Select and Place:

100Base-FX	provides 100 Mbps over copper segments up to 100 100 meters long
100Base-TX	provides 100 Mbps over fiber segments up to 412 meters long
1000Base-LX	provides 10 Gbps over copper segments up to 100 meters long
1000Base-SX	provides 1 Gbps over fiber segments up to 550 meters long
1000Base-T	provides 1 Gbps over fiber segments up to 10 kilometers long
10GBase-T	provides 1 Gbps over copper segments up to 100 meters long

Correct Answer:

	100Base-TX
	100Base-FX
	10GBase-T
	1000Base-SX
	1000Base-LX
	1000Base-T

QUESTION 3

Which protocol verifies connectivity between two switches that are configured with IP addresses in the same network?

A. ICMP
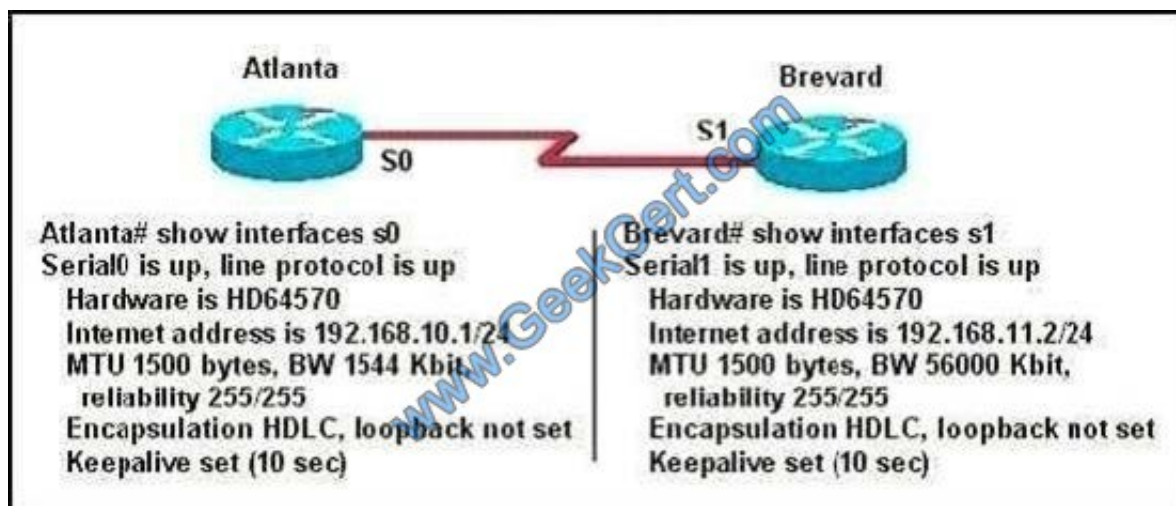
B. STP

C. VTP

D. HSRP

Correct Answer: A

QUESTION 4

When you configure router# ipnat pool 10.10.10.1 10.10.10.20 255.255.255.0

A. nat pool

B. dynamic nat

C. nat translation

D. dhcp pool

Correct Answer: B

QUESTION 5

Two routers named Atlanta and Brevard are connected by their serial interfaces as shown in the exhibit, but there is no data connectivity between them. The Atlanta router is known to have a correct configuration.

Atlanta
S0

Brevard
S1

Atlanta# show interfaces s0
Serial0 is up, line protocol is up
  Hardware is HD64570
  Internet address is 192.168.10.1/24
  MTU 1500 bytes, BW 1544 Kbit,
    reliability 255/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)

Brevard# show interfaces s1
Serial1 is up, line protocol is up
  Hardware is HD64570
  Internet address is 192.168.11.2/24
  MTU 1500 bytes, BW 56000 Kbit,
    reliability 255/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)

Given the partial configurations shown in the exhibit, what is the problem on the Brevard router that is causing the lack of connectivity?

A. A loopback is not set.

B. The IP address is incorrect.

C. The subnet mask is incorrect.

D. The serial line encapsulations are incompatible.

E. The maximum transmission unit (MTU) size is too large.

F. The bandwidth setting is incompatible with the connected interface.

Correct Answer: B

To Read the Whole Q&As, please purchase the Complete Version from Our website.

Try our product !
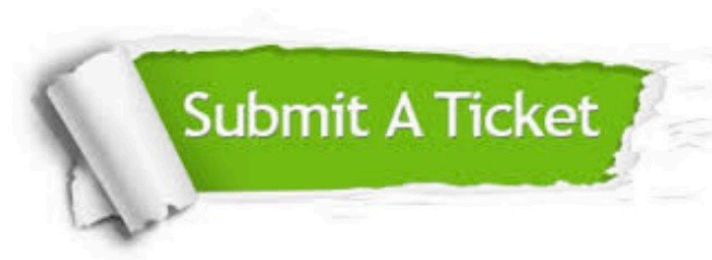
100% Guaranteed Success
100% Money Back Guarantee
365 Days Free Update
Instant Download After Purchase
24x7 Customer Support
Average 99.9% Success Rate
More than 800,000 Satisfied Customers Worldwide
Multi-Platform capabilities - Windows, Mac, Android, iPhone, iPod, iPad, Kindle

We provide exam PDF and VCE of Cisco, Microsoft, IBM, CompTIA, Oracle and other IT Certifications.
You can view Vendor list of All Certification Exams offered:

https://www.geekcert.com/allproducts

Need Help

Please provide as much detail as possible so we can best assist you.
To update a previously submitted ticket:

One Year Free Update
Free update is available within One Year after your purchase. After One Year, you will get 50% discounts for updating. And we are proud to boast a 24/7 efficient Customer Support system via Email.

Money Back Guarantee
To ensure that you are spending on quality products, we provide 100% money back guarantee for 30 days from the date of purchase.

Security & Privacy
We respect customer privacy. We use McAfee's security service to provide you with utmost security for your personal information & peace of mind.