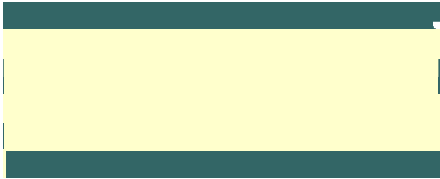
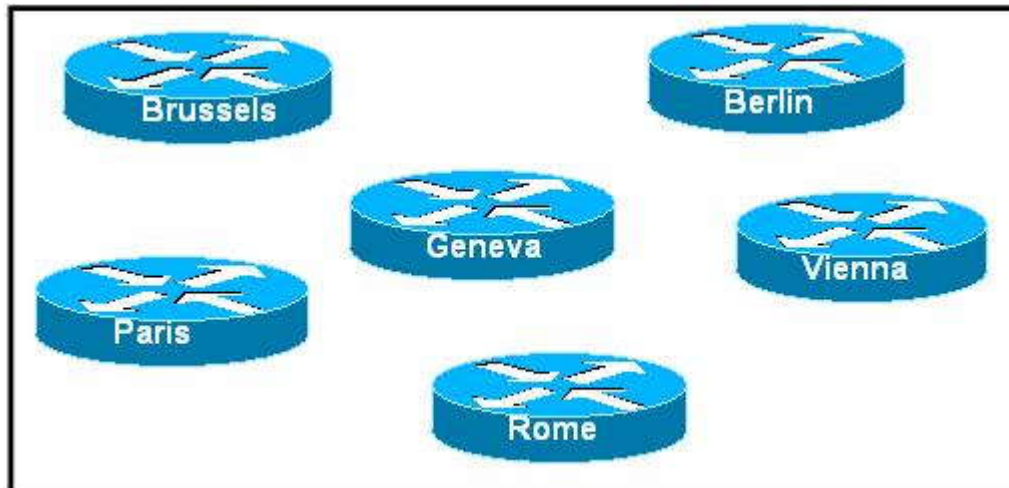


Take Assessment - EWAN Chapter 3 - CCNA Exploration: Accessing the WAN (Version 4.0)



- 1 Which best describes the benefit of using Frame Relay as opposed to a leased line or ISDN service?
- Customers can define their virtual circuit needs in far greater combinations, with increments as small as 64 kbps.
 - Customers pay for an end-to-end connection that includes the local loop and the network link.
 - Customers only pay for the local loop and the bandwidth they purchase from the network provider.
 - Connecting new sites requires new lower cost circuit installations when compared to ISDN dialup costs or adding additional hardware for leased service.

2



Refer to the exhibit. All of the locations are going to be connected by a new WAN solution. If Frame Relay is selected as the solution, how many physical circuits are required to create a Frame mesh topology?

● 6

- ☐ 15
 - ☐ 30
 - ☐ none
-

3

```
Router# show frame-relay map
Serial1/2 (up): ip 172.16.1.4 dlcI 401(0x191,0x6410),
               dynamic, broadcast, status defined, active
```

Refer to the exhibit. Which two statements are true given the output shown? (Choose two.)

- ☐ The IP address of the local Frame Relay interface is 172.16.1.4.
 - ☐ The local DLCI number is 401.
 - ☐ Inverse ARP is being used on this connection.
 - ☐ This interface is in the active state and in the process of negotiating configuration parameters.
 - ☐ Multicast is not enabled on this connection.
-

4 Which two extensions are defined as part of the Frame Relay Local Management Interface? (Choose two.)

- ☐ Inverse ARP
 - ☐ multicasting
 - ☐ locally significant DLCIs
 - ☐ global addressing
 - ☐ DLCI to IP address mapping
-

5 Which Frame Relay topology is a compromise of costs, reliability, and complexity when the WAN contains one headquarters site, 40

regional sites, and several sites within each regional site?

- ☒ star
 - ☒ full mesh
 - ☒ partial mesh
 - ☒ point-to-multipoint
 - ☒ point-to-point
-

6 What two methods does Frame Relay technology use to process frames that contain errors? (Choose two.)

- ☒ Frame Relay services depend on the upper layer protocols to handle error recovery.
 - ☐ It requires the receiving device to request that the sender retransmit erroneous frames.
 - ☐ FECN, BECN, and DE bits are set in the frames to minimize errors.
 - ☒ The receiving device drops any frames that contain errors without notifying the sender.
 - ☐ The frame relay switch notifies the sender that errors were detected.
-

7

```
interface Serial0/0.110 point-to-point
ip address 10.1.1.1 255.255.255.252
bandwidth 64
frame-relay interface-dlci 110
```

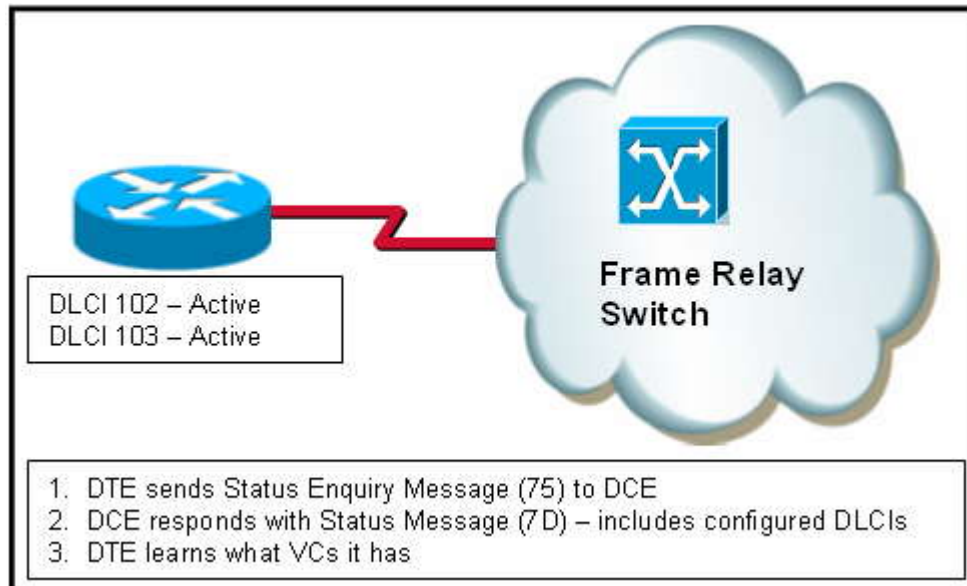
Refer to the exhibit. What effect does the point-to-point configuration on subinterface S0/0.110 have on the operation of the router?

- ☒ It helps to conserve IP addresses.
 - ☒ It establishes multiple PVC connections to multiple physical interfaces.
 - ☒ It eliminates split horizon issues without increasing the likelihood of routing loops.
 - ☒ It requires the configuration of the **encapsulation** command on the subinterface.
-

8 What is created between two DTEs in a Frame Relay network?

- switched parallel circuit
- permanent virtual circuit
- limited access circuit
- ISDN circuit
- Frame Relay circuit

9



Refer to the exhibit. Which part of the Frame Relay capability is shown?

- Frame Relay can determine the local DLCI using the LMI.
- Frame Relay learns the local frame switch port and destination DLCI via Inverse ARP.
- Each router uses the local DLCI specified in the Frame Relay map to query the LMI for the destination DLCI.
- Each router uses the LMI to determine the destination DLCI and maps that destination to an IP address either manually via the

Frame Relay map or automatically via Inverse ARP.

10

PVC Statistics for interface Serial0 (Frame Relay DTE)				
	Active	Inactive	Deleted	Static
Local	1	0	0	0
Switched	0	0	0	0
Unused	0	0	0	0

DLCI = 100, DLCI USAGE = LOCAL, PVC STATUS = ACTIVE, INTERFACE = Serial0

input pkts 1300 output pkts 1270 in bytes 22121000
out bytes 21802000 dropped pkts 4 in FECN pkts 147
in BECN pkts 192 out FECN pkts 259 out BECN pkts 214
in DE pkts 12 out DE pkts 34
out bcast pkts 107 out bcast bytes 19722
pvc create time 00:25:50, last time pvc status changed 00:25:40

Refer to the exhibit. What can be determined about the Frame Relay switch from the output shown?

- ☒ It is currently not transmitting data.
 - ☐ It is in the process of establishing the PVC.
 - ☐ It has put a hold on processing frames in excess of the CIR.
 - ☒ It is experiencing congestion.
-

11 Which three actions does a Frame Relay switch perform when it detects an excessive build-up of frames in its queue? (Choose three.)

- ☐ puts a hold on accepting frames in excess of the CIR
- ☒ drops frames from the queue that have the DE bit set
- ☐ reduces the number of frames it sends over the link

- ☐ re-negotiates flow control with the connected device
 - ☐ sets the FECN bit on all frames it receives on the congested link
 - ☐ sets the BECN bit on all frames it places on the congested link
-

12 Which two statements regarding multipoint subinterfaces are true? (Choose two.)

- ☐ A single multipoint subinterface is used to establish PVC connections to multiple physical interfaces on remote routers.
 - ☐ Each multipoint link is in its own subnet.
 - ☐ The physical interface does not have an IP address.
 - ☐ Split-horizon is disabled allowing routing updates to be re-transmitted on every subinterface.
 - ☐ Multipoint subinterfaces require the **encapsulation frame-relay** command to be issued individually for each subinterface to operate correctly.
-

13 Which statement describes parallel data communications?

- ☒ Digital data is broken into 8-bit chunks (bytes) and transmitted from one entity to another bit by bit.
 - ☒ Digital data that is transmitted over a parallel connection is not affected by clock skew or crosstalk.
 - ☒ Digital data is transmitted from one entity to another via the use of a bus that consists of multiple wires, each carrying one bit of the data sample.
 - ☒ Digital data is transmitted via the use of two loops of wire, one in each direction.
-

14 Which two outcomes occur when the **frame-relay map ip 10.1.1.1 22** command is configured on the router? (Choose two.)

- ☐ DLCI 22 will replace the MAC address in the ARP table for entry 10.1.1.1
 - ☐ The remote circuit with DLCI 22 can receive a ping.
 - ☐ Inverse-ARP will be used to add an entry for 10.1.1.1 into the Frame Relay map table using DLCI 22.
 - ☐ Pings to 10.1.1.1 will be sent on the circuit labeled DLCI 22.
 - ☐ The router will use DLCI 22 to forward data to 10.1.1.1.
-

15

```
Singapore# sh int S0/0
Serial0/0 is up, line protocol is down
Hardware is PowerQUICC Serial
Internet Address is 192.168.192.4/24
MTU 1500 bytes, B/W 128 Kbit, DLY 20000 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation FRAME-RELAY, loopback not set
Keepalive set (10 sec)
LMI enq sent 43, LMI stat  recvd 0, LMI upd recvd 0, DTE LMI down
LMI eng recvd 0, LMI stat sent 0, LMI upd sent 0
LMI DLCI 0 LMI type is ANSI ANNEX D framerelay DTE
Broadcast queue 0/64, broadcasts sent/dropped 12/0, interface broadcast 8
Last input 00:00:01, output hang never
Last clearing of "show interface" counters 00:07:13
<output text omitted>
```

Refer to the exhibit. When troubleshooting a Frame Relay connection, an administrator entered the **show interfaces s0/0** command and received the output shown in the exhibit. What are two probable reasons for this problem? (Choose two.)

- ☐ The cable between the CSU/DSU and the router is disconnected.
- ☐ The serial 0/0 interface is shutdown.
- ☐ The router is not configured for the same Frame Relay PVC as the switch.
- ☐ The LMI type on the Frame Relay switch is NOT ANSI.
- ☐ The address of the Frame Relay switch is not in the routing table.

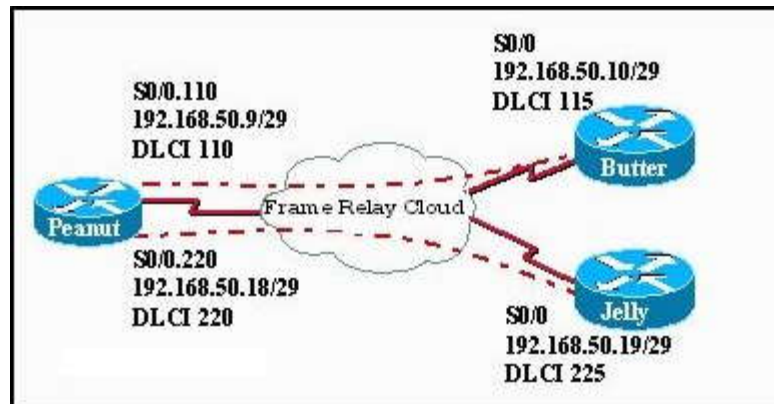
16 Which two items allow the router to map data link layer addresses to network layer addresses in a Frame Relay network? (Choose two.)

- ☐ ARP
 - ☐ RARP
 - ☐ Proxy ARP
 - ☐ **Inverse ARP**
 - ☐ **LMI status messages**
 - ☐ ICMP
-

17 What best describes the use of a data-link connection identifier (DLCI)?

- ☒ local address identifying a destination router across a Frame Relay network
 - ☒ **locally significant address used to identify a virtual circuit**
 - ☐ logical address identifying the interface between a router and a Frame Relay switch
 - ☐ logical address used to identify the DCE
-

18

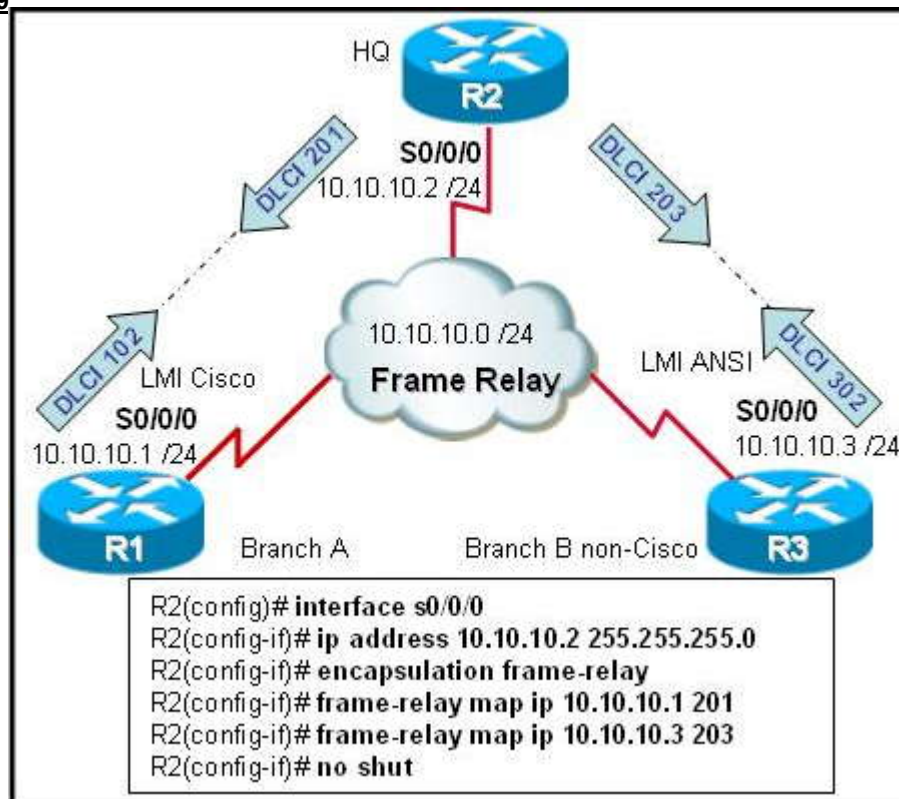


Refer to the exhibit. A ping is sent to address 192.168.50.10 from the Peanut router. Which DLCI will be used to send the ping?

- ☒ **110**

- 115
- 220
- 225

19



Refer to the exhibit. Router R2 is part of a Frame Relay network that uses OSPF for IP routing. After the commands that are shown are entered, R2 will not exchange OSPF information correctly. What is the likely cause?

- The **frame-relay map** command requires the **broadcast** keyword.
- The DLCIs on each end of the PVCs are not identical.

- The R2 S0/0/0 interface has not been brought online.
- The LMI or Inverse ARP or both are not working.

20

Singapore#show frame-relay pvc

PVC Statistics for interface Serial0/0 (Frame Relay DTE)

	Active	Inactive	Deleted	Static
Local	1	0	0	0
Switched	0	0	0	0
Unused	0	1	0	0

DLCI = 16, DLCI USAGE = UNUSED, PVC STATUS = INACTIVE, INTERFACE = Serial0/0

input pkts 0	output pkts 0	in bytes 0
out bytes 0	dropped pkts 0	in FECN pkts 0
in BECN pkts 0	out FECN pkts 0	out BECN pkts 0
in DE pkts 0	out DE pkts 0	
out bcast pkts 0	out bcast bytes 0	Num Pkts Switched 0

pvc create time 00:05:01, last time pvc status changed 00:05:01

DLCI = 18, DLCI USAGE = LOCAL, PVC STATUS = ACTIVE, INTERFACE = Serial0/0

input pkts 32	output pkts 33	in bytes 3711
out bytes 4024	dropped pkts 0	in FECN pkts 0
in BECN pkts 0	out FECN pkts 0	out BECN pkts 0
in DE pkts 0	out DE pkts 0	
out bcast pkts 8	out bcast bytes 1424	

pvc create time 00:05:07, last time pvc status changed 00:04:07

Refer to the exhibit. What three items can be concluded from the output shown in the exhibit? (Choose three.)

- ☐ The output in the **debug frame-relay lmi** command will indicate status 0x2 for DLCI 18.

- ☐ DLCI 16 was correctly programmed on the switch, but the remote router may be misconfigured.
 - ☐ The frame relay switch is sending LMI status messages about DLCI 16 to the Singapore router.
 - ☐ Congestion has been experienced on DLCI 16.
 - ☐ Congestion has been experienced on DLCI 18.
 - ☐ Some packets have been set to be dropped if congestion is experienced on the PVC.
-