Take Assessment - EWAN Final Exam - CCNA Exploration:
Accessing the WAN (Version 4.0)

1   What will be the result of adding the command **ip dhcp excluded-address 172.16.4.1 172.16.**
the configuration of a local router that has been configured as a DHCP server?

- ○ Traffic that is destined for 172.16.4.1 and 172.16.4.5 will be dropped by the router.
- ○ Traffic will not be routed from clients with addresses between 172.16.4.1 and 172.16.4.5.
- ◉ The DHCP server function of the router will not issue the addresses between 172.16.4.1 an
  172.16.4.5.
- ○ The router will ignore all traffic that comes from the DHCP servers with addresses 172.16.4
  172.16.4.5.

2

Refer to the exhibit. Partial results of the **show access-lists** and **show ip interface FastEther**
commands for router R3 are shown. There are no other ACLs in effect. Host A is unable to teln
host B. Which action will correct the problem but still restrict other traffic between the two netwo

- ○ Apply the ACL in the inbound direction.
- ○ Apply the ACL on the FastEthernet 0/0 interface.
- ◉ Reverse the order of the TCP protocol statements in the ACL.
- ○ Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

3

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is
functioning correctly. What could be the problem?

- ○ The username and password are not configured correctly.
- ○ The authentication method is not configured correctly.
- ○ The HTTP timeout policy is not configured correctly.
- ◉ The vtys are not configured correctly.

4

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the DC office of ABC Company to the Orlando office?

- ☐ MAC address of the Orlando router
- ☐ MAC address of the DC router
- ☉ 192.168.1.25
- ☐ 192.168.1.26
- ☐ DLCI 100
- ☐ DLCI 200

5   A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

- ☐ The router forwards the frame to all ports in the network and learns the address from the re frame.
- ☐ The destination host IP address is embedded in the DLCI.
- ☑ The router searches Inverse ARP tables for maps of DLCIs to IP addresses.
- ☑ A table of static mappings can be searched.
- ☐ The router broadcasts a request for the required IP address.

6

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in th exhibit. Why are the routers unable to establish a PPP session?

- ☐ The clock rate must be 56000.
- ☉ The usernames are misconfigured.
- ☐ The IP addresses are on different subnets.
- ☐ The clock rate is configured on the wrong end of the link.
- ☐ The CHAP passwords must be different on the two routers.
- ☐ Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

7

Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and F not receive RIP routing updates. On the basis of the provided configuration, what should be en on router R2 to remedy the problem?

- ☐ proxy ARP

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☐ CDP updates
- ☐ SNMP services
- ◉ RIP authentication

8 Which wireless solution can provide mobile users with non line-of-sight broadband Internet acc
at speeds comparable to DSL or cable?

- ☐ Wi-Fi
- ☐ WiMAX
- ◉ satellite
- ☐ Metro Ethernet

9

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP req
entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?

- ☐ It matches the incoming packet to the **access-list 201 permit any any** statement and all
  packet into the router.
- ☐ It reaches the end of ACL 101 without matching a condition and drops the packet because
  is no **access-list 101 permit any any** statement.
- ◉ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.25**
  statement, ignores the remaining statements in ACL 101, and allows the packet into the r
- ☐ It matches the incoming packet to the access-list 201 deny icmp 192.168.1.0 0.0.0.255 ar
  statement, continues comparing the packet to the remaining statements in ACL 201 to en
  that no subsequent statements allow FTP, and then drops the packet.

10

Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IET
encapsulation. After the commands shown are entered, R2 and R3 fail to establish the PVC.
LMI is Cisco, and the R3 LMI is ANSI. The LMI is successfully established at both locations. V
the PVC failing?

- ☐ The PVC to R3 must be point-to-point.
- ☐ LMI types must match on each end of a PVC.
- ◉ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.
- ☐ The PVCs at R2 use different encapsulation types. A single port can only support one
  encapsulation type.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

11

Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A
sent a packet to the web server. What is the destination IP address of the return packet from
web server?

- ☐ 10.1.1.2:1234
- ☐ 172.30.20.1:1234
- ☑ 172.30.20.1:3333
- ☐ 192.168.1.2:80

12 When configuring a Frame Relay connection, what are two instances when a static Frame Re
map should be used? (Choose two.)

- ☐ when the remote router is a non-Cisco router
- ☑ when the remote router does not support Inverse ARP
- ☐ when the local router is using IOS Release 11.1 or earlier
- ☑ when broadcast traffic and multicast traffic over the PVC must be controlled
- ☐ when globally significant rather than locally significant DLCIs are being used

13 Which two statements are true about IPv6? (Choose two.)

- ☑ Security options are build into IPv6.
- ☐ IPv6 addresses require less router overhead to process.
- ☐ IPv6 can only be configured on an interface that does not have IPv4 on it.
- ☐ There is no way to translate between IPv4 addresses and IPv6 addresses.
- ☑ When enabled on a router, IPv6 can automatically configure link-local IPv6 addresses on
  interfaces.

14

Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat**
command?

- ☐ The 10.1.1.225 host is exchanging packets with the 192.168.0.10 host.
- ☐ The native 10.1.200.254 address is being translated to 192.168.0.10.
- ☑ The 192.168.0.0/24 network is the inside network.
- ☐ Port address translation is in effect.

15

Refer to the exhibit. Company ABC expanded its business and recently opened a new branch of
another country. IPv6 addresses have been used for the company network. The data servers Se
Server2 run applications which require end-to-end functionality, with unmodified packets that are
forwarded from the source to the destination. The edge routers R1 and R2 support dual stack
configuration. What solution should be deployed at the edge of the company network in order to
successfully interconnect both offices?

☐ a new WAN service supporting only IPv6

☐ NAT overload to map inside IPv6 addresses to outside IPv4 address

☑ a manually configured IPv6 tunnel between the edge routers R1 and R2

☐ static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dyna
for the rest of the inside IPv6 addresses

Time Remaining: | 00:46:20 |

16

Refer to the exhibit. How is the TCP/IP configuration information specified by the **default-r
dns-server** commands made available?

☐ The TCP/IP information is forwarded to a 10.0.1.3 to be supplied to DHCP clients.

☐ The TCP/IP information is used by DHCP clients that are configured to request a config
from R1.

☑ The TCP/IP information is supplied to any DHCP client on the network connected to the
FastEthernet 0/0 interface of R1.

☐ The TCP/IP information is applied to each packet that enters R1 through the FastEthern
interface that are hosts on the 10.0.1.0 /24 network except packets from addresses 10.
10.0.1.16, and 10.0.1.254.

17

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this
server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no add
for 192.168.1.1". What is the problem?

☐ The 192.168.1.1 address has not been excluded from the DHCP pool.

☑ The pool of addresses for the 192Network pool is incorrect.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ The default router for the 192Network pool is incorrect.

☐ The 192.168.1.1 address is already configured on Fa0/0.

18 An administrator is configuring a dual stack router with IPv6 and IPv4 using RIPng. The administrator receives an error message when trying to enter the IPv4 routes into RIPng. W cause of the problem?

☐ RIPng is incompatible with dual-stack technology.

☐ All interfaces have been configured with the incorrect IPv4 addresses.

◉ RIPv1 or RIPv2 needs to be configured in addition to RIPng to successfully use IPv4.

☐ When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut favor of the newer technology.

19 A network administrator added two switches and a new VLAN over the past weekend. How administrator determine if the additions and changes improved performance and availability company intranet?

◉ Perform a baseline test and compare the current values to values that were obtained in weeks.

☐ Interview departmental secretaries and determine if they think load time for web pages improved.

☐ Compare the hit counts on the company web server for the current week to the values recorded from previous weeks.

☐ Performance on the intranet can be determined by monitoring load times of company w from remote sites.

20

Refer to the exhibit. A network administrator has issued the commands that are shown on and Router2. A later review of the routing tables reveals that neither router is learning the L network of the neighbor router. What is most likely the problem with the RIPng configuratio

☐ The serial interfaces are in different subnets.

◉ The RIPng process is not enabled on interfaces.

☐ The RIPng network command is not configured.

☐ The RIPng processes do not match between Router1 and Router2.

21 What three statements describe the roles of devices in a WAN? (Choose three.)

☑ A CSU/DSU terminates a digital local loop.

☐ A modem terminates a digital local loop.

☐ A CSU/DSU terminates an analog local loop.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☑ A modem terminates an analog local loop.

☑ A router is commonly considered a DTE device.

☐ A router is commonly considered a DCE device.

22 A technician has been asked to run Cisco SDM one-step lockdown on the router of a custo
What will be the result of this process?

○ Traffic is only forwarded from SDM-trusted Cisco routers.

○ Security testing is performed and the results are saved as a text file stored in NVRAM.

◉ The router is tested for potential security problems and any necessary changes are ma

○ All traffic entering the router is quarantined and checked for viruses before being forwar

23 At what physical location does the responsibilty for a WAN connection change from the use
service provider?

○ demilitarized zone (DMZ)

◉ demarcation point

○ local loop

○ cloud

24 Which three statements accurately describe a security policy? (Choose three.)

☑ It creates a basis for legal action if necessary.

☑ It defines a process for managing security violations.

☐ It defines acceptable and unacceptable use of network resources.

☐ The remote access policy is a component of the security policy that governs acceptable
mail systems.

☐ It is kept private from users to prevent the possibility of circumventing security measure

☑ It provides step-by-step procedures to harden routers and other network devices.

25 An administrator is unable to receive e-mail. While troubleshooting the problem, the admini
able to ping the local mail server IP address successfully from a remote network and can
successfully resolve the mail server name to an IP address via the use of the **nslookup** co
At what OSI layer is the problem most likely to be found?

○ physical layer

○ data link layer

○ network layer

◉ application layer

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

26

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands show
an ACL called Managers already exists on the router?

- ☐ The commands overwrite the existing Managers ACL.
- ☉ The commands are added at the end of the existing Managers ACL.
- ☐ The network administrator receives an error stating that the ACL already exists.
- ☐ The commands will create a duplicate Managers ACL containing only the new commar
  entered.

27 Which three statements are true about creating and applying access lists? (Choose three.)

- ☐ Access list entries should filter in the order from general to specific.
- ☑ One access list per port per protocol per direction is permitted.
- ☐ Standard ACLs should be applied closest to the source while extended ACLs should be
  closest to the destination.
- ☑ There is an implicit deny at the end of all access lists.
- ☑ Statements are processed sequentially from top to bottom until a match is found.
- ☐ The **inbound** keyword refers to traffic entering the network from the router interface wh
  ACL is applied.

28

Refer to the exhibit. From the output of the **show interface** commands, at which OSI layer
indicated?

- ☐ application
- ☐ transport
- ☐ network
- ☉ data link
- ☐ physical

29 Which combination of Layer 2 protocol and authentication should be used to establish a lin
sending authentication information in plain text between a Cisco and a non-Cisco router?

- ☐ PPP with PAP
- ☉ PPP with CHAP

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ HDLC with PAP

☐ HDLC with CHAP

30

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a network problem. What two conclusions can be determined by from the ou shown? (Choose two.)

☑ The bandwidth has been set to the value of a T1 line.

☐ Encapsulation should of this inteface be changed to PPP.

☑ There is no failure indicated in an OSI Layer 1 or Layer 2.

☐ The physical connection between the two routers has failed.

☐ The IP address of S0/0 is invalid, given the subnet mask being used.

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 00:45:47

Showing 3 of 4   Next>   Page: | 3 | GO   <Prev

31 What are two main components of data confidentiality? (Choose two.)

☐ checksum

☐ digital certificates

☑ encapsulation

☑ encryption

☐ hashing

32 Which statement is true regarding wildcard masks?

☐ The wildcard mask and subnet mask perform the same function.

☐ The wildcard mask is always the inverse of the subnet mask.

◉ A "0" in the wildcard mask identifies IP address bits that must be checked.

☐ A "1" in the wildcard mask identifies a network or subnet bit.

33

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. The network administrator creates a standard access control list to prohib traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction sh be applied?

- ☐ interface fa0/0/0, inbound
- ☐ interface fa0/0/0, outbound
- ☐ interface fa0/0/1, inbound
- ◉ interface fa0/0/1, outbound

34 Which three guidelines would help contribute to creating a strong password policy? (Choose t

- ☐ Once a good password is created, do not change it.
- ☐ Deliberately misspell words when creating passwords.
- ☑ Create passwords that are at least 8 characters in length.
- ☑ Use combinations of upper case, lower case, and special characters.
- ☑ Write passwords in locations that can be easily retrieved to avoid being locked out.
- ☐ Use long words found in the dictionary to make passwords that are easy to remember.

35 What is a major characteristic of a worm?

- ☐ malicious software that copies itself into other executable programs
- ☐ tricks users into running the infected software
- ☐ a set of computer instructions that lies dormant until triggered by a specific event
- ◉ exploits vulnerabilities with the intent of propagating itself across a network

36 A system administrator must provide Internet connectivity for ten hosts in a small remote offic ISP has assigned two public IP addresses to this remote office. How can the system administ configure the router to provide Internet access to all ten users at the same time?

- ☐ Configure DHCP and static NAT.
- ☐ Configure dynamic NAT for ten users.
- ☐ Configure static NAT for all ten users.
- ◉ Configure dynamic NAT with overload.

37 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☐ exchange information about the status of virtual circuits
- ☑ map DLCIs to network addresses
- ☑ provide flow control
- ☐ provide error notification
- ☐ provide congestion notification
- ☑ send keepalive packets to verify operation of the PVC

38A technician is talking to a colleague at a rival company and comparing DSL transfer rates be
the two companies. Both companies are in the same city, use the same service provider, and
the same rate/service plan. What is the explanation for why Company A reports higher downl
speeds than Company B?

- ☐ Company B has a higher volume of POTS voice traffic than Company A.
- ☐ Company B shares the conection to the DSLAM with more clients than Company A.
- ☐ Company A only uses microfilters on branch locations.
- ☉ Company A is closer to the service provider.

39   What can a network administrator do to recover from a lost router password?

- ☐ use the **copy tftp: flash:** command
- ☐ boot the router to bootROM mode and enter the **b** command to load the IOS manually
- ☐ telnet from another router and issue the **show running-config** command to view the pass
- ☉ boot the router to ROM monitor mode and configure the router to ignore the startup config
  when it initializes

40A network administrator is working with an applications team to fix a problem that a server ba
application is having with response time. The administrator has examined the network portion
the data path and identified several possible problem areas. The applications team has
simultaneously identified potential issues with the current release of software. The network
administrator begins addressing the network issues while the applications team implements s
patches.

Which statement applies to this situation?

- ☐ Changes to the network will reveal problems that are caused by the new patches.
- ☉ Scheduling will be more difficult if the network and software teams work independently.
- ☐ It will be difficult to isolate the problem if two teams are implementing changes independe
- ☐ Results from changes will be easier to reconcile and document if each team works in isola

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
41

Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel bet
R1 and R3. When the packet first arrives at R3, what are the source and destination IP addre
the packet?

- ○ Source 192.168.1.2 - Destination 192.168.4.2
- ○ Source 192.168.3.1 - Destination 192.168.3.2
- ◉ Source 192.168.2.1 - Destination 192.168.3.2
- ○ Source 192.168.3.1 - Destination 192.168.4.2

42

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output sho
what is the most likely cause?

- ○ improper LMI type
- ○ interface reset
- ◉ PPP negotiation failure
- ○ unplugged cable

43

Refer to the exhibit. Which two conclusions can be drawn from the output shown? (Choose tw

- ☑ This network is experiencing congestion.
- ☐ The Frame Relay connection is in the process of negotiation.
- ☐ Data is not flowing in this network.
- ☑ The network is discarding eligible packets.
- ☐ The DLCI is globally significant.

44 An established company has recently transitioned from outsourced LAN support to a complet
house staff. The outsourcing company is no longer in business, so no records are available. T
are many user complaints about application speed and availability. What two considerations a
this situation? (Choose two.)

- ☐ A network utilization baseline should quickly reveal application availability.
- ☐ A period of 24 to 48 hours should provide a sufficient baseline to track normal network act
- ☐ It is easier to start with monitoring all available data inputs on application servers, and the

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

tune to fewer variables along the way.

☐ The initial baseline results have little relevance to current values after the network has bee modified or grown in usage.

☑ When it is practical, network administrators should attempt to automate the collection of performance data and stay away from manual collection.

☑ Creating a network baseline data helps determine device thresholds for alerting.

45 Which three items are LCP options that can be configured for PPP? (Choose three.)

☑ CHAP

☑ Stacker

☐ IPCP

☐ CDPCP

☑ Multilink

46

Refer to the exhibit. The SSH connections between the remote user and the server are failing correct configuration of NAT has been verified. What is the most likely cause of the problem?

☐ SSH is unable to pass through NAT.

☑ There are incorrect access control list entries.

☐ The access list has the incorrect port number for SSH.

☐ The **ip helper** command is required on S0/0/0 to allow inbound connections.

47 Which technology would provide the highest bandwidth connections between company sites a lowest cost?

☑ broadband Internet site-to-site VPN connections

☐ satellite based network connections

☐ dedicated point-to-point circuits

☐ Frame Relay PVCs

48 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administrator provide?

☐ Named ACLs are less efficient than numbered ACLs.

☐ Standard ACLs should be applied closest to the core layer.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

ⓒ ACLs applied to outbound interfaces are the most efficient.

◉ Extended ACLs should be applied closest to the source that is specified by the ACL.

49What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has been activated?

ⓒ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates seria line protocol down.

ⓒ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates seria line protocol down.

◉ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates seria line protocol down.

ⓒ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates seria line protocol down.

50   What functionality do access control lists provide when implementing dynamic NAT on a Cisc router?

◉ defines which addresses can be translated

ⓒ defines which addresses are assigned to a NAT pool

ⓒ defines which addresses are allowed out of the router

ⓒ defines which addresses can be accessed from the inside network

51A company is looking for a WAN solution to connect its headquarters site with four remote site What advantage would dedicated leased lines provide to the customer compared to a shared Relay solution?

ⓒ lower cost

ⓒ lower latency and jitter

◉ variable bandwidth capacity

ⓒ fewer physical router interfaces

52   Which statement about a VPN is true?

ⓒ VPN link establishment and maintenance is provided by LCP.

ⓒ DLCI addresses are used to identify each end of the VPN tunnel.

◉ VPNs use virtual Layer 3 connections that are routed through the Internet.

ⓒ Only IP packets can be encapsulated by a VPN for tunneling through the Internet.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

53 What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www**
command have when implemented inbound on the f0/0 interface?

- ⊙ All TCP traffic is permitted, and all other traffic is denied.

- ⊙ The command is rejected by the router because it is incomplete.

- ⊙ All traffic from 172.16.4.0/24 is permitted anywhere on any port.

- ⊙ Traffic originating from 172.16.4.0/24 is permitted to all TCP port 80 destinations.

54

Refer to the exhibit. The network administrator is adding R1 to an existing network. As a part
corporate IT procedures, the administrator attempts to back up the router Cisco IOS software
and receives the output shown. The network administrator then attempts unsuccessfully to pi
TFTP server from the console session. What should be done next to isolate this problem?

- ⊙ From R2, validate that interface Fa0/0 is operational.

- ⊙ From the TFTP server, verify that the software on the TFTP server is operational.

- ⊙ From the TFTP server, confirm there is enough room on the TFTP server for the Cisco IO
software.

- ⊙ From the console session, make sure that R1 has a route to the network where the TFTP
resides.

55

Refer to the exhibit. You are a network administrator who has been tasked with completing th
Frame Relay topology that interconnects two remote sites. How should the point-to-point
subinterfaces be configured on HQ to complete the topology?

- ⊙ HQ(config-subif)#**frame-relay interface-dlci 103** on Serial 0/0/0.1
HQ(config-subif)#**frame-relay interface-dlci 203** on Serial 0/0/0.2
- ⊙ HQ(config-subif)#**frame-relay interface-dlci 301** on Serial 0/0/0.1
HQ(config-subif)# **frame-relay interface-dlci 302** on Serial 0/0/0.2
- ⊙ HQ(config-subif)#**frame-relay map ip 172.16.1.1 103 broadcast** on Serial 0/0/0.1
HQ(config-subif)#**frame-relay map ip 172.16.2.2 203 broadcast** on Serial 0/0/0.2
- ⊙ HQ(config-subif)#**frame-relay map ip 172.16.1.1 301 broadcast** on Serial 0/0/0.1
HQ(config-subif)#**frame-relay map ip 172.16.2.2 302 broadcast** on Serial 0/0/0.2

Close Window

CISCO

Assessment System

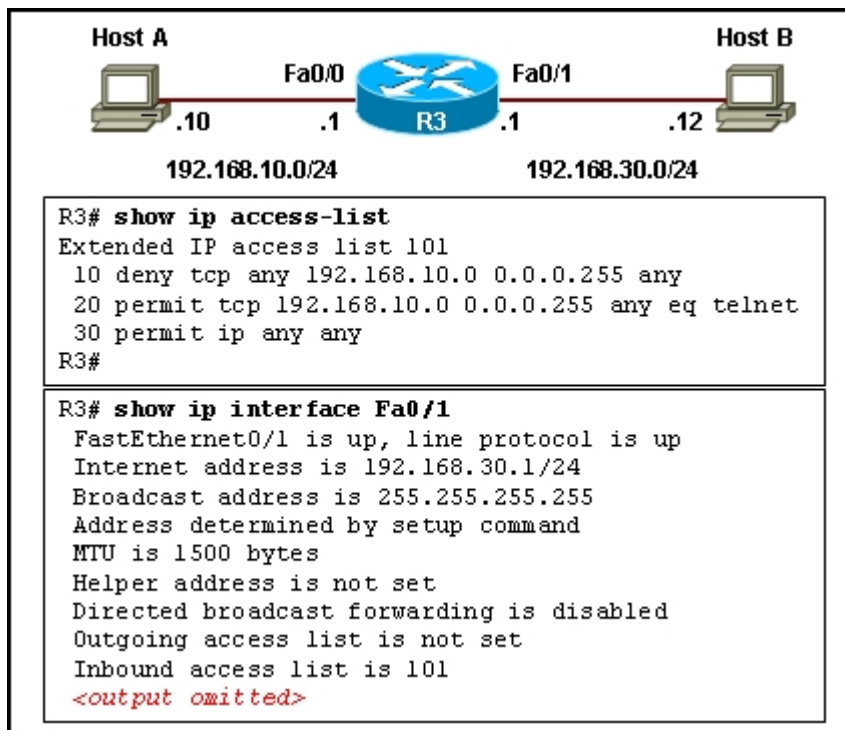| 1. Assessment Selection | 2. Assessment Settings | 3. Take Assessment |

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: 01:09:19

1

Refer to the exhibit. Partial results of the **show ip access-list** and **show ip interface Fa0/1** commands for router R3 are show are no other ACLs in effect. Host A is unable to telnet to host B. Which two actions will correct the problem but still restrict othe between the two networks? (Choose two.)

☐ Apply the ACL in the inbound direction on Fa0/0 interface.

☐   Apply the ACL in the outbound direction on Fa0/0 interface.

☐   Change the protocol in the access list entries to UDP.

☐   **Reverse the order of the TCP protocol statements in the ACL.**

☐   Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

2   What will be the result of the **enable secret** command when added at the global configuration mode on the router?

○   It will use MD5 encryption to protect the privileged EXEC level access.

○   It will use type 7 encryption and will encrypt only the privileged EXEC level passwords.

○   It will use type 7 encryption to prevent all passwords that are displayed on the screen from being readable.

○   It will use MD5 encryption to protect the passwords that are only used in the PAP and CHAP authentication process.

3   What translation method will allow multiple users to simultaneously access the Internet with only one available public address?

○   static NAT

○   dynamic NAT

○   static NAT with overload

○   dynamic NAT with overload

4

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a network problem. conclusions can be determined by from the output shown? (Choose two.)

☐   **The bandwidth has been set to the value of a T1 line.**

☐   This interface should be configured for PPP encapsulation.

☐   **There is no failure indicated in an OSI Layer 1 or Layer 2.**

☐   The physical connection between the two routers has failed.

☐   The IP address of S0/0/0 is invalid, given the subnet mask being used.

5   Which option represents a best practice for applying ACLs?

○   Named ACLs are less efficient than numbered ACLs.

○   Standard ACLs should be applied inside the core layer.

○   ACLs applied to outbound interfaces use fewer router resources.

◉   Extended ACLs should be applied closest to the source that is specified by the ACL.

6   A network administrator is instructing a technician on best practices for applying ACLs. Which two suggestions should the adm provide? (Choose two.)

☐   Named ACLs are less efficient than numbered ACLs.

☐   Standard ACLs should be applied inside the core layer.

☐   Place standard ACLs as close to the destination as possible.

☐ ACLs applied to outbound interfaces require fewer router resources.

☐ Extended ACLs should be applied closest to the source that is specified by the ACL.

---

7 While configuring a router using RIPng and dual-stack technology with IPv4 and IPv6, the administrator receives an error mess when inputting IPv4 routes. What could cause the error message?

☐ IPv4 is not compatible with RIPng

☐ RIPng is incompatible with dual-stack technology.

☐ The router interfaces have been configured with incorrect addresses.

☐ When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer techno

---

8 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both c are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why com reports higher download speeds than company 2 reports?

☐ Company 2 downloads larger files than company 1 downloads.

☐ Company 2 must share the connection to the DSLAM with more clients than company 1 shares.

◉ Company 1 is closer to the service provider than is company 2.

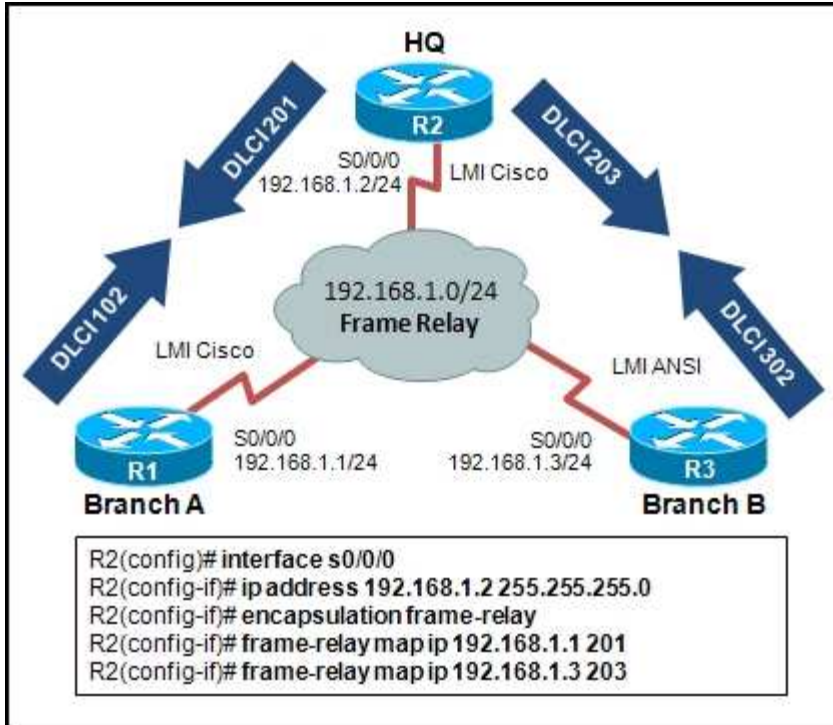☐ Company 1 has a lower volume of POTS traffic than company 2 has.

9
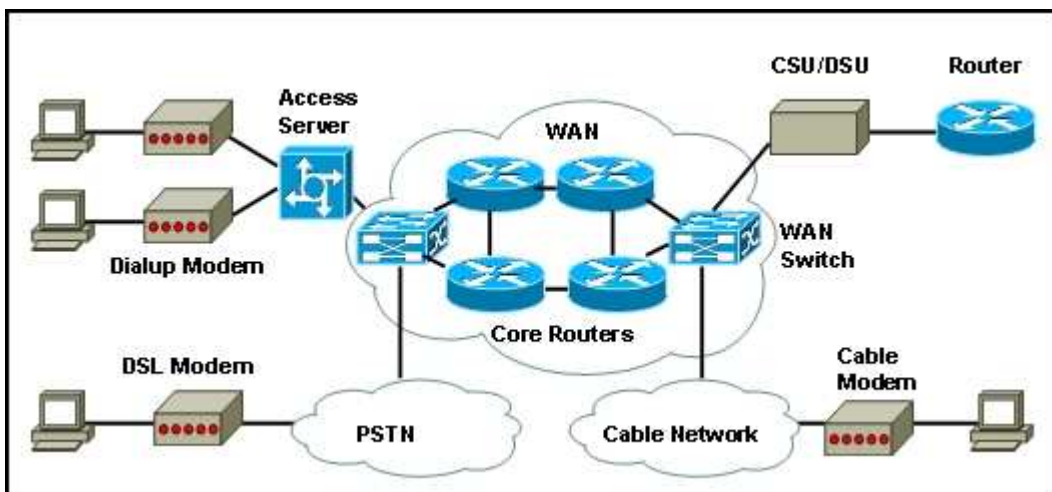
Refer to the exhibit. Which statement is true about the WAN switch device?

☐ It uses a multiport internetworking device to switch traffic such as Frame Relay, ATM or X.25 over the WAN.

☐ It provides internetworking and WAN access interface ports that are used to connect to the service provider network.

☐ It provides termination for the digital signal and ensures connection integrity through error correction and line monitoring

☐ It converts the digital signals produced by a computer into voice frequencies that can be transmitted over the analog line public telephone network.

10

```
R2(config)# interface s0/0/0
R2(config-if)# ip address 192.168.1.2 255.255.255.0
R2(config-if)# encapsulation frame-relay
R2(config-if)# frame-relay map ip 192.168.1.1 201
R2(config-if)# frame-relay map ip 192.168.1.3 203
```

Refer to the exhibit. Branch A has a Cisco router and Branch B has a non-Cisco router that is using IETF encapsulation . Afte
commands that are shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANSI. T
successfully established at both locations. Why is the PVC failing?

⬤ The PVC to R3 must be point-to-point.

⬤ LMI types cannot be different on each end of a PVC.

⬤ A single port can only support one encapsulation type.

⬤ The IETF parameter is missing from the **frame-relay map ip 192.168.1.3 203** command.

11

4

Router1# **show interfaces fastEthernet 0/0**
FastEthernet0/0 is up, line protocol is up (connected)
  Hardware is Lance, address is 000b.be78.3c01 (bia 000b.be78.3c01)
  Internet address is 192.168.10.6/29
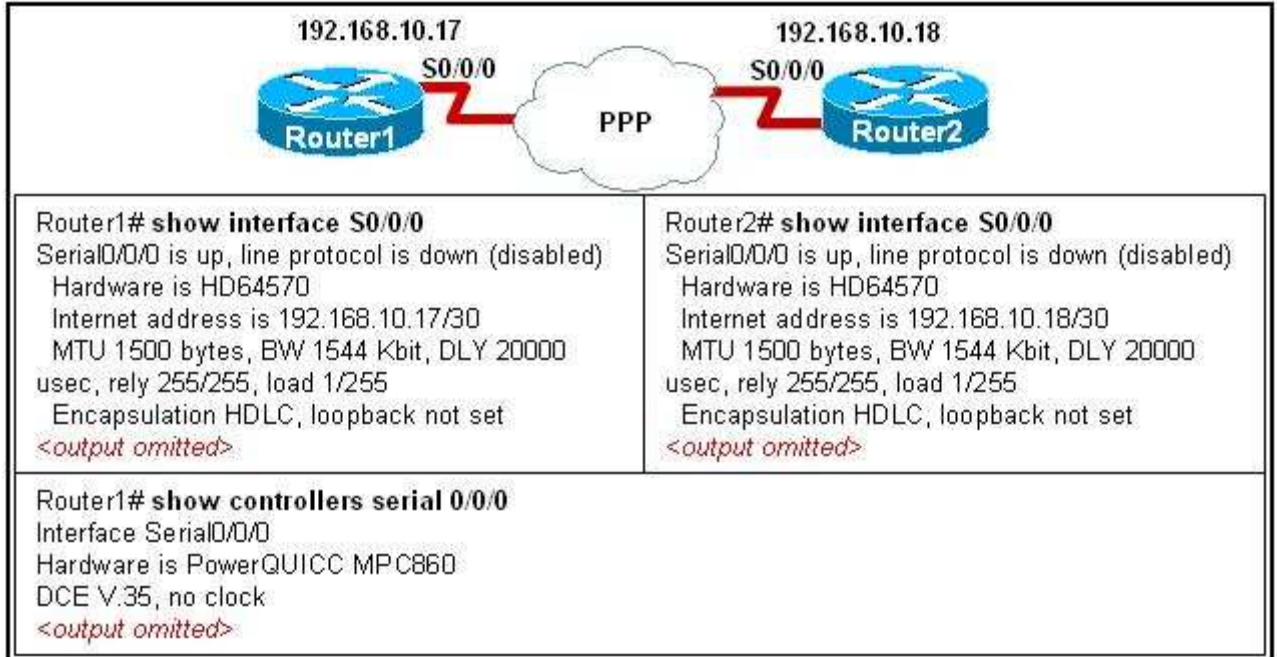 MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec, rely 255/255, load 1/255

Router2# **show interfaces fastEthernet 0/0**
 FastEthernet0/0 is up, line protocol is up (connected)
  Hardware is Lance, address is 0002.17e1.9201 (bia 0002.17e1.9201)
  Internet address is 192.168.10.17/29
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec, rely 255/255, load 1/255

Router2# **ping 192.168.10.6**

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.10.6, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

Refer to the exhibit. Router1 and Router2 each support separate areas of a data center, and are connected via a crossover c
Resources attached to Router1 are unable to connect to resources attached to Router2. What is the likely cause?

☐   The crossover cable is faulty.

☐   The IP addressing is incorrect.

☐   There is a Layer 2 problem with the router connection.

☐   The upper layers are experiencing an unspecified problem.

☐   One or both of the Ethernet interfaces are not working correctly.

12

192.168.10.17   192.168.10.18
S0/0/0   S0/0/0
Router1   PPP   Router2

```
Router1# show interface S0/0/0
Serial0/0/0 is up, line protocol is down (disabled)
   Hardware is HD64570
   Internet address is 192.168.10.17/30
   MTU 1500 bytes, BW 1544 Kbit, DLY 20000
usec, rely 255/255, load 1/255
   Encapsulation HDLC, loopback not set
<output omitted>
```

```
Router2# show interface S0/0/0
Serial0/0/0 is up, line protocol is down (disabled)
   Hardware is HD64570
   Internet address is 192.168.10.18/30
   MTU 1500 bytes, BW 1544 Kbit, DLY 20000
usec, rely 255/255, load 1/255
   Encapsulation HDLC, loopback not set
<output omitted>
```

```
Router1# show controllers serial 0/0/0
Interface Serial0/0/0
Hardware is PowerQUICC MPC860
DCE V.35, no clock
<output omitted>
```

Refer to the exhibit. From the output of the commands that are shown, at which layer of the OSI model is a fault indicated?

☐ transport

☐ network

☐ data link

☐ physical

13

```
<output omitted>
!
username smith privilege 15 password  0  c1sc0
!
ip http server
ip http authentication local
ip http secure-server
ip http timeout-policy idle 500 life  2400 requests 5000
!
<output omitted>
!
line con 0
line aux 0
line vty 0 4
 privilege level 15
 login local
 transport input none
```

Refer to the exhibit. A network administrator is trying to configure a router to use SDM, but the network administrator cannot a
SDM interface of the router. What is the cause of the problem?

◉ The VTY lines are misconfigured.

☐ The HTTP timeout policy is misconfigured.

⊙ The authentication method is misconfigured.

⊙ The username and password are misconfigured.

14
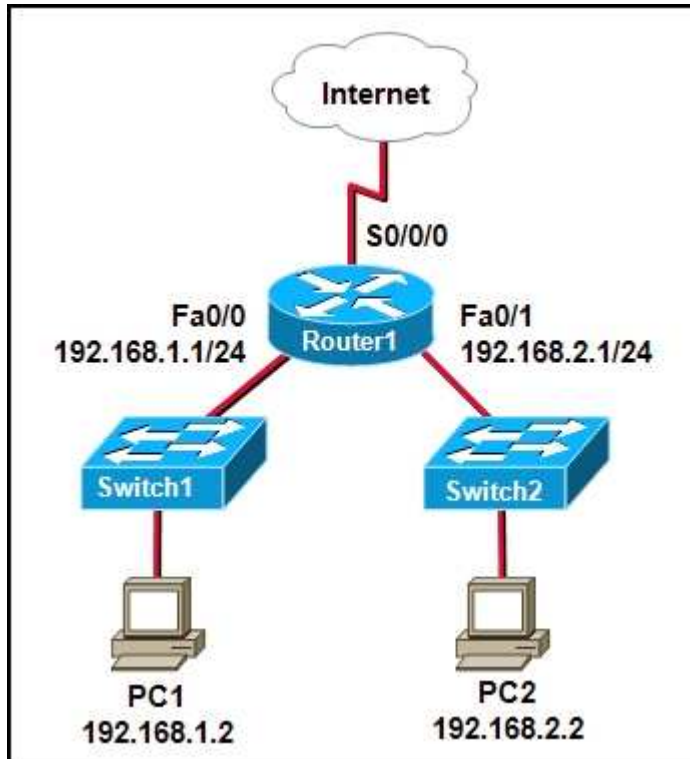
Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and direction should it be applied?

⊙ interface Fa0/0, inbound

⊙ interface Fa0/0, outbound

⊙ interface Fa0/1, inbound

⦿ interface Fa0/1, outbound

15 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administra
provide?

⊙ Named ACLs are less efficient than numbered ACLs.

⊙ Standard ACLs should be applied closest to the core layer.

⊙ ACLs applied to outbound interfaces are the most efficient.

⦿ Extended ACLs should be applied closest to the source that is specified by the ACL.

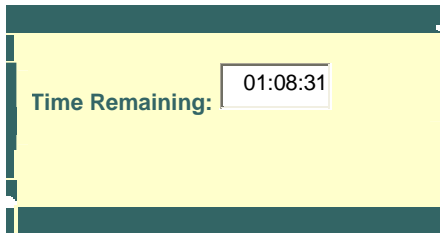Close Window

Close Window

ılıılı
CISCO

Assessment System

| 1. Assessment Selection | | 2. Assessment Settings | | 3. Take Assessment |

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: 01:08:31

16

Refer to the exhibit. A network administrator is trying to backup the IOS software on R1 to the TFTP server. He receives the error message that is shown in the exhibit, and cannot ping the TFTP server from R1. What action can help to isolate this problem?

- ⚪ Check that R1 has a route to the 10.10.10.0 network.

- ⚪ Verify that the TFTP server software supports binary file transfers.

- ⦿ Make sure that the TFTP server has 192.168.1.1 as its default gateway.

- ⚪ Ensure that the laptop has an IP address in the 192.168.1.0/24 network.

17 When a Frame Relay connection is being configured, under which condition should the command **frame-relay map** be used?

- ⚪ when the remote router is a non-Cisco router

- ⚪ when the local router is configured with subinterfaces

- ⚪ when globally significant rather than locally significant DLCIs are being used

- ⚪ when the local router and the remote router are using different LMI protocols

18   What is the result when the command **permit tcp 10.25.132.0 0.0.0.255 any eq smtp** is added to a named access control lis applied on the inbound interface of a router?

    ☐   TCP traffic with a destination to the 10.25.132.0/24 is permitted.

    ☐   Only Telnet traffic is permitted to the 10.24.132.0/24 network

    ☐   Ttraffic from 10.25.132.0/24 is permitted to anywhere on using any port.

    ☐   Traffic using port 25 from the 10.25.132.0/24 is permitted to all destinations.

19
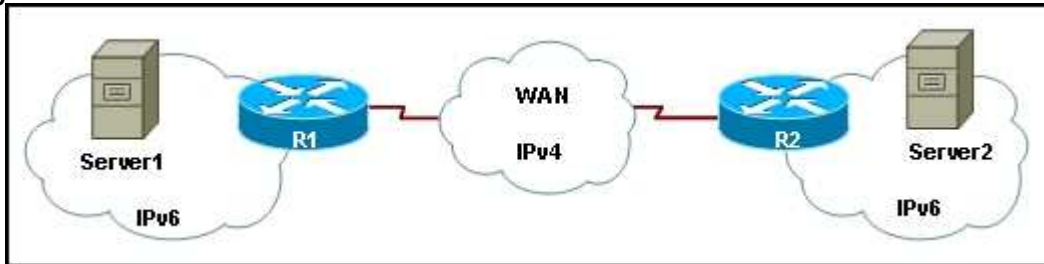
Refer to the exhibit. Company ABC expanded its business and recently opened a new branch office in another country. IPv6 addresses have been used for the company network. The data servers Server1 and Server2 run applications which require e functionality, with unmodified packets that are forwarded from the source to the destination. The edge routers R1 and R2 sup stack configuration. What solution should be deployed at the edge of the company network in order to successfully interconne offices?

    ☐   a new WAN service supporting only IPv6

    ☐   NAT overload to map inside IPv6 addresses to outside IPv4 address

    ☐   a manually configured IPv6 tunnel between the edge routers R1 and R2

    ☐   static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dynamic NAT for the rest of the i IPv6 addresses

20

```
R1(config)# interface FastEthernet 0/0
R1(config-if)# ip address 10.0.1.254 255.255.255.0
R1(config-if)# exit
R1(config)# ip dhcp excluded
R1(config)# ip dhcp excluded-address 10.0.1.2 10.0.1.16
R1(config)# ip dhcp excluded-address 10.0.1.254
R1(config)# ip dhcp pool TEST
R1(dhcp-config)# network 10.0.1.0 255.255.255.0
R1(dhcp-config)# default-router 10.0.1.254
R1(dhcp-config)# dns-server 10.0.1.3
R1(dhcp-config)# domain-name netacad.net
```

Refer to the exhibit. Which DHCP requests will R1 answer?

    ☐   all DHCP requests that R1 receives

    ☐   requests that are broadcast to 10.0.1.255

    ☐   DNS requests with a destination of 10.0.1.3

    ☐   requests that are received on the FastEthernet 0/0 interface

☐ requests that come from any networks that are not listed as excluded

21 What are three attributes of a security policy? (Choose three.)

☐ It provides step-by-step procedures to harden routers and other network devices.

☑ It defines acceptable and unacceptable use of network resources.

☐ It focuses primarily on attacks from outside of the organization.

☑ It defines a process for managing security violations.

☐ It should not need to be altered once implemented.

☑ It creates a basis for legal action if necessary.

22 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clo
but the far end router on the point-to-point link has not been activated?

☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

☐ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

◉ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.
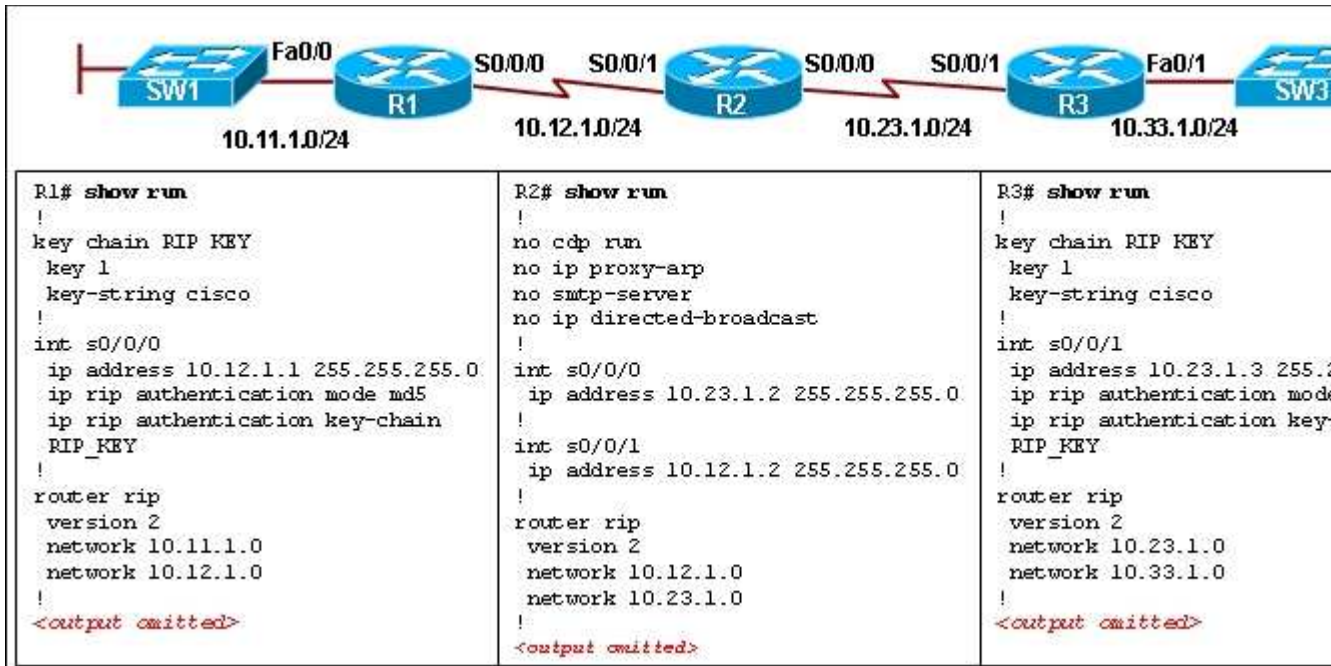
23 Which two statements are true about creating and applying access lists? (Choose two.)

☐ One access list per port, per protocol, per direction is permitted.

☐ Access list entries should filter in the order from general to specific.

☐ Statements are processed sequentially from top to bottom until a match is found.

☐ The term "inbound" refers to traffic entering the network from the router interface where the ACL is applied.

☐ Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destinatio

24 When configuring remote access to a router, what is the significance of the **no password** command on a VTY line?

☐ Logins are prevented on that line.

☐ No password is required to log in to that line.

☐ The remote user is not allowed to change the password for that line.

☐ The remote user is prompted to change the line password after connecting to the router.

25

```
Fa0/0    SO/0/0    SO/0/1    SO/0/0    SO/0/1    Fa0/1
SW1              R1                 R2               R3         SW3
10.11.1.0/24        10.12.1.0/24        10.23.1.0/24        10.33.1.0/24
```

R1# show run	R2# show run	R3# show run
!	!	!
key chain RIP KEY	no cdp run	key chain RIP KEY
key 1	no ip proxy-arp	key 1
key-string cisco	no smtp-server	key-string cisco
!	no ip directed-broadcast	!
int s0/0/0	!	int s0/0/1
ip address 10.12.1.1 255.255.255.0	int s0/0/0	ip address 10.23.1.3 255.2
ip rip authentication mode md5	ip address 10.23.1.2 255.255.255.0	ip rip authentication mode
ip rip authentication key-chain	!	ip rip authentication key-
RIP_KEY	int s0/0/1	RIP_KEY
!	ip address 10.12.1.2 255.255.255.0	!
router rip	!	router rip
version 2	router rip	version 2
network 10.11.1.0	version 2	network 10.23.1.0
network 10.12.1.0	network 10.12.1.0	network 10.33.1.0
!	network 10.23.1.0	!
<output omitted>	!	<output omitted>
	<output omitted>	

Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and R3 do not receive RIP routing u
basis of the provided configuration, what should be enabled on router R2 to remedy the problem?

- [ ] proxy ARP

- [ ] CDP updates

- [ ] SNMP services

- [ ] RIP authentication

26   An administrator is unable to receive e-mail. While troubleshooting the problem, the administrator is able to ping the local mai
IP address successfully from a remote network and can successfully resolve the mail server name to an IP address via the us
nslookup command. At what layer of the OSI model is the problem most likely to be found?

- [ ] application

- [ ] transport

- [ ] network

- [ ] data link

27 A network administrator has moved the company intranet web server from a switch port to a dedicated router interface. How o
administrator determine how this change has affected performance and availability on the company intranet?

- [ ] Conduct a performance test and compare with the baseline that was established previously.

- [ ] Determine performance on the intranet by monitoring load times of company web pages from remote sites.

- [ ] Interview departmental administrative assistants and determine if they think load time for web pages has improved.

- [ ] Compare the hit counts on the company web server for the current week to the values that were recorded in previous we

28   What type of ACL can be used to force a user to authenticate to the router before accessing a network?

- ☐ standard
- ☐ dynamic
- ☐ reflexive
- ☐ time-based

29 Which two functions are provided by the Local Management Interface (LMI) that is used in Frame Relay networks? (Choose t

- ☐ flow control
- ☐ error notification
- ☐ congestion notification
- ☑ the mapping of DLCIs to network addresses
- ☑ the sending of keepalive packets to verify operation of the PVC

30 Where does a service provider assume responsibility from a customer for a WAN connection?

- ☐ local loop
- ☐ DTE cable on router
- ☐ demarcation point
- ☐ demilitarized zone

Showing 2 of 4   <Prev   Page: | 2   ▼ | Next>

Close Window

Close Window
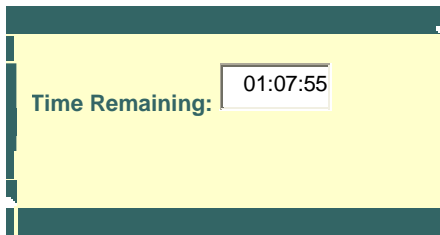
ılıılı
CISCO

Assessment System

| 1. Assessment Selection | | | 2. Assessment Settings | | 3. Take Assessment |

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN

Time Remaining: 01:07:55

31   Which two items are LCP options that can be configured for PPP? (Choose two.)

- ☐ EAP
- ☑ CHAP
- ☐ IPCP
- ☐ CDPCP
- ☑ multilink

32

```
Router1# show interfaces serial 0/1/0

Serial0/1/0 is up, line protocol is down
  Hardware is HD64570
  Internet address is 10.45.1.7/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, txload 1/255, rxload 1/255
  Encapsulation frame-relay, CRC 16 , loopback not set

<output omitted>

  Queueing Strategy: weighted fair
  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 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrin, 0 ignored, 0 abort
    0 packets output, 0 bytes, 0 underruns
    0 output erros, 0 collisions, 1 interface resets
    0 output buffer failures, 0 output buffers swapped out
    0 carrier transistions
    DCD=up DSR=up DTR= up RTS=up CTS=up
```
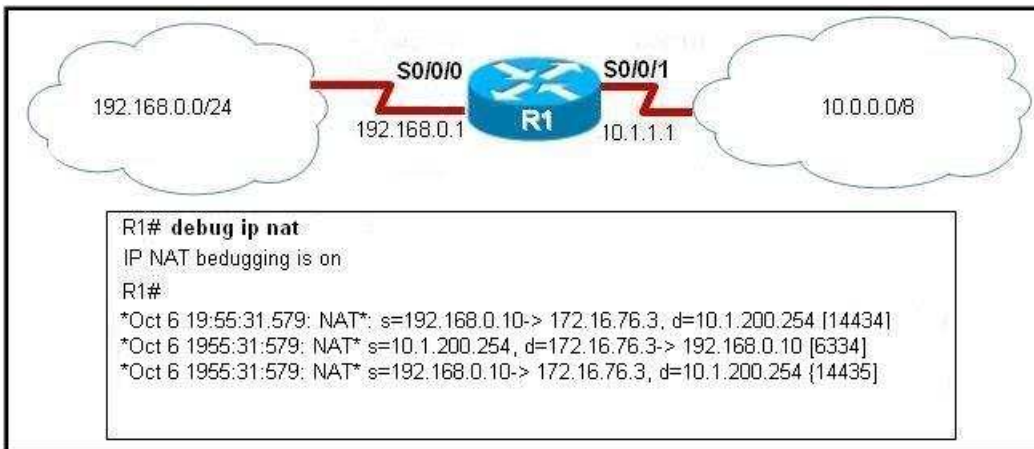
Refer to the exhibit. Router1 is not able to communicate with its peer that is connected to this interface. Based on the output
what is the most likely cause?

- ⬡ interface reset
- ⬡ improper LMI type
- ⬡ encapsulation failure
- ⬡ local cable unplugged

13

33

Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat** command?

- The 172.16.76.3 host is exchanging packets with the 192.168.0.10 host.

- The native 10.1.200.254 address is being translated to 192.168.0.10.

- The 192.168.0.0/24 network is the inside network.

- Port address translation is in effect.

34 What will be the result of adding the command **ip dhcp excluded-address 10.10.4.1 10.10.4.5** to the configuration of a local that has been configured as a DHCP server?

- Traffic that is destined for 10.10.4.1 and 10.10.4.5 will be dropped by the router.

- Traffic will not be routed from clients with addresses between 10.10.4.1 and 10.10.4.5.

- The DHCP server will not issue the addresses ranging from 10.10.4.1 to 10.10.4.5.

- The router will ignore all traffic that comes from the DHCP servers with addresses 10.10.4.1 and 10.10.4.5.

35 What are two main components of data confidentiality? (Choose two.)

- ☐ checksum

- ☐ digital certificates

- ☑ encapsulation

- ☑ encryption

- ☐ hashing

36
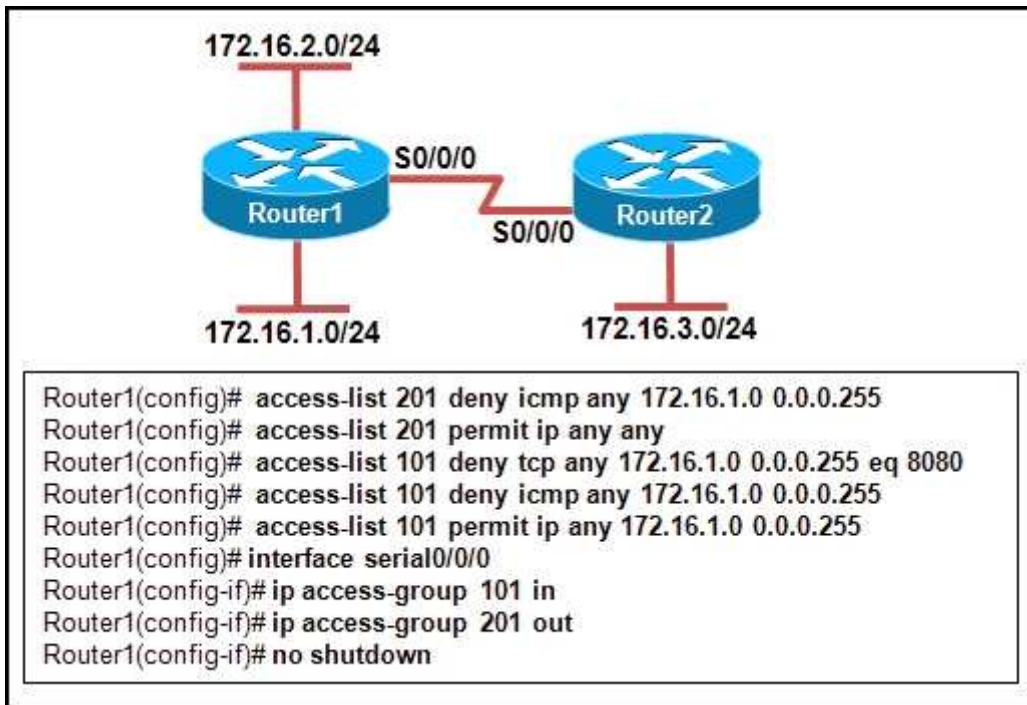
Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request packet that enters interface and is destined for an FTP server at IP address 172.16.1.5?

- The router matches the incoming packet to the statement that is created by **access-list 201 permit ip any any** command allows the packet into the router.
- The router reaches the end of ACL 101 without matching a condition and drops the packet because there is no statement was created by **access-list 101 permit ip any any** command.
- The router matches the incoming packet to the statement that was created by the **access-list 101 permit ip any 172.16 0.0.0.255** command, ignores the remaining statements in ACL 101, and allows the packet into the router.
- The router matches the incoming packet to the statement that was created by the **access-list 201 deny icmp 172.16.1. 0.0.0.255 any** command, continues comparing the packet to the remaining statements in ACL 201 to ensure that no sub statements allow FTP, and then the router drops the packet.

37   Which type of network attack exploits vulnerabilities in the compromised system with the intent of propagating itself across a

- virus
- worm
- Trojan horse
- man-in-the-middle

38

```
Router (config)# access-list 101 permit tcp 192.168.1.0 0.0.0.255 any eq www
Router (config)# access-list 101 permit tcp 192.168.1.0 0.0.0.255 any eq ftp
Router (config)# access-list 101 permit tcp 192.168.1.0 0.0.0.255 any eq telnet
```

Refer to the exhibit. An ACL numbered 101 already exists on this router. What happens if the network administrator issues the commands that are shown in the exhibit?

- The new ACL overwrites the existing ACL.
- The network administrator will receive an error message.
- The existing ACL is modified to include the new commands.

- ◻ A second ACL that is numbered 101 is created and contains only the new commands.

39

```
<output omitted>
ip dhcp pool 192Network
 network 192.168.1.128 255.255.255.128
 default-router 192.168.1.1
 dns-server 192.168.1.1
!
interface FastEthernet0/0
 ip address 192.168.1.1 255.255.255.128
 duplex auto
 speed auto
!
<output omitted>
```

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **d dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?

- ◻ The 192.168.1.1 address has not been excluded from the DHCP pool.

- ◻ The pool of addresses for the 192Network pool is incorrect.

- ◻ The default router for the 192Network pool is incorrect.

- ◻ The 192.168.1.1 address is already configured on Fa0/0.

40


```
hostname Router1                              hostname Router2
username Router1 password  cisco              username Router2 password  cisco
interface serial 0/0/0                        interface serial 0/0/0
clock rate 64000                              ip address 198.18.10.229  255.255.255.252
ip address 198.18.10.230  255.255.255.252     encapsulation ppp
encapsulation ppp                             ppp authentication  chap
ppp authentication  chap                      no shutdown
no shutdown
```

Refer to the exhibit. Why are the routers unable to establish a PPP session?

- ◻ Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

- ◻ The CHAP passwords must be different on the two routers.

- ◻ The clock rate is configured on the wrong end of the link.

- ◻ The IP addresses are on different subnets.

- ◉ The usernames are misconfigured.

41 Which statement is true about wildcard masks?

- ☐ Inverting the subnet mask will always create the wildcard mask.
- ☐ A wildcard mask identifies a network or subnet bit by using a "1".
- ☐ The same function is performed by both a wildcard mask and a subnet mask.
- ☉ When a "0" is encountered in a wildcard mask, the IP address bit must be checked.

42
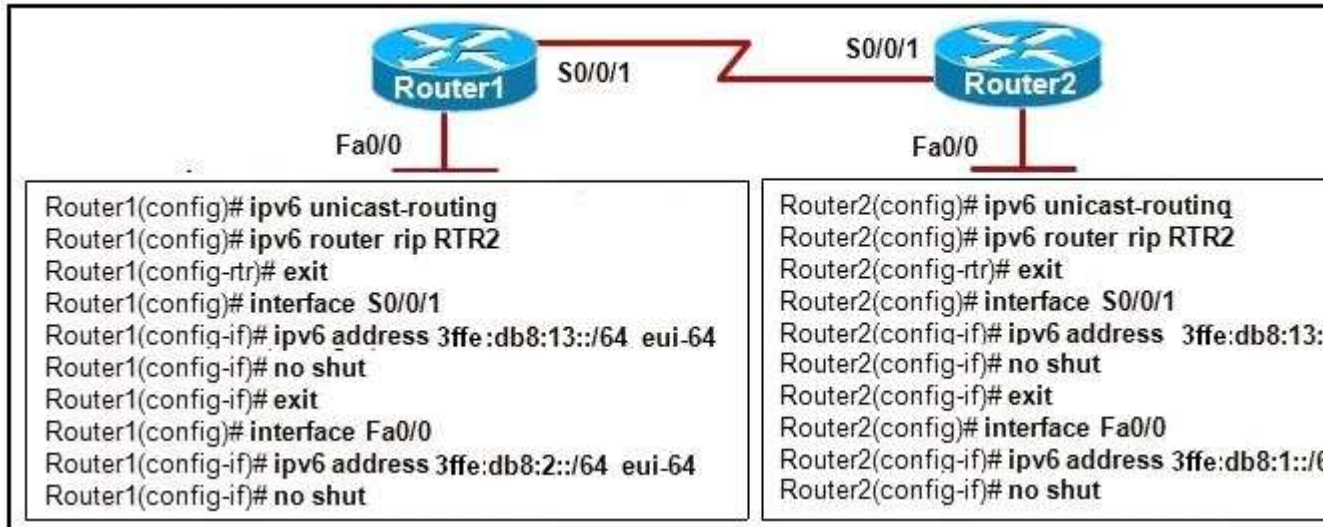

```
Router1(config)# ipv6 unicast-routing
Router1(config)# ipv6 router rip RTR2
Router1(config-rtr)# exit
Router1(config)# interface S0/0/1
Router1(config-if)# ipv6 address 3ffe:db8:13::/64 eui-64
Router1(config-if)# no shut
Router1(config-if)# exit
Router1(config)# interface Fa0/0
Router1(config-if)# ipv6 address 3ffe:db8:2::/64 eui-64
Router1(config-if)# no shut
```

```
Router2(config)# ipv6 unicast-routing
Router2(config)# ipv6 router rip RTR2
Router2(config-rtr)# exit
Router2(config)# interface S0/0/1
Router2(config-if)# ipv6 address  3ffe:db8:13::
Router2(config-if)# no shut
Router2(config-if)# exit
Router2(config)# interface Fa0/0
Router2(config-if)# ipv6 address 3ffe:db8:1::/6
Router2(config-if)# no shut
```

Refer to the exhibit. A network administrator has issued the commands that are shown on Router1 and Router2. A later review
tables reveals that neither router is learning the LAN network of the neighbor router. What is most likely the problem with the

- ☐ The serial interfaces are in different subnets.
- ☐ The RIPng process is not enabled on interfaces.
- ☐ The RIPng processes do not match between Router1 and Router2.
- ☐ The RIPng **network** command is missing from the IPv6 RIP configuration.

43 What are two effective measures for securing routers? (Choose two.)
- ☐ Enable SNMP traps.
- ☐ Disable the HTTP server service.
- ☐ Use quotes, phrases, or poems to create passphrases.
- ☐ Configure remote administration through VTY lines for Telnet access.
- ☐ Protect all active router interfaces by configuring them as passive interfaces.

44 Which protocol is implicitly denied at the end of an IPv4 access list?
- ☐ IP
- ☐ TCP
- ☐ UDP

☐ HTTP

45 What can a network administrator do to recover from a lost router password?

☐ use the **copy tftp: flash:** command

☐ boot the router to bootROM mode and enter the **b** command to load the IOS manually

☐ telnet from another router and issue the **show running-config** command to view the password

☑ boot the router to ROM monitor mode and configure the router to ignore the startup configuration when it initializes

Showing 3 of 4   <Prev   Page: | 3   ▼ | Next>

Close Window

cisco

Close Window

Assessment System

| 1. Assessment Selection | 2. Assessment Settings | 3. Take Assessment |

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 01:07:04 |

46

```
Router# show frame-relay pvc 100

PVC Statistics for interface Serial0/0/0.1 (Frame Relay DTE)

<output omitted>

DLCI = 100, DLCI USAGE = LOCAL, PVC STATUS = ACTIVE, INTERFACE = Serial0/0/0.1

    input pkts 3100          output pkts 1270         in bytes 22121000
    out bytes 21802000       dropped pkts 4           in pkts dropped 147
    out pkts dropped 0       out bytes dropped 0
    in FECN pkts 32          in BECN pkts 192          out FECN pkts 259
    out BECN pkts 192        in DE pkts 12             out DE pkts 34
    out bcast pkts 32        out bcast bytes 2699
    pvc create time 00:28:09, last time pvc status changed 00:18:01

<output omitted>
```

Refer to the exhibit. Which statement is true about the status of the Frame Relay connection?

　　The Frame Relay connection is in the process of negotiation.

　　Only packets with control bit DE set are sent over the PVC. No data traffic traverses the link.

　　Packets marked as FECN and BECN indicate that a congestion control mechanism is enabled on the Frame Relay PVC

　　The "DLCI USAGE = LOCAL" status indicates that the PVC link is not established between the interface S0/0/0.1 and th
Relay switch.

47　　When configuring a Frame Relay connection, what is the purpose of Inverse ARP?

　　to assign a DLCI to a remote peer

　　to disable peer requests from determining local Layer 3 addresses

　　to negotiate LMI encapsulations between local and remote Frame Relay peers

　　to create a mapping of DLCI to Layer 3 addresses that belong to remote peers

48　　What does an access control list determine when used with NAT on a Cisco router?

　　addresses that are to be translated

　　addresses that are assigned to a NAT pool

　　addresses that are allowed out of the router

　　addresses that are accessible from the inside network

49
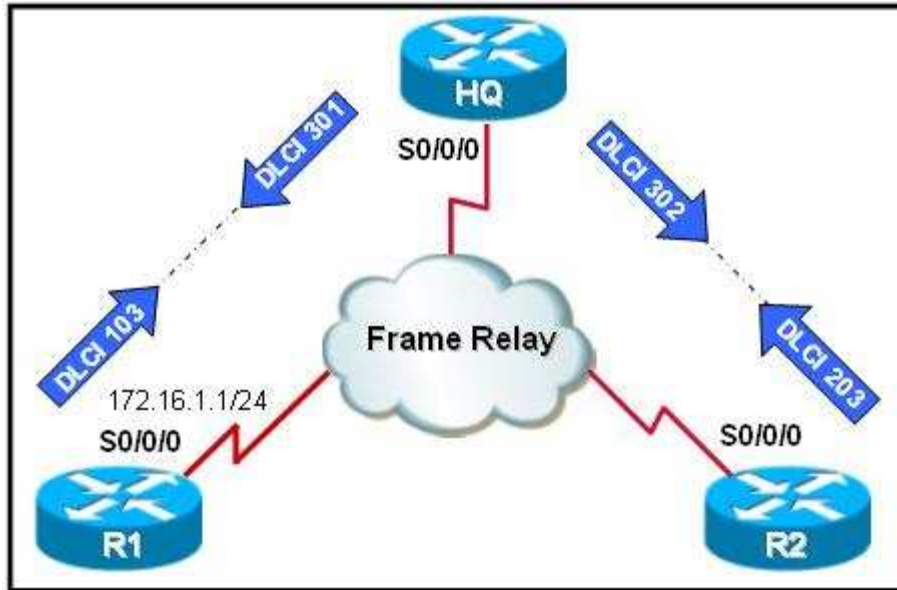
Refer to the exhibit. A network administrator is configuring Frame Relay on router HQ. It is desired that each Frame Relay PV between the routers be in a separate subnet. Which two commands on HQ will accomplish this task for the connection to R1? two.)

☐ HQ(config)# **interface S0/0/0**

☐ HQ(config)# **interface S0/0/0.1 multipoint**

☐ HQ(config)# **interface S0/0/0.1 point-to-point**

☐ HQ(config-subif)# **frame-relay interface dlci 103**

☐ HQ(config-subif)# **frame-relay interface dlci 301**

☐ HQ(config-if)# **frame-relay map ip 172.16.1.1 255.255.255.0 301 broadcast**

50
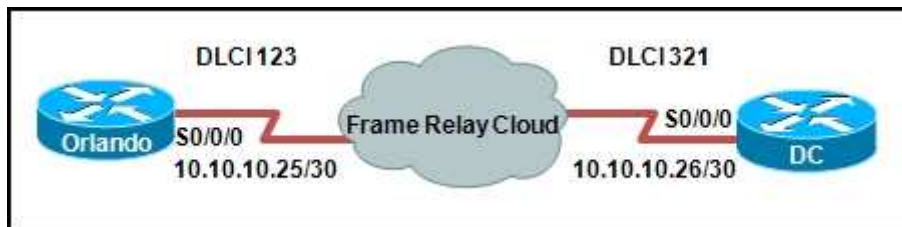
Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the Orlando router to the router?

⊙ DLCI 123

⊙ DLCI 321

⊙ 10.10.10.25

⊙ 10.10.10.26

⊙ MAC address of the DC router

51 Which combination of Layer 2 protocol and authentication should be used to establish a link between a Cisco and a non-Cisc without sending authentication information in plain text?

- ⊙ HDLC with PAP
- ⊙ HDLC with CHAP
- ⊙ PPP with PAP
- ⦿ PPP with CHAP

---

52 A technician has been asked to run the Cisco SDM one-step lockdown on a customer router. What will be the result of this proc

- ⊙ Traffic is only accepted from and forwarded to SDM-trusted Cisco routers.

- ⊙ Security testing is performed and the results are saved as a text file stored in NVRAM.

- ⊙ All traffic that enters the router is quarantined and checked for viruses before being forwarded.

- ⊙ The router is tested for any potential security problems and all recommended security-related configuration changes will b automatically applied.

Showing 4 of 4   <Prev   Page: [4   ▾]   Next>

Close Window

Close Window

CISCO

Final ccna4 v4.0 bản chuẩn của netpro 100%

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

1 An administrator has configured a dual-stack router, employing IPv6 and IPv4 on all interfaces and RIPng for routing. All IPv6 traffic reaches its destination as desired, but only directly connected IPv4 networks can be reached. What is the cause of this problem?

◻   All interfaces have been configured with the incorrect IPv4 addresses.

◻   When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer technology.

◻   RIPng is incompatible with dual-stack technology.

◻   RIP needs to be configured in addition to RIPng to successfully use IPv4.

2
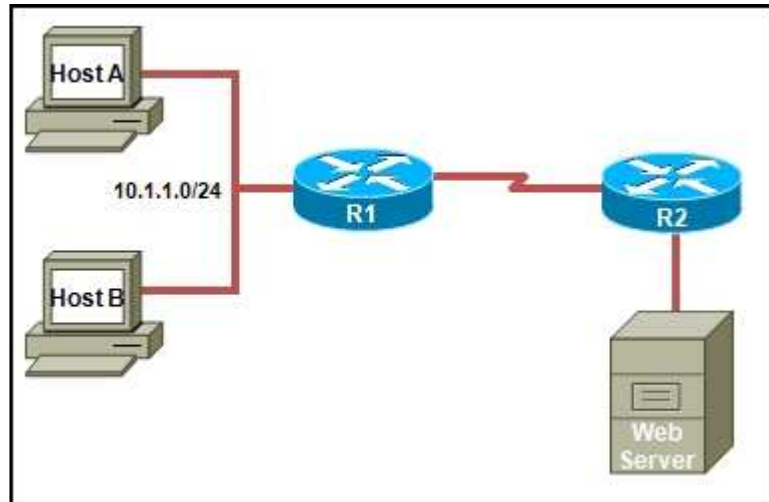
Refer to the exhibit. R1 is performing NAT Overload for the 10.1.1.0/24 inside network. Host A and Host B are both trying to

communicate with the web server using a source port of 1234. If the packet from Host A arrives at R1 first, what happens to the packet from Host B?

- [ ] It is dropped.

- [ ] It is queued until the session of Host A is completed and the port becomes available.

- [ ] It is translated, keeping the source port number 1234.

- [ ] It is assigned the first available port number in its range.

3 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has not been activated?

- [ ] **show interfaces s0/0/0** indicates serial down, line protocol down. **show controllers** indicates cable type "unknown".

- [ ] **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

- [ ] **show controllers** indicatse cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

- [ ] **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

4 A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

- [ ] The router forwards the frame to all ports in the network and learns the address from the reply frame.

- [ ] The destination host IP address is embedded in the DLCI.

- [ ] The router searches Inverse ARP tables for maps of DLCIs to IP addresses.

- [ ] A table of static mappings can be searched.

- [ ] The router broadcasts a request for the required IP address.

5
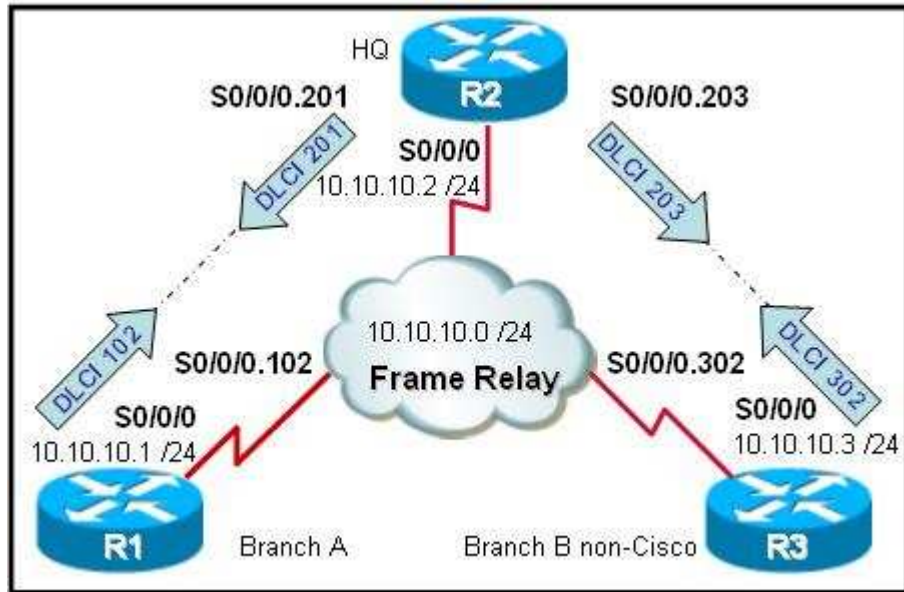
Refer to the exhibit. To solve split horizon routing issues, the Frame Relay network has been redesigned to include subinterfaces. The appropriate **frame-relay map** commands have been configured on each router. Site to site pings are not successful. What will fix the problem?

- The subinterfaces must be given addresses in separate subnets.

- The **no ip split-horizon** command must be issued on S0/0/0 on R2.

- The DLCI numbers on each end of the PVCs must match.

- The addressing has to be changed to publicly routable addresses.
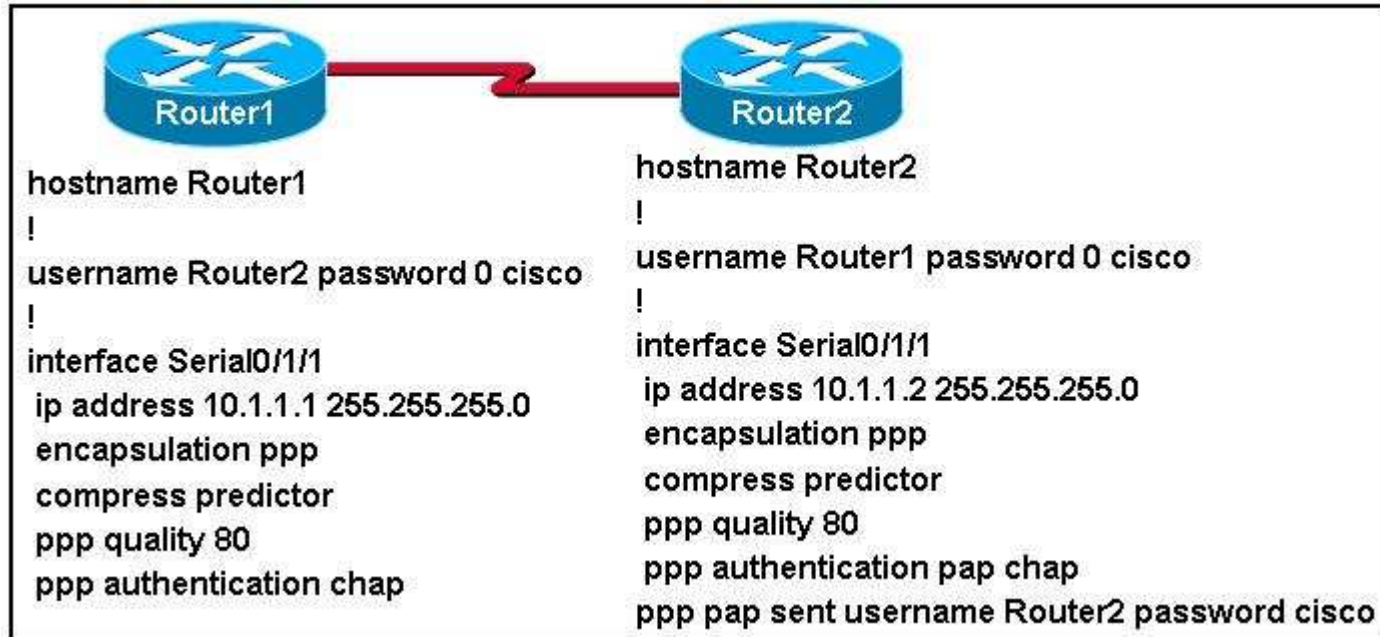
Refer to the exhibit. Which two statements are true regarding the configuration shown? (Choose two.)

☐ Before Layer 3 protocols are negotiated, the routers test the quality of the link.

☐ After the quality of the link is tested, LCP negotiates the compression and authentication options.

☐ Before Layer 3 protocols are negotiated, the routers authenticate using a three-way handshake.

☐ After LCP negotiations are complete, the IP connection shows as OPEN.

☐ When data exchange is complete, NCP terminates the link.

```
<output omitted>
!
username sdm privilege 15 password 0 sdm
!
ip http server
ip http authentication local
ip http secure-server
ip http timeout-policy idle 600 life 86400 requests 10000
!
<output omitted>
!
line con 0
line aux 0
line vty 0 4
 privilege level 15
 login local
 transport input none
```

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is not functioning correctly. What could be the problem?

- The username and password are not configured correctly.

- The authentication method is not configured correctly.

- The HTTP timeout policy is not configured correctly.

- The vtys are not configured correctly.

8

```
Serial0/0/0 is up, line protocol is down
  Hardware is HD64570
  Internet address is 10.1.1.1/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation PPP, loopback not set, keepalive set (10 sec)
  LCP Closed
  Closed: LEXCP, BRIDGECP, IPCP, CCP, CDPCP, LLC2, BACP
  <output omitted>
  Queueing strategy: weighted fair
  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 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, 1 interface resets
    0 output buffer failures, 0 output buffers swapped out
    0 carrier transitions
    DCD=up DSR=up DTR=up RTS=up CTS=up
```

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output shown, what is the most likely cause?

- [ ] interface reset
- [ ] improper queuing strategy
- [ ] unplugged cable
- [ ] PPP negotiation failure

---

9 What two events can occur when a Frame Relay switch detects its queue filling faster than it can process data? (Choose two.)

- [ ] Frames in excess of the CIR are not accepted by the switch.
- [ ] Frames with the DE bit set are dropped from the switch queue.
- [ ] Frames with the FECN and BECN bits set are dropped from the switch queue.
- [ ] The switch sets the FECN bit on all frames it receives on the congested link and sets the BECN bit on all frames it places on the congested link.
- [ ] The switch sets the FECN bit on all frames it places on the congested link and sets the BECN bit on all frames it receives on the congested link.

10


```
192.168.2.0/24


Router1    S0/0/0    Router2

192.168.1.0/24        192.168.3.0/24
Router1(config)# access-list 201 deny icmp 192.168.1.0 0.0.0.255 any
Router1(config)# access-list 201 deny icmp 192.168.2.0 0.0.0.255 any
Router1(config)# access-list 201 permit any any
Router1(config)# access-list 101 deny tcp any 192.168.1.0 0.0.0.255 eq 8080
Router1(config)# access-list 101 deny tcp any 192.168.1.0 0.0.0.255 eq 80
Router1(config)# access-list 101 deny icmp any 192.168.1.0 0.0.0.255
Router1(config)# access-list 101 deny icmp any 192.168.2.0 0.0.0.255
Router1(config)# access-list 101 permit ip any 192.168.1.0 0.0.0.255
Router1(config)# access-list 101 permit ip any 192.168.2.0 0.0.0.255
Router1(config)# int s0/0/0
Router1(config-if)# ip access-group 101 in
Router1(config-if)# ip access-group 201 out
```

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?

☐ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, continues comparing the packet to the remaining statements in ACL 101 to ensure that no subsequent statements prohibit FTP, and then allows the packet in interface s0/0/0.

☐ It matches the incoming packet to the **access-list 201 permit any any** statement and allows the packet in interface s0/0/0.

☐ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, ignores the remaining statements in ACL 101, and allows the packet in interface s0/0/0.

☐ It reaches the end of ACL 101 without matching a condition and drops the packet because there is no **access-list 101 permit any any** statement.

11
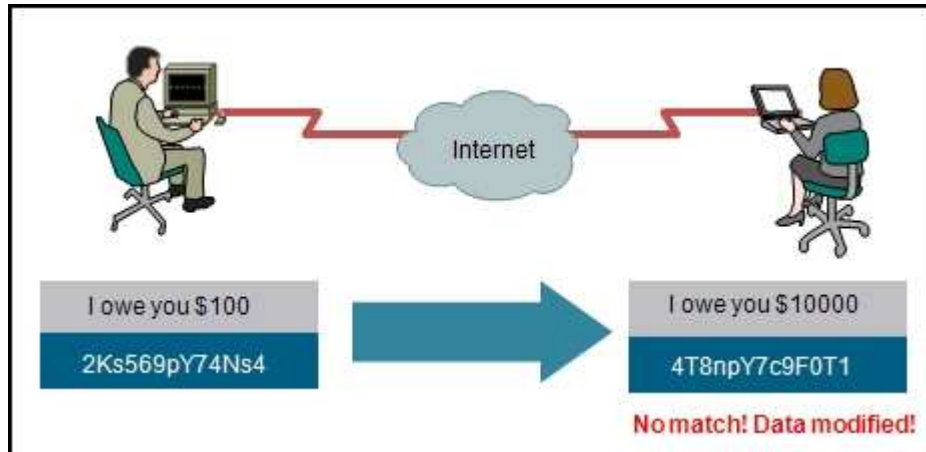
Refer to the exhibit. What VPN feature is being represented?

- ⊙ digital certificates

- ⊙ encapsulation

- ⊙ encryption

- ⊙ hashing

- ⊙ tunneling

12
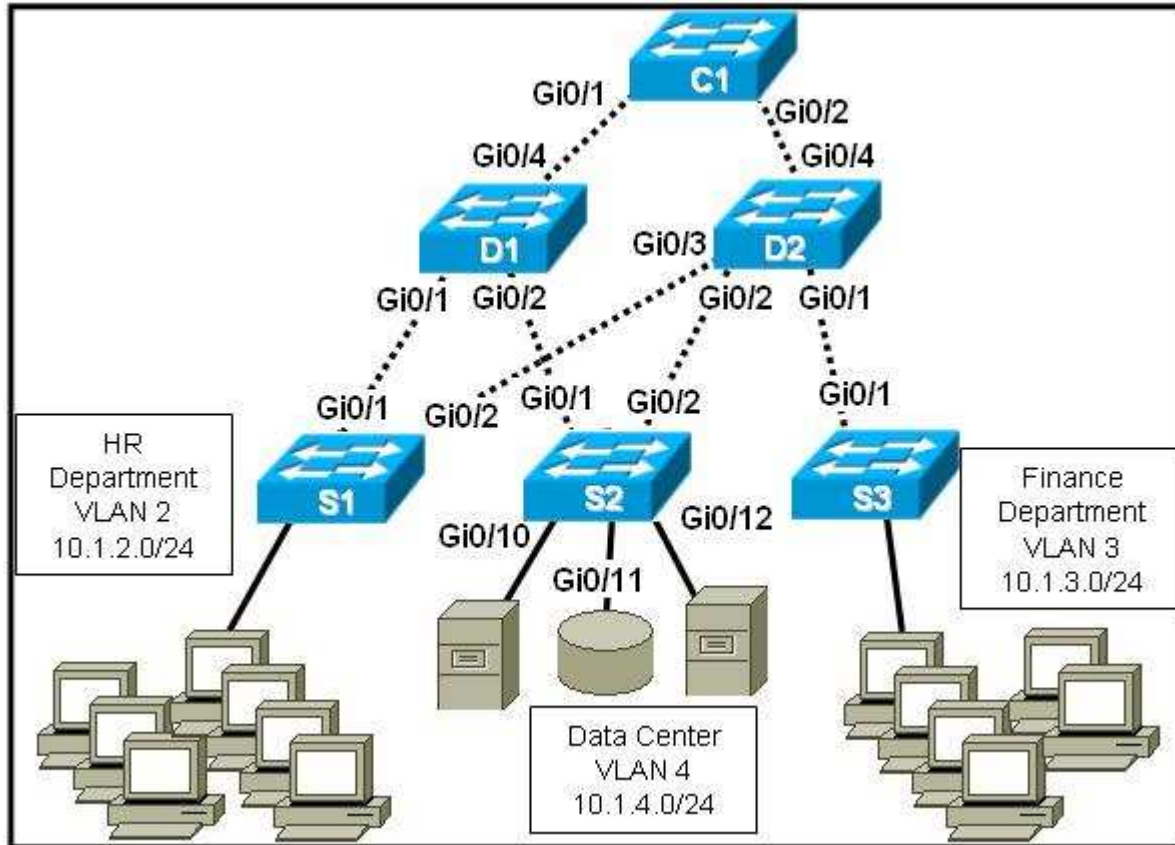
Refer to the exhibit. A new HR server has just been physically installed and configured in the data center by a vendor. The vendor certified that the server has passed all internal quality checks. The application console of the server indicates that the application has loaded and is functioning normally. However, in the initial client testing, the HR department workers report that the application is completely non-functional. The server is also unable to get to the Internet to perform updates. Which troubleshooting efforts are appropriate for these symptoms?

- The lack of Internet connectivity indicates a likely problem in the lower layers. Begin with physical connectivity on the server and proceed with a bottom-up methodology.
- Narrow the scope of the investigation by ensuring that no other general connectivity problems exist between the affected clients and other company resources. Use a divide-and-conquer approach by checking the functionality of the intervening switches, beginning with the physical layer.

- Because an external vendor installed the server increases the odds of an installation error. Use a top-down methodology by having the vendor reinstall and check each application, and then follow the layers down through the physical layer.
- Isolate the problem area by obtaining and installing a protocol analyzer on the server. Coordinate with the test users to capture application traffic. Have the vendor analyze the captured traffic to determine the problem.

13
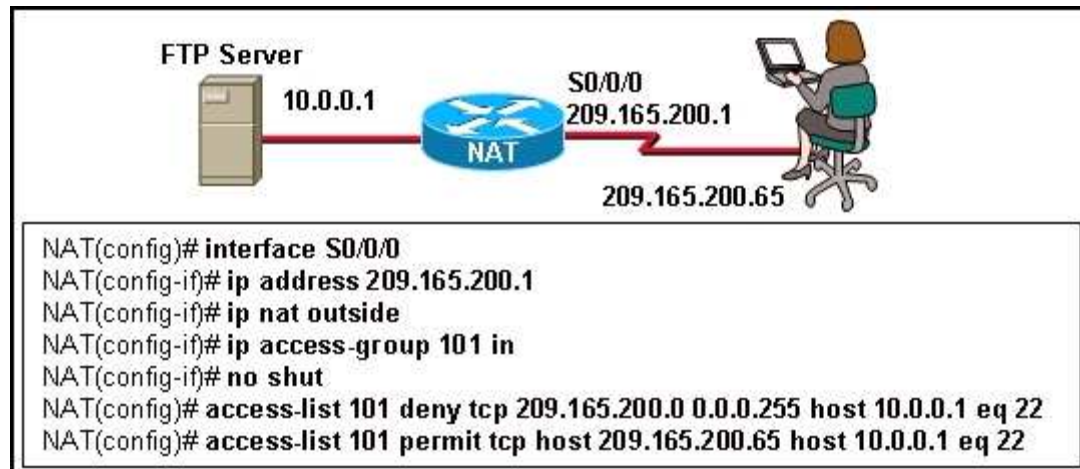
Refer to the exhibit. The SSH connections between the remote user and the server are failing. The correct configuration of NAT has been verified. What is the most likely cause of the problem?

- SSH is unable to pass through NAT.

- There are incorrect access control list entries.

- The access list has the incorrect port number for SSH.

- The **ip helper** command is required on S0/0/0 to allow inbound connections.

14 A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?

- Configure static NAT for all ten users.

- ▣ Configure dynamic NAT for ten users.
- ▣ Configure dynamic NAT with PAT.
- ▣ Configure DHCP and static NAT.
- ▣ What the administrator wants to do cannot be done.

15 When configuring a Frame Relay connection, what are two instances when a static Frame Relay map should be used? (Choose two.)

- ☐ when the remote router is a non-Cisco router
- ☐ when the remote router does not support Inverse ARP
- ☐ when the local router is using IOS Release 11.1 or earlier
- ☐ when broadcast traffic and multicast traffic over the PVC must be controlled
- ☐ when globally significant rather than locally significant DLCIs are being used

16
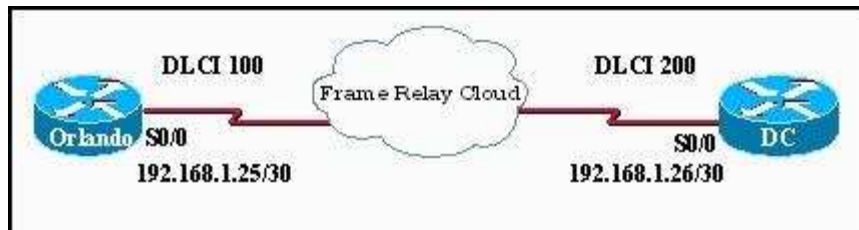
Refer to the exhibit. What is placed in the address field of a frame that will travel from the DC office of ABC company to the Orlando office?

- ▣ MAC address of the Orlando router
- ▣ MAC address of the DC router
- ▣ 192.168.1.25
- ▣ 192.168.1.26

- ⊙ DLCI 100
- ⊙ DLCI 200

---

17 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

☐ exchange information about the status of virtual circuits

☐ map DLCIs to network addresses

☐ provide flow control

☐ provide error notification

☐ provide congestion notification

☐ send keepalive packets to verify operation of the PVC

18

```
RouterA#debug ip nat
NAT:   s= 192.168.1.95        172.31.233.209,      d=172.31.2.132  [6825]
NAT:   s= 172.31.2.132,       d=172.31.233.209,    192.168.1.95 [21852]
NAT:   s= 192.168.1.95        172.31.233.209,      d=172.31.1.161 [6826]
NAT*:  s= 172.31.1.161,       d=172.31.233.209,    192.168.1.95 [23311]
NAT*:  s= 192.168.1.95        172.31.233.209,      d=172.31.1.161 [6827]
NAT*:  s= 192.168.1.95        172.31.233.209,      d=172.31.1.161 [6828]
NAT*:  s= 172.31.1.161        d=172.31.233.209,    192.168.1.95 [23313]
NAT*:  s= 172.31.1.161,       d=172.31.233.209,    192.168.1.95 [23313]
```

Refer to the exhibit. While troubleshooting a failed NAT connection, an administrator notices an asterisk (*) on several lines in the debug output. What does this indicate?

- The asterisk indicates congestion in the path that may result in dropped packets.
- The asterisk indicates that the translation is proceeding in the fast-switched path, and the administrator should look for other potential causes for the problem.
- The asterisk indicates that the traffic is being forced to use a default route.
- The asterisk indicates connections that fail to open and requires further investigation of the NAT configuration.

19
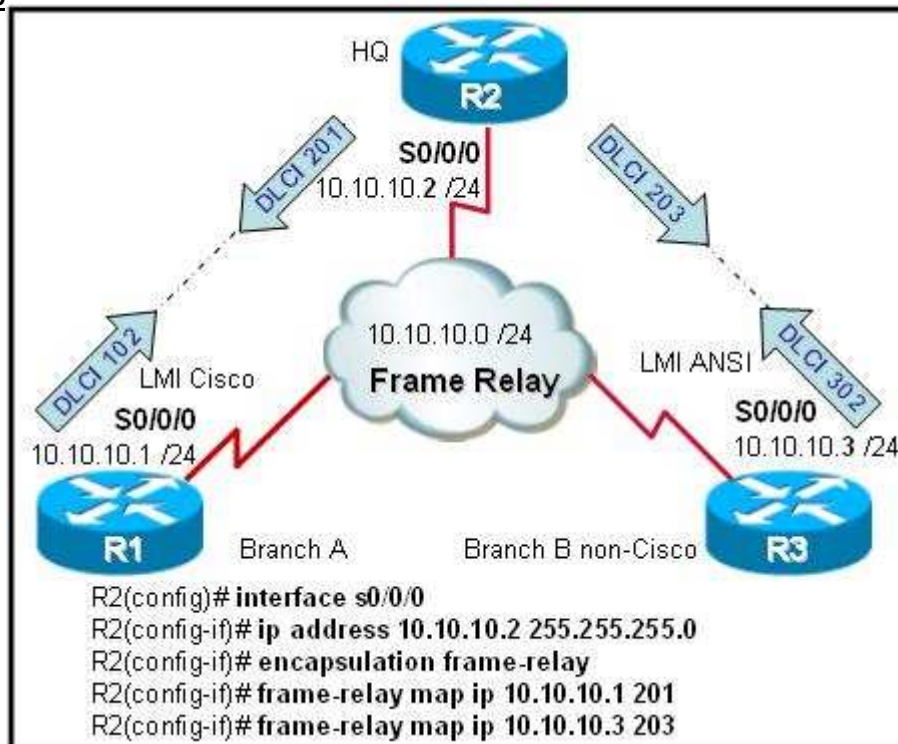

```
R2(config)# interface s0/0/0
R2(config-if)# ip address 10.10.10.2 255.255.255.0
R2(config-if)# encapsulation frame-relay
R2(config-if)# frame-relay map ip 10.10.10.1 201
R2(config-if)# frame-relay map ip 10.10.10.3 203
```

Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IETF encapsulation. After the commands shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANSI. The LMI is successfully established at both locations. What is the likely problem?

☐ LMI types must match on each end of a PVC.

☐ The PVCs at R2 use different encapsulation types. A single port can only support one encapsulation type.

☐ Multipoint topologies are Cisco proprietary. The PVC to R3 must be point to point.

☐ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.

20
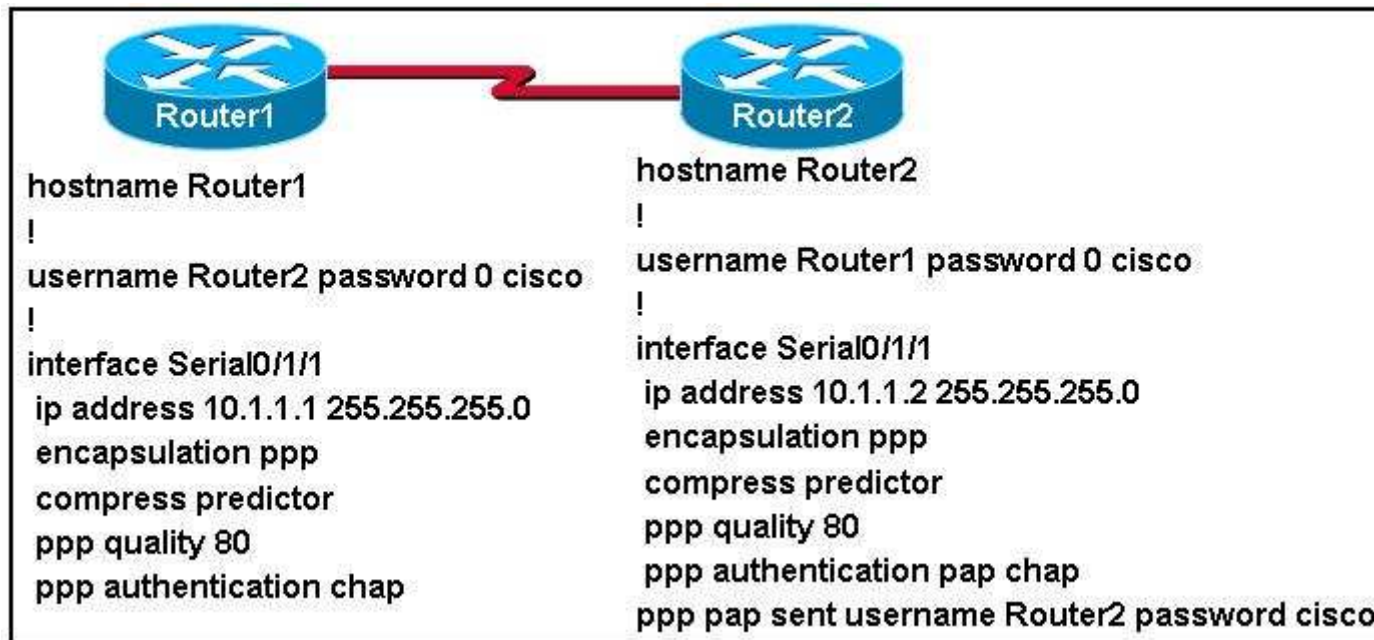
hostname Router1
!
username Router2 password 0 cisco
!
interface Serial0/1/1
 ip address 10.1.1.1 255.255.255.0
 encapsulation ppp
 compress predictor
 ppp quality 80
 ppp authentication chap

hostname Router2
!
username Router1 password 0 cisco
!
interface Serial0/1/1
 ip address 10.1.1.2 255.255.255.0
 encapsulation ppp
 compress predictor
 ppp quality 80
 ppp authentication pap chap
 ppp pap sent username Router2 password cisco

Refer to the exhibit. Which two statements are true regarding the configuration shown? (Choose two.)

☐ LCP sends a Configure-Reject frame.

☐ LCP tests the quality of the link.

☐ The routers authenticate using plain text passwords.

☐ NCP terminates the link when data exchange is complete.

☐ LCP uses link management frames to manage and debug a link.

☐ Layer 3 protocol options are negotiated immediately after the Configuration-Acknowledgement frame is sent.

21 What are three features of the CHAP protocol? (Choose three.)

☐ exchanges a random challenge number during the session to verify identity

☐ sends authentication password to verify identity

☐ prevents transmission of login information in plain text

☐ disconnects the PPP session if authentication fails

☐ initiates a two-way handshake

☐ is vulnerable to playback attacks

22


```
East# show interface serial 0
Serial0 is up, line protocol is down
  Hardware is PowerQUICC Serial
  Internet address is 198.19.249.254/30
  MTU 1500 bytes, BW 128 Kbit, DLY 20000 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set
     <output omitted>
```
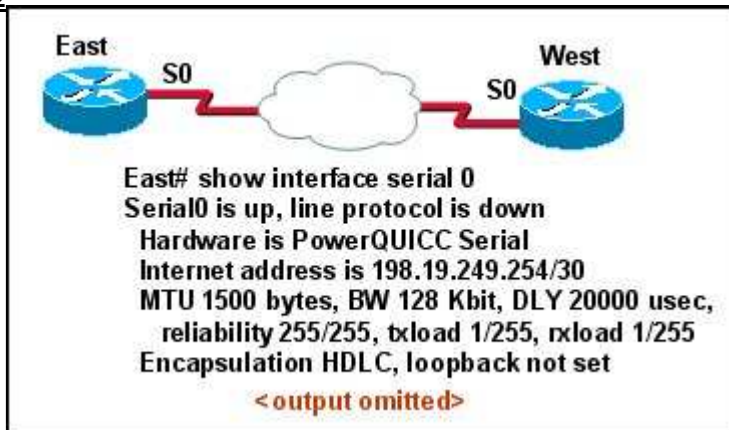
Refer to the exhibit. A system administrator is unable to ping the S0 interface of the West router from the East router. During the troubleshooting process, the following facts are established:

- IP addressing and subnet masks are correct.
- East is a Cisco router and West is a router from another vendor.

What should the administrator do to solve the problem?

⊙ Enable the serial interface on West.

◯ Change the encapsulation on both routers to PPP.

◯ Add a clock rate on East.

◯ Replace the serial cable used to attach the CSU/DSU to West.

◯ Set the loopback interface on East.

---

23 The command **show frame-relay map** gives the following output:

Serial 0 (up): ip 192.168.151.4 dlci 122, dynamic, broadcast, status defined, active

Which three statements represent what is shown?(Choose three.)

☐ **192.168.151.4** represents the IP address of the remote router

☐ **192.168.151.4** represents the IP address of the local serial interface

☐ **DLCI 122** represents the interface of the remote serial interface

☐ **DLCI 122** represents the local number used to connect to the remote address

☐ **broadcast** indicates that a dynamic routing protocol such as RIP v1 can send packets across this PVC

☐ **active** indicates that the ARP process is working

---

24 What type of access control list must be used to create a reflexive ACL?

◯ any extended IP ACL

◯ named extended IP ACL

⊙ numbered extended IP ACL

☐ any standard or extended IP ACL

___

25
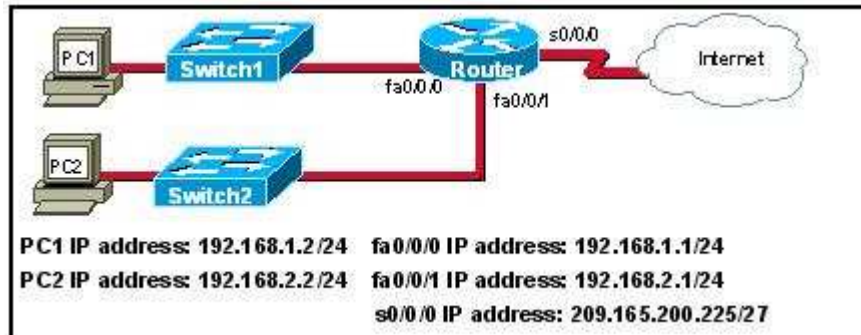
PC1 IP address: 192.168.1.2/24   fa0/0/0 IP address: 192.168.1.1/24
PC2 IP address: 192.168.2.2/24   fa0/0/1 IP address: 192.168.2.1/24
                                   s0/0/0 IP address: 209.165.200.225/27

Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction should it be applied?

☐ interface fa0/0/0, inbound

☐ interface fa0/0/0, outbound

☐ interface fa0/0/1, inbound

◉ interface fa0/0/1, outbound

___

26   An established company has recently transitioned from outsourced LAN support to a completely in-house staff. The outsourcing company is no longer in business, so no records are available. There are many user complaints about application speed and availability. What two considerations apply to this situation?

☐ A network utilization baseline should quickly reveal application availability.

☐ A period of 24 to 48 hours should provide a sufficient baseline to track normal network activity.

☐ It is easier to start with monitoring all available data inputs on application servers, and then fine-tune to fewer variables along the way.

☐ The initial baseline results have little relevance to current values after the network has been modified or grown in usage.

- ☐ When it is practical, network administrators should attempt to automate the collection of performance data and stay away from manual collection.
- ☐ Creating a network baseline data helps determine device thresholds for alerting.

27
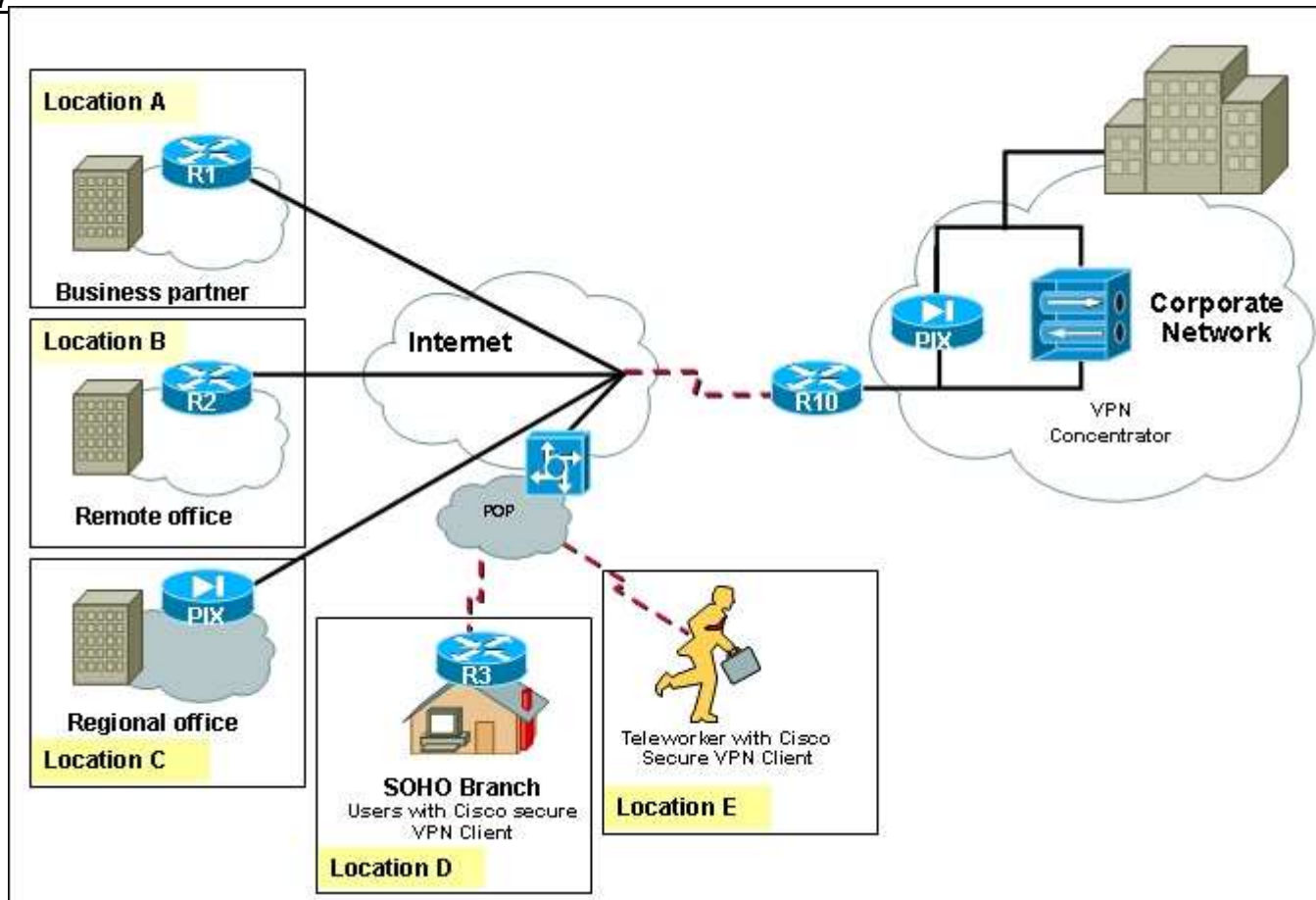
Refer to the exhibit. What type of VPN access is established from each location?

☐ Locations A and B – Site-to-site VPN
Locations C, D, and E - Remote access VPN

☐ Locations A, B, and C – Site-to-site VPN
Locations D and E - Remote access VPN

☐ Locations A, B, C, and D – Site-to-site VPN
Location E - Remote access VPN

☐ All locations can establish either site-to-site VPN or remote access VPN.

28
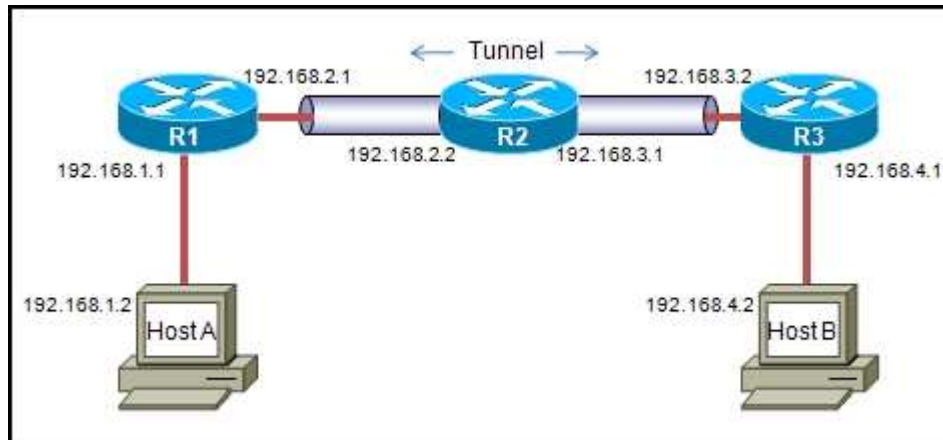
Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel between R1 and R3. When the packet first arrives at R3, what are the source and destination IP addresses of the packet?

☐ Source 192.168.1.2 - Destination 192.168.4.2

☐ Source 192.168.3.1 - Destination 192.168.3.2

☐ Source 192.168.2.1 - Destination 192.168.3.2

☐ Source 192.168.3.1 - Destination 192.168.4.2

29 Which three statements accurately describe a security policy? (Choose three.)

☐ It creates a basis for legal action if necessary.

☐ It defines a process for managing security violations.

☐ It defines acceptable and unacceptable use of network resources.

☐ The remote access policy is a component of the security policy that governs acceptable use of e-mail systems.

☐ It is kept private from users to prevent the possibility of circumventing security measures.

☐ It provides step-by-step procedures to harden routers and other network devices.

30 A technician has been asked to run Cisco SDM one-step lockdown on the router of a customer. What is the result of running these tests?

☐ Security testing is performed and the results are saved as a text file stored in NVRAM.

☐ All traffic entering the router is quarantined and checked for viruses before being forwarded.

☐ The router is tested for potential security problems and any necessary changes are made.

☐ Traffic is only forwarded from SDM-trusted Cisco routers.

31
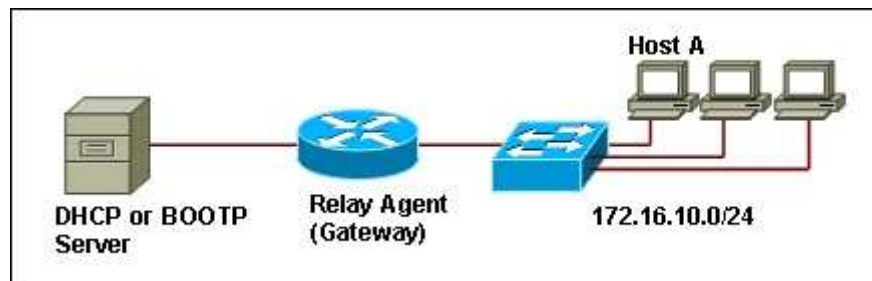
Refer to the exhibit. A new client Host A sent a DHCPDISCOVER message to the DHCP server located on a different subnet. How is the DHCPOFFER message sent to Host A by the DHCP server?

☐ as a unicast using the Layer 2 MAC address of the server as a source address and the Layer 2 address of Host A as a destination address

- ☑ as a unicast using the Layer 2 MAC address of the server as a source address and the Layer 2 address of the router as a destination address

- ☑ as a broadcast to all nodes on the subnet 172.1.16.10.0/24 using the Layer 2 MAC address of the server as a source address

- ☑ as a broadcast to all nodes on subnet 172.16.10.0/24 using the Layer 2 MAC address of the router as a source address

32 What are two main components of data confidentiality? (Choose two.)

- ☐ checksum

- ☐ digital certificates

- ☐ encapsulation

- ☐ encryption

- ☐ hashing

33

```
interface Serial0/0
  no ip address
  encapsulation frame-relay
  !
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. Which statement is true regarding the configuration shown?

- ☑ DLCI 110 has global significance.

- ☑ Point-to-point interfaces utilize bandwidth more efficiently.

- ☑ The IP address should have been configured on interface Serial0/0.

☐ The encapsulation should have been configured on the subinterface.

☐ This configuration will have fewer split horizon problems without suffering from routing loops.

34 Which statement is true regarding wildcard masks?

☐ The wildcard mask and subnet mask perform the same function.

☐ The wildcard mask is always the inverse of the subnet mask.

☐ A "0" in the wildcard mask identifies IP address bits that must be checked.

☐ A "1" in the wildcard mask identifies a network or subnet bit.

35 The SDM homepage for a router displays which three pieces of information? (Choose three.)

☐ ARP cache

☐ amount of total and available flash memory

☐ routing table

☐ number of configured LAN interfaces

☐ if a DHCP server is configured

☐ number of routers on the LAN

36
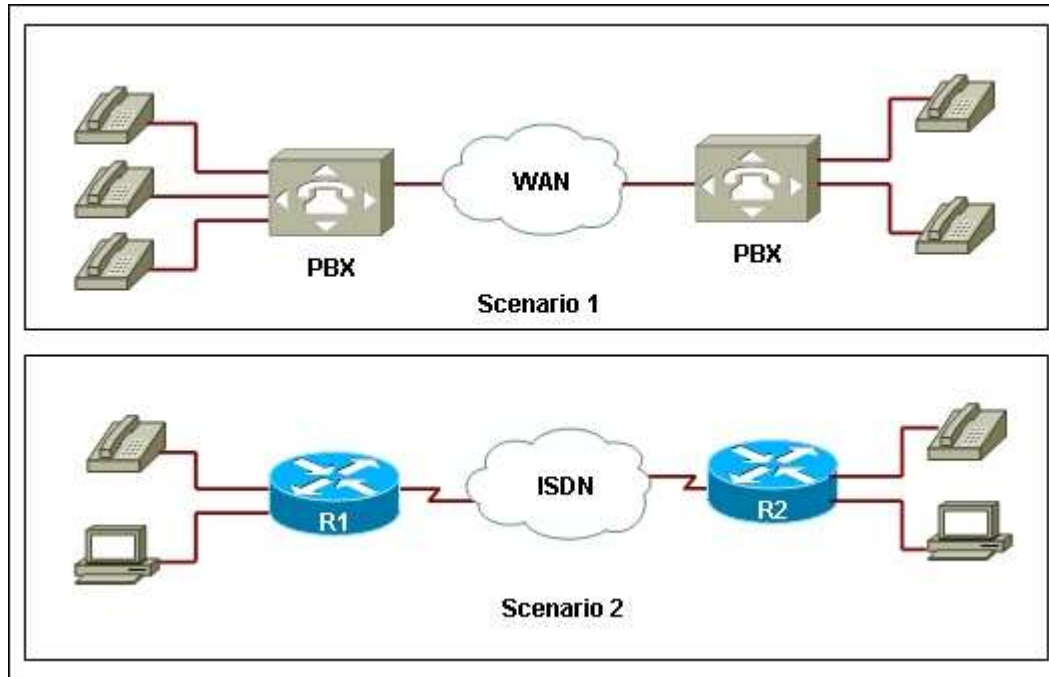
Refer to the exhibit. What types of switching technologies are used to carry voice and data traffic over the WAN connections shown in Scenario 1 and Scenario 2?

- Scenario 1: packet switching
  Scenario 2: packet switching
- Scenario 1: circuit switching
  Scenario 2: circuit switching
- Scenario 1: circuit switching
  Scenario 2: packet switching
- Scenario 1: packet switching
  Scenario 2: circuit switching

37 What functionality do access control lists provide when implementing dynamic NAT on a Cisco router?

- defines which addresses are excluded from the NAT pool

- defines which addresses are assigned to a NAT pool

⬚ defines which addresses are allowed out of the router

⬚ defines which addresses can be translated

38 While troubleshooting a failed VPN connection, a technician opens an SDM connection to a router and notices a message box with a login button, a configured IPSec policy, and that the router is configured as a DMVPN hub. What is the most likely cause of the failed connection?

⬚ The connection has been administratively closed on the other end of the connection.

⬚ The VPN tunnel has failed due to problems at the physical layer.

⬚ The timeout interval is set too low to allow the tunnel to be maintained.

⬚ XAUTH has been enabled for the tunnel, and the username and password must be supplied.

39 A network administrator must provide WAN connectivity between a central office and three remote sites: Orlando, Atlanta, and Phoenix. The Orlando and Atlanta remote offices receive sales orders and transmit shipping confirmations to the Central office consistently throughout the day. The Phoenix remote office consists of one salesperson traveling through the southwest territory. The salesperson occasionally needs to connect to the Central office for e-mail access. What two methods could the network administrator recommend to connect the remote sites to the Central office? (Choose two.)

☐ Connect to the Atlanta and Orlando remote offices with Frame Relay connections.

☐ Connect to the Atlanta and Orlando remote offices with ISDN connections.

☐ Connect to the Atlanta and Orlando remote offices with POTS dial-up connections.

☐ Connect to the Phoenix remote office with a Frame Relay connection.

☐ Connect to the Phoenix remote office with a POTS dial-up connection.

40

```
hostname CTRL
username CTRL password aDG73fh3
interface serial 0/0
clock rate 64000
ip address 198.18.10.230 255.255.255.252
encapsulation ppp
ppp authentication chap
```

```
hostname BR_1
username BR_1 password aDG73fh3
interface serial 0/0
ip address 198.18.10.229 255.255.255.252
encapsulation ppp
ppp authentication chap
```

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in the exhibit. Why are the routers unable to establish a PPP session?

The CHAP passwords must be different on the two routers.

The clock rate must be 56000.

Interface serial 0/0 on CTRL must connect to interface serial 0/1 on BR_1.

The IP addresses are on different subnets.

The usernames are misconfigured.

The clock rate is configured on the wrong end of the link.

41

```
Orlando# show running-config

<--output omitted-->

Hostname Orlando
!
interface Ethernet0
 ip address 192.168.1.129 255.255.255.240
!
interface Ethernet1
 ip address 192.168.1.145 255.255.255.240
!
interface Serial1
 ip address 201.201.201.1 255.255.255.0
 ip nat outside
!
ip nat pool Sales 201.201.201.5 201.201.201.15
netmask 255.255.255.0
!
access-list 1 permit 192.168.1.0 0.0.0.255
```

Internet
S1
Orlando
E0   E1

Workstation   Workstation
IP: 192.168.1.133/28   IP: 192.168.1.153/28

Refer to the exhibit. What are two reasons that explain why the workstation with the IP address 192.168.1.153/28 fails to access the Internet? (Choose two.)

☐ The NAT inside interfaces are not configured properly.

☐ The NAT outside interface is not configured properly.

☐ The router is not properly configured to use the access control list for NAT.

☐ The NAT pool is not properly configured to use routable outside addresses.

☐ The access control list does not include the IP address 192.168.1.153/28 to access the Internet.

42 Which two statements are true regarding the Security Wheel? (Choose two.)

☐ Testing can be done with IDS tools.

☐ Monitoring can be done using tools like SATAN, Nessus, or NMap.

☐ Steps taken to secure the network should be based on the security policy.

☐ The improve phase of the Security Wheel describes the initial implementation of the guidelines in the security policy to secure the network.

☐ Securing the network requires an adequate threat defense using packet filtering and HIPS, secure connectivity via VPNs, and secure trust relations using authentication.

43


```
Router1# show interface s0/0
Serial 0 is up, line protocol is up
  Hardware is MCI Serial
  Internet address is 131.108.156.98, subnet mask is 255.255.255.252
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
```
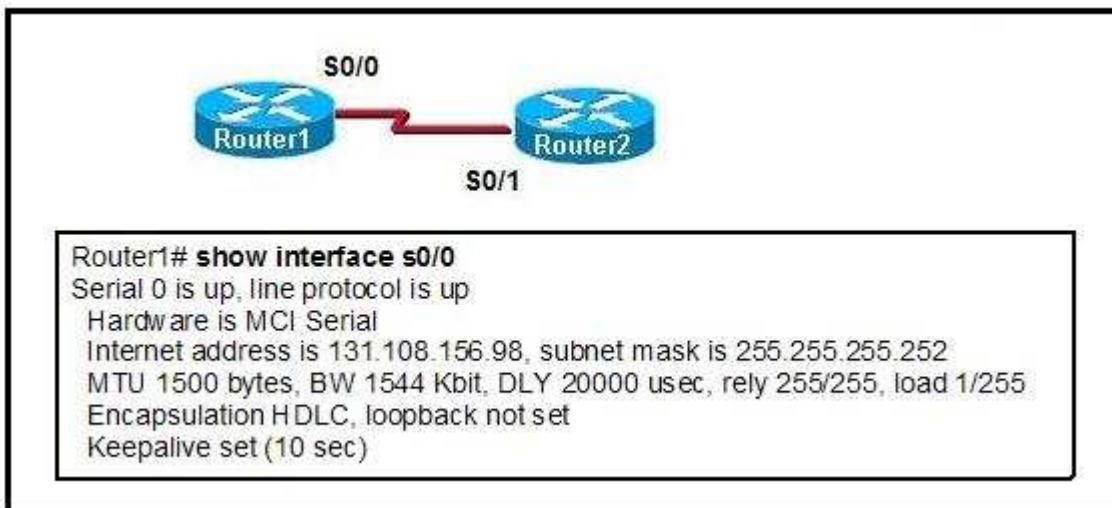
Refer to the exhibit. A technician has been asked to troubleshoot a failed connection between two routers. What can be determined by analyzing the output shown? (Choose two.)

☐ The physical connection between the two routers has failed.

☐ The failure occurs in an OSI layer other than layers 1 and 2.

☐ Encapsulation should be changed to PPP to solve the problem.

☐ The bandwidth has been set to the value of a T1 line.

☐ The IP address of S0/0 is invalid, given the subnet mask being used.

44 Which protocol should be chosen to support WAN connectivity in a multi-vendor system and provide strong security through authentication?

⊙ NAT with DHCP

⊙ Frame Relay

⊙ HDLC with encryption

⊙ HDLC with CHAP

⊙ PPP with PAP

⊙ PPP with CHAP

45

Inside Local	Inside Global	Outside Local	Outside Global
10.1.1.2:1234	172.30.20.1:3333	192.168.1.2:80	192.168.1.2:80
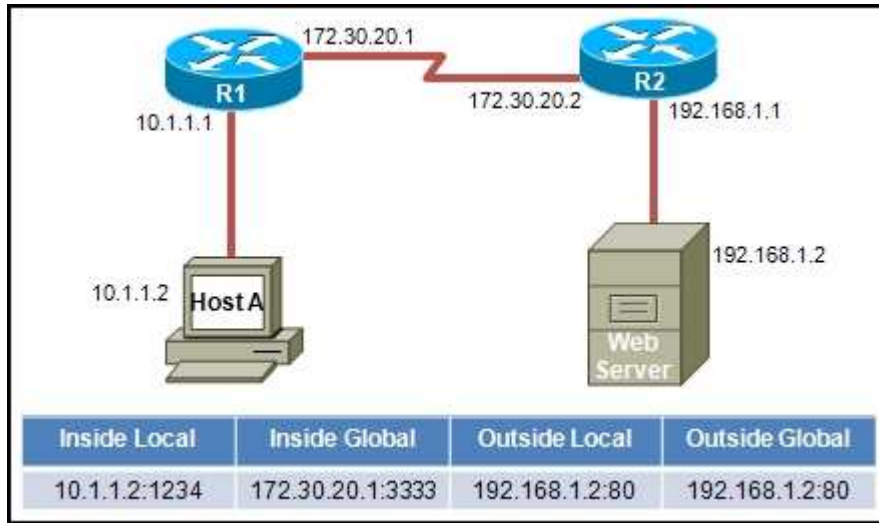
Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A has sent a packet to the web server. What is the destination IP address of the return packet from the web server?

- 10.1.1.2:1234
- 172.30.20.1:3333
- 10.1.1.2:3333
- 172.30.20.1:1234
- 192.168.1.2:80

---

46   What three statements describe the roles of devices in a WAN? (Choose three.)

- A CSU/DSU terminates a digital local loop.
- A modem terminates a digital local loop.
- A CSU/DSU terminates an analog local loop.
- A modem terminates an analog local loop.

□   A router is commonly considered a DTE device.

□   A router is commonly considered a DCE device.

47

```
TFTP Server
192.168.2.5

Fa0/0  192.168.2.1

R2

Fa0/0  192.168.1.1

R1
```

```
R1# show flash
System flash directory:
File  Length  Name/status
  1   13832032 c1841-ipbase-mz.123-14.T7.bin
[13832032 bytes used, 18682016 available, 32514048 total]
32768K bytes of processor board System flash (Read/Write)
```

```
R1# copy flash: tftp:
Source filename []? c1841-ipbase-mz.123-14.T7.bin
Address or name of remote host []? 192.168.2.5
Destination filename [c1841-ipbase-mz.123-14.T7.bin]?
%Error opening tftp:
```

Refer to the exhibit. The network administrator is trying to back up the router Cisco IOS software and receives the output shown. The network administrator also cannot ping the TFTP server. What should be done to solve this problem?

○   Make sure that the Cisco IOS checksum is valid.

○   Start the TFTP server software on the TFTP server.

- Confirm there is enough room on the TFTP server for the Cisco IOS software.

- Make sure that the router has a route to the network where the TFTP server resides.

48 An administrator has been asked to implement broadband connections for all teleworkers in the department. Which three options, if available in the area, would satisfy this request? (Choose three.)

- cable

- dialup

- DSL

- IEEE 802.11g

- ISDN

- satellite

49 At what physical location does the responsibilty for a WAN connection change from the user to the service provider?

- demilitarized zone (DMZ)

- demarcation point

- local loop

- cloud

50

```
R1(config)# ip nat pool nat-pool1 209.165.200.225 209.165.200.240
                     netmask 255.255.255.0
R1(config)# ip nat inside source list 1 pool nat-pool1
R1(config)# interface serial 0/0/0
R1(config-if)# ip address 10.1.1.2 255.255.0.0
R1(config-if)# ip nat outside
R1(config)# interface serial s0/0/2
R1(config-if)# ip address 209.165.200. 241 255.255.255.0
R1(config-if)# ip nat inside
R1(config)# access-list 1 permit 192.168.0.0 0.0.0.255
```

Refer to the exhibit. Which three statements are true? (Choose three.)

- ☐ NAT overloading is enabled.

- ☐ Dynamic NAT is enabled.

- ☐ Address translation will fail.

- ☐ Interface configurations are incorrect.

- ☐ The host with an address of 192.168.1.255 will be translated.

- ☐ Traffic entering serial interface 0/0/2 is translated before exiting serial interface 0/0/0.

51 Which two statements are true regarding IPv6? (Choose two.)

- ☐ It is inherently more secure than IPv4.

- ☐ It can only be configured on an interface that does not have IPv4 on it.

- ☐ It can automatically configure the IPv6 addresses on end devices.

- ☐ Routing efficiency is slightly reduced because of the length of IPv6 addresses.

- ☐ There is no way to translate between IPv4 addresses and IPv6 addresses.

52 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both companies are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why

Company A reports higher download speeds than Company B?

☐ Company B has a higher volume of POTS voice traffic than Company A.

☐ Company B shares the conection to the DSLAM with more clients than Company A.

☐ Company A only uses microfilters on branch locations.

☐ Company A is closer to the service provider.

53 Which two statements are true regarding network attack mitigation? (Choose two.)

☐ Using non-alphanumeric characters prevents a brute-force password attack.

☐ Using secure passwords is the best way to mitigate reconnaissance attacks.

☐ Using payload encryption helps to mitigate attacks using malicious code, such as worms or viruses.

☐ DoS and DDoS attacks prevent legitimate users from using network devices and are not easily mitigated.

☐ User education helps prevent social engineering and the spread of viruses.

54 Which three items are LCP options that can be configured for PPP? (Choose three.)

☐ CHAP

☐ Stacker

☐ IPCP

☐ CDPCP

☐ Multilink

55

```
Router(config)# ip dhcp excluded-addresses 10.0.1.2 10.0.1.16
Router(config)# ip dhcp excluded-addresses 10.0.1.254
Router(config)# ip dhcp pool TEST
Router(dhcp-config)# network 10.0.1.2 255.255.255.0
Router(dhcp-config)# default-router 10.0.1.254
Router(dhcp-config)# dns-server 10.0.1.3
Router(dhcp-config)# domain-name netacad.net
```

Refer to the exhibit. How is the TCP/IP information specified by the **default-router** and **dns-server** commands made available to the clients in the network 10.0.1.0/24?

Each of the addresses must be manually configured on each of the network clients.

The TCP/IP information is dynamically configured on each network client.

The TCP/IP information is available on the DHCP server only.

The TCP/IP information is excluded on the DNS server only.

56   What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www** command have when implemented inbound on the f0/0 interface?

All traffic from any network destined for the Internet is permitted.

All traffic from 172.16.4.0/24 is permitted anywhere on any port.

Traffic originating from 172.16.4.0/24 is permitted to all port 80 destinations.

All TCP traffic is permitted, and all other traffic is denied.

The command is rejected by the router because it is incomplete.

57

```
<output omitted>
ip dhcp pool 192Network
 network 192.168.1.128 255.255.255.128
 default-router 192.168.1.1
 dns-server 192.168.1.1
!
interface FastEthernet0/0
 ip address 192.168.1.1 255.255.255.128
 duplex auto
 speed auto
!
<output omitted>
```

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?

- [ ] The 192.168.1.1 address has not been excluded from the DHCP pool.

- [ ] The pool of addresses for the 192Network pool is incorrect.

- [ ] The default router for the 192Network pool is incorrect.

- [ ] The 192.168.1.1 address is already configured on Fa0/0.

58 After examining server logs, a network administrator noticed that most of the servers on the network were probed for open TCP ports 80 and 8080 by an unknown remote user. Which type of attack would this most likely represent?

- [ ] access

- [ ] Trojan horse

- [ ] reconnaissance

- [ ] denial of service

59 What is a major characteristic of a worm?

- [ ] malicious software that copies itself into other executable programs

- [ ] tricks users into running the infected software

☐   a set of computer instructions that lies dormant until triggered by a specific event

☐   exploits vulnerabilities with the intent of propagating itself across a network

60   Which statement is true about the metro Ethernet packet-switched WAN technology?

☐   Requires the network address to be assigned to the subscriber to establish a switched virtual circuit (SVC).

☐   Provides a switched, high-bandwidth network capable of managing data, voice, and video all on the same infrastructure.

☐   Requires a DLCI number to be assigned to the subscribers to establish a permanent virtual circuit (PVC).

☐   Provides permanent voice connectivity to the public switched telephone network (PSTN).

61

```
Router1 (config)# username test password 0 test
Router1 (config)# username test autocommand access-enable host timeout 10
Router1 (config)# access-list 101 permit tcp any host 10.1.1.1 eq telnet
Router1 (config)# access-list 101 dynamic testlist timeout 15 permit ip
              10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255
Router1 (config)# interface fa0/0
Router1 (config-if)# ip address 10.1.1.1 255.255.255.0
Router1 (config-if)# ip access-group 101 in
Router1 (config)# line vty 0 4
Router1 (config-line)# login local
```

Refer to the exhibit. When does Router1 apply the dynamic access list named testlist to interface fa0/0?

☐   15 seconds after receiving Telnet traffic from 10.1.1.1/24

☐   when a Telnet session to 10.1.1.1/24 is authenticated

☐   immediately after receiving traffic on port 23 from 10.1.1.1/15

○ immediately after receiving traffic from the 10.1.1.0/24 network destined for the 172.16.1.0/24 network

62 Which three statements are true about creating and applying access lists? (Choose three.)

☐ Access list entries should filter in the order from general to specific.

☐ One access list per port per protocol per direction is permitted.

☐ Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destination.

☐ There is an implicit deny at the end of all access lists.

☐ Statements are processed sequentially from top to bottom until a match is found.

☐ The **inbound** keyword refers to traffic entering the network from the router interface where the ACL is applied.

63

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands shown when an ACL called Managers already exists on the router?

○ The commands overwrite the Managers ACL that is already on the router.

○ The commands are added at the end of the Managers ACL that is already on the router.

○ The commands are added at the beginning of the Managers ACL that is already on the router.

○ The network administrator receives an error stating that the ACL already exists.

64

```
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          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. Which two conclusions can be drawn from the output shown? (Choose two.)

☐ This network is experiencing congestion.

☐ The Frame Relay connection is in the process of negotiation.

☐ Data is not flowing in this network.

☐ The network is discarding eligible packets.

☐ The DLCI is globally significant.

---

65 What can a network administrator do to recover from a lost router password?

◻ perform a reload or reset

◻ telnet from another router and issue the **show running-config** command to view the password

◻ boot the router to ROM monitor mode and configure the router to ignore NVRAM when it initializes

◻ boot the router to bootROM mode and enter the **b** command to load the IOS manually

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 00:46:54 |

Showing 1 of 4   Next>   Page: | 1 ▼ | GO   <Prev

1 What will be the result of adding the command **ip dhcp excluded-address 172.16.4.1 172.16.4.5** to the configuration of a local router that has been configured as a DHCP server?

○ Traffic that is destined for 172.16.4.1 and 172.16.4.5 will be dropped by the router.

○ Traffic will not be routed from clients with addresses between 172.16.4.1 and 172.16.4.5.

◉ The DHCP server function of the router will not issue the addresses between 172.16.4.1 and 172.16.4.5.

○ The router will ignore all traffic that comes from the DHCP servers with addresses 172.16.4.1 and 172.16.4.5.

2

Refer to the exhibit. Partial results of the **show access-lists** and **show ip interface FastEthernet 0/1** commands for router R3 are shown. There are no other ACLs in effect. Host A is unable to telnet to host B. Which action will correct the problem but still restrict other traffic between the two networks?

○ Apply the ACL in the inbound direction.

○ Apply the ACL on the FastEthernet 0/0 interface.

◉ Reverse the order of the TCP protocol statements in the ACL.

○ Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

3

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is not functioning correctly. What could be the problem?

○ The username and password are not configured correctly.

○ The authentication method is not configured correctly.

○ The HTTP timeout policy is not configured correctly.

◉ The vtys are not configured correctly.

4

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the DC office of ABC Company to the Orlando office?

☐ MAC address of the Orlando router

☐ MAC address of the DC router

☐ 192.168.1.25

☐ 192.168.1.26

☐ DLCI 100

☉ DLCI 200

5 A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

☐ The router forwards the frame to all ports in the network and learns the address from the reply frame.

☐ The destination host IP address is embedded in the DLCI.

☑ The router searches Inverse ARP tables for maps of DLCIs to IP addresses.

☑ A table of static mappings can be searched.

☐ The router broadcasts a request for the required IP address.

6

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in the exhibit. Why are the routers unable to establish a PPP session?

☐ The clock rate must be 56000.

☉ The usernames are misconfigured.

☐ The IP addresses are on different subnets.

☐ The clock rate is configured on the wrong end of the link.

☐ The CHAP passwords must be different on the two routers.

☐ Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

7

Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and R3 do not receive RIP routing updates. On the basis of the provided configuration, what should be enabled on router R2 to remedy the problem?

☐ proxy ARP

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ◌ CDP updates
- ◌ SNMP services
- ◉ RIP authentication

---

8 Which wireless solution can provide mobile users with non line-of-sight broadband Internet access at speeds comparable to DSL or cable?

- ◌ Wi-Fi
- ◌ WiMAX
- ◉ satellite
- ◌ Metro Ethernet

9

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?

- ◌ It matches the incoming packet to the **access-list 201 permit any any** statement and allows the packet into the router.
- ◌ It reaches the end of ACL 101 without matching a condition and drops the packet because there is no **access-list 101 permit any any** statement.
- ◉ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, ignores the remaining statements in ACL 101, and allows the packet into the router.
- ◌ It matches the incoming packet to the access-list 201 deny icmp 192.168.1.0 0.0.0.255 any statement, continues comparing the packet to the remaining statements in ACL 201 to ensure that no subsequent statements allow FTP, and then drops the packet.

10

Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IETF encapsulation. After the commands shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANSI. The LMI is successfully established at both locations. Why is the PVC failing?

- ◌ The PVC to R3 must be point-to-point.
- ◌ LMI types must match on each end of a PVC.
- ◉ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.
- ◌ The PVCs at R2 use different encapsulation types. A single port can only support one encapsulation type.

---

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

11

Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A has sent a packet to the web server. What is the destination IP address of the return packet from the web server?

- ☐ 10.1.1.2:1234
- ☐ 172.30.20.1:1234
- ☒ 172.30.20.1:3333
- ☐ 192.168.1.2:80

12 When configuring a Frame Relay connection, what are two instances when a static Frame Relay map should be used? (Choose two.)

- ☐ when the remote router is a non-Cisco router
- ☒ when the remote router does not support Inverse ARP
- ☐ when the local router is using IOS Release 11.1 or earlier
- ☒ when broadcast traffic and multicast traffic over the PVC must be controlled
- ☐ when globally significant rather than locally significant DLCIs are being used

13 Which two statements are true about IPv6? (Choose two.)

- ☒ Security options are build into IPv6.
- ☐ IPv6 addresses require less router overhead to process.
- ☐ IPv6 can only be configured on an interface that does not have IPv4 on it.
- ☐ There is no way to translate between IPv4 addresses and IPv6 addresses.
- ☒ When enabled on a router, IPv6 can automatically configure link-local IPv6 addresses on all interfaces.

14

Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat** command?

- ☐ The 10.1.1.225 host is exchanging packets with the 192.168.0.10 host.
- ☐ The native 10.1.200.254 address is being translated to 192.168.0.10.
- ☒ The 192.168.0.0/24 network is the inside network.
- ☐ Port address translation is in effect.

4

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

15

Refer to the exhibit. Company ABC expanded its business and recently opened a new branch office in another country. IPv6 addresses have been used for the company network. The data servers Server1 and Server2 run applications which require end-to-end functionality, with unmodified packets that are forwarded from the source to the destination. The edge routers R1 and R2 support dual stack configuration. What solution should be deployed at the edge of the company network in order to successfully interconnect both offices?

- ☐ a new WAN service supporting only IPv6
- ☐ NAT overload to map inside IPv6 addresses to outside IPv4 address
- ☑ a manually configured IPv6 tunnel between the edge routers R1 and R2
- ☐ static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dynamic NAT for the rest of the inside IPv6 addresses

Time Remaining: 00:46:20

Showing 2 of 4   Next>   Page: ☐ 2 ▼ GO   <Prev

16

Refer to the exhibit. How is the TCP/IP configuration information specified by the **default-router** and **dns-server** commands made available?

- ☐ The TCP/IP information is forwarded to a 10.0.1.3 to be supplied to DHCP clients.
- ☐ The TCP/IP information is used by DHCP clients that are configured to request a configuration from R1.
- ☑ The TCP/IP information is supplied to any DHCP client on the network connected to the FastEthernet 0/0 interface of R1.
- ☐ The TCP/IP information is applied to each packet that enters R1 through the FastEthernet 0/0 interface that are hosts on the 10.0.1.0 /24 network except packets from addresses 10.0.1.2, 10.0.1.16, and 10.0.1.254.

17

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?

- ☐ The 192.168.1.1 address has not been excluded from the DHCP pool.
- ☑ The pool of addresses for the 192Network pool is incorrect.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ The default router for the 192Network pool is incorrect.

☐ The 192.168.1.1 address is already configured on Fa0/0.

18 An administrator is configuring a dual stack router with IPv6 and IPv4 using RIPng. The administrator receives an error message when trying to enter the IPv4 routes into RIPng. What is the cause of the problem?

☐ RIPng is incompatible with dual-stack technology.

☐ All interfaces have been configured with the incorrect IPv4 addresses.

◉ RIPv1 or RIPv2 needs to be configured in addition to RIPng to successfully use IPv4.

☐ When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer technology.

19 A network administrator added two switches and a new VLAN over the past weekend. How can the administrator determine if the additions and changes improved performance and availability on the company intranet?

◉ Perform a baseline test and compare the current values to values that were obtained in previous weeks.

☐ Interview departmental secretaries and determine if they think load time for web pages is improved.

☐ Compare the hit counts on the company web server for the current week to the values that were recorded from previous weeks.

☐ Performance on the intranet can be determined by monitoring load times of company web pages from remote sites.

20

Refer to the exhibit. A network administrator has issued the commands that are shown on Router1 and Router2. A later review of the routing tables reveals that neither router is learning the LAN network of the neighbor router. What is most likely the problem with the RIPng configuration?

☐ The serial interfaces are in different subnets.

◉ The RIPng process is not enabled on interfaces.

☐ The RIPng network command is not configured.

☐ The RIPng processes do not match between Router1 and Router2.

21 What three statements describe the roles of devices in a WAN? (Choose three.)

☑ A CSU/DSU terminates a digital local loop.

☐ A modem terminates a digital local loop.

☐ A CSU/DSU terminates an analog local loop.

6

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☑ A modem terminates an analog local loop.
- ☑ A router is commonly considered a DTE device.
- ☐ A router is commonly considered a DCE device.

22 A technician has been asked to run Cisco SDM one-step lockdown on the router of a customer. What will be the result of this process?

- ☐ Traffic is only forwarded from SDM-trusted Cisco routers.
- ☐ Security testing is performed and the results are saved as a text file stored in NVRAM.
- ◉ The router is tested for potential security problems and any necessary changes are made.
- ☐ All traffic entering the router is quarantined and checked for viruses before being forwarded.

23 At what physical location does the responsibilty for a WAN connection change from the user to the service provider?

- ☐ demilitarized zone (DMZ)
- ◉ demarcation point
- ☐ local loop
- ☐ cloud

24 Which three statements accurately describe a security policy? (Choose three.)

- ☑ It creates a basis for legal action if necessary.
- ☑ It defines a process for managing security violations.
- ☐ It defines acceptable and unacceptable use of network resources.
- ☐ The remote access policy is a component of the security policy that governs acceptable use of e-mail systems.
- ☐ It is kept private from users to prevent the possibility of circumventing security measures.
- ☑ It provides step-by-step procedures to harden routers and other network devices.

25 An administrator is unable to receive e-mail. While troubleshooting the problem, the administrator is able to ping the local mail server IP address successfully from a remote network and can successfully resolve the mail server name to an IP address via the use of the **nslookup** command. At what OSI layer is the problem most likely to be found?

- ☐ physical layer
- ☐ data link layer
- ☐ network layer
- ◉ application layer

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
26

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands shown when an ACL called Managers already exists on the router?

- ☐ The commands overwrite the existing Managers ACL.
- ☑ The commands are added at the end of the existing Managers ACL.
- ☐ The network administrator receives an error stating that the ACL already exists.
- ☐ The commands will create a duplicate Managers ACL containing only the new commands being entered.

27 Which three statements are true about creating and applying access lists? (Choose three.)

- ☐ Access list entries should filter in the order from general to specific.
- ☑ One access list per port per protocol per direction is permitted.
- ☐ Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destination.
- ☑ There is an implicit deny at the end of all access lists.
- ☑ Statements are processed sequentially from top to bottom until a match is found.
- ☐ The **inbound** keyword refers to traffic entering the network from the router interface where the ACL is applied.

28

Refer to the exhibit. From the output of the **show interface** commands, at which OSI layer is a fault indicated?

- ☐ application
- ☐ transport
- ☐ network
- ☑ data link
- ☐ physical

29 Which combination of Layer 2 protocol and authentication should be used to establish a link without sending authentication information in plain text between a Cisco and a non-Cisco router?

- ☐ PPP with PAP
- ☑ PPP with CHAP

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ HDLC with PAP

☐ HDLC with CHAP

30

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a network problem. What two conclusions can be determined by from the output shown? (Choose two.)

☑ The bandwidth has been set to the value of a T1 line.

☐ Encapsulation should of this inteface be changed to PPP.

☑ There is no failure indicated in an OSI Layer 1 or Layer 2.

☐ The physical connection between the two routers has failed.

☐ The IP address of S0/0 is invalid, given the subnet mask being used.

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 00:45:47 |

Showing 3 of 4   Next>   Page: | 3   ▼ | GO   <Prev

31   What are two main components of data confidentiality? (Choose two.)

☐ checksum

☐ digital certificates

☑ encapsulation

☑ encryption

☐ hashing

32 Which statement is true regarding wildcard masks?

○ The wildcard mask and subnet mask perform the same function.

○ The wildcard mask is always the inverse of the subnet mask.

⊙ A "0" in the wildcard mask identifies IP address bits that must be checked.

○ A "1" in the wildcard mask identifies a network or subnet bit.

33

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction should it be applied?

- ☐ interface fa0/0/0, inbound
- ☐ interface fa0/0/0, outbound
- ☐ interface fa0/0/1, inbound
- ◉ interface fa0/0/1, outbound

34 Which three guidelines would help contribute to creating a strong password policy? (Choose three.)

- ☐ Once a good password is created, do not change it.
- ☑ Deliberately misspell words when creating passwords.
- ☑ Create passwords that are at least 8 characters in length.
- ☑ Use combinations of upper case, lower case, and special characters.
- ☐ Write passwords in locations that can be easily retrieved to avoid being locked out.
- ☐ Use long words found in the dictionary to make passwords that are easy to remember.

35 What is a major characteristic of a worm?

- ☐ malicious software that copies itself into other executable programs
- ☐ tricks users into running the infected software
- ☐ a set of computer instructions that lies dormant until triggered by a specific event
- ◉ exploits vulnerabilities with the intent of propagating itself across a network

36 A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?

- ☐ Configure DHCP and static NAT.
- ☐ Configure dynamic NAT for ten users.
- ☐ Configure static NAT for all ten users.
- ◉ Configure dynamic NAT with overload.

37 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

- ☐ exchange information about the status of virtual circuits

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☑ map DLCIs to network addresses
- ☑ provide flow control
- ☐ provide error notification
- ☐ provide congestion notification
- ☑ send keepalive packets to verify operation of the PVC

---

38 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both companies are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why Company A reports higher download speeds than Company B?

- ☐ Company B has a higher volume of POTS voice traffic than Company A.
- ☐ Company B shares the conection to the DSLAM with more clients than Company A.
- ☐ Company A only uses microfilters on branch locations.
- ◉ Company A is closer to the service provider.

---

39 What can a network administrator do to recover from a lost router password?

- ☐ use the **copy tftp: flash:** command
- ☐ boot the router to bootROM mode and enter the **b** command to load the IOS manually
- ☐ telnet from another router and issue the **show running-config** command to view the password
- ◉ boot the router to ROM monitor mode and configure the router to ignore the startup configuration when it initializes

---

40 A network administrator is working with an applications team to fix a problem that a server based application is having with response time. The administrator has examined the network portions of the data path and identified several possible problem areas. The applications team has simultaneously identified potential issues with the current release of software. The network administrator begins addressing the network issues while the applications team implements software patches.

Which statement applies to this situation?

- ☐ Changes to the network will reveal problems that are caused by the new patches.
- ◉ Scheduling will be more difficult if the network and software teams work independently.
- ☐ It will be difficult to isolate the problem if two teams are implementing changes independently.
- ☐ Results from changes will be easier to reconcile and document if each team works in isolation.

41

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel between R1 and R3. When the packet first arrives at R3, what are the source and destination IP addresses of the packet?

- ◉ Source 192.168.1.2 - Destination 192.168.4.2
- ◉ Source 192.168.3.1 - Destination 192.168.3.2
- ◉ Source 192.168.2.1 - Destination 192.168.3.2
- ◉ Source 192.168.3.1 - Destination 192.168.4.2

42

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output shown, what is the most likely cause?

- ◉ improper LMI type
- ◉ interface reset
- ◉ PPP negotiation failure
- ◉ unplugged cable

43

Refer to the exhibit. Which two conclusions can be drawn from the output shown? (Choose two.)

- ☑ This network is experiencing congestion.
- ☐ The Frame Relay connection is in the process of negotiation.
- ☐ Data is not flowing in this network.
- ☑ The network is discarding eligible packets.
- ☐ The DLCI is globally significant.

44 An established company has recently transitioned from outsourced LAN support to a completely in-house staff. The outsourcing company is no longer in business, so no records are available. There are many user complaints about application speed and availability. What two considerations apply to this situation? (Choose two.)

- ☐ A network utilization baseline should quickly reveal application availability.
- ☐ A period of 24 to 48 hours should provide a sufficient baseline to track normal network activity.
- ☐ It is easier to start with monitoring all available data inputs on application servers, and then fine-tune to fewer variables along the way.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ The initial baseline results have little relevance to current values after the network has been modified or grown in usage.

☑ When it is practical, network administrators should attempt to automate the collection of performance data and stay away from manual collection.

☑ Creating a network baseline data helps determine device thresholds for alerting.

45 Which three items are LCP options that can be configured for PPP? (Choose three.)

☑ CHAP

☑ Stacker

☐ IPCP

☐ CDPCP

☑ Multilink

46

Refer to the exhibit. The SSH connections between the remote user and the server are failing. The correct configuration of NAT has been verified. What is the most likely cause of the problem?

◯ SSH is unable to pass through NAT.

◉ There are incorrect access control list entries.

◯ The access list has the incorrect port number for SSH.

◯ The **ip helper** command is required on S0/0/0 to allow inbound connections.

47 Which technology would provide the highest bandwidth connections between company sites at the lowest cost?

◉ broadband Internet site-to-site VPN connections

◯ satellite based network connections

◯ dedicated point-to-point circuits

◯ Frame Relay PVCs

48 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administrator provide?

◯ Named ACLs are less efficient than numbered ACLs.

◯ Standard ACLs should be applied closest to the core layer.

◯ ACLs applied to outbound interfaces are the most efficient.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☉ Extended ACLs should be applied closest to the source that is specified by the ACL.

49 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has not been activated?

☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

☉ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

☐ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

50 What functionality do access control lists provide when implementing dynamic NAT on a Cisco router?

☉ defines which addresses can be translated

☐ defines which addresses are assigned to a NAT pool

☐ defines which addresses are allowed out of the router

☐ defines which addresses can be accessed from the inside network

51 A company is looking for a WAN solution to connect its headquarters site with four remote sites. What advantage would dedicated leased lines provide to the customer compared to a shared Frame Relay solution?

☐ lower cost

☐ lower latency and jitter

☉ variable bandwidth capacity

☐ fewer physical router interfaces

52 Which statement about a VPN is true?

☐ VPN link establishment and maintenance is provided by LCP.

☐ DLCI addresses are used to identify each end of the VPN tunnel.

☉ VPNs use virtual Layer 3 connections that are routed through the Internet.

☐ Only IP packets can be encapsulated by a VPN for tunneling through the Internet.

53 What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www** command have when implemented inbound on the f0/0 interface?

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ⬚ All TCP traffic is permitted, and all other traffic is denied.
- ⬚ The command is rejected by the router because it is incomplete.
- ⬚ All traffic from 172.16.4.0/24 is permitted anywhere on any port.
- ⬢ Traffic originating from 172.16.4.0/24 is permitted to all TCP port 80 destinations.

54

Refer to the exhibit. The network administrator is adding R1 to an existing network. As a part of the corporate IT procedures, the administrator attempts to back up the router Cisco IOS software of R1 and receives the output shown. The network administrator then attempts unsuccessfully to ping the TFTP server from the console session. What should be done next to isolate this problem?

- ⬚ From R2, validate that interface Fa0/0 is operational.
- ⬢ From the TFTP server, verify that the software on the TFTP server is operational.
- ⬚ From the TFTP server, confirm there is enough room on the TFTP server for the Cisco IOS software.
- ⬚ From the console session, make sure that R1 has a route to the network where the TFTP server resides.

55

Refer to the exhibit. You are a network administrator who has been tasked with completing the Frame Relay topology that interconnects two remote sites. How should the point-to-point subinterfaces be configured on HQ to complete the topology?

- ⬚ HQ(config-subif)#**frame-relay interface-dlci 103** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay interface-dlci 203** on Serial 0/0/0.2
- ⬢ HQ(config-subif)#**frame-relay interface-dlci 301** on Serial 0/0/0.1
  HQ(config-subif)# **frame-relay interface-dlci 302** on Serial 0/0/0.2
- ⬚ HQ(config-subif)#**frame-relay map ip 172.16.1.1 103 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 203 broadcast** on Serial 0/0/0.2
- ⬚ HQ(config-subif)#**frame-relay map ip 172.16.1.1 301 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 302 broadcast** on Serial 0/0/0.2

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 00:46:54 |

Showing 1 of 4   Next>   Page: | 1 ▼ | GO   <Prev

1 What will be the result of adding the command **ip dhcp excluded-address 172.16.4.1 172.16.4.5** to the configuration of a local router that has been configured as a DHCP server?

☐ Traffic that is destined for 172.16.4.1 and 172.16.4.5 will be dropped by the router.

☐ Traffic will not be routed from clients with addresses between 172.16.4.1 and 172.16.4.5.

◉ The DHCP server function of the router will not issue the addresses between 172.16.4.1 and 172.16.4.5.

☐ The router will ignore all traffic that comes from the DHCP servers with addresses 172.16.4.1 and 172.16.4.5.

2

Refer to the exhibit. Partial results of the **show access-lists** and **show ip interface FastEthernet 0/1** commands for router R3 are shown. There are no other ACLs in effect. Host A is unable to telnet to host B. Which action will correct the problem but still restrict other traffic between the two networks?

☐ Apply the ACL in the inbound direction.

☐ Apply the ACL on the FastEthernet 0/0 interface.

◉ Reverse the order of the TCP protocol statements in the ACL.

☐ Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

1

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

3

```
<output omitted>
!
username sdm privilege 15 password 0 sdm
!
ip http server
ip http authentication local
ip http secure-server
ip http timeout-policy idle 600 life 86400 requests 10000
!
<output omitted>
!
line con 0
line aux 0
line vty 0 4
 privilege level 15
 login local
 transport input none
```

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is not functioning correctly. What could be the problem?

- The username and password are not configured correctly.
- The authentication method is not configured correctly.
- The HTTP timeout policy is not configured correctly.
- ◉ The vtys are not configured correctly.

4

Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the DC office of ABC Company to the Orlando office?

- MAC address of the Orlando router
- MAC address of the DC router
- ◉ 192.168.1.25
- 192.168.1.26
- DLCI 100
- DLCI 200

www.9tut.info www.ccna4u.tk www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

5 A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

- ☐ The router forwards the frame to all ports in the network and learns the address from the reply frame.
- ☐ The destination host IP address is embedded in the DLCI.
- ☑ The router searches Inverse ARP tables for maps of DLCIs to IP addresses.
- ☑ A table of static mappings can be searched.
- ☐ The router broadcasts a request for the required IP address.

6


```
hostname CTRL
username CTRL password aDG73fh3
interface serial 0/0/0
clock rate 64000
ip address 198.18.10.230 255.255.255.252
encapsulation ppp
ppp authentication chap
```

```
hostname BR_1
username BR_1 password aDG73fh3
interface serial 0/0/0
ip address 198.18.10.229 255.255.255.252
encapsulation ppp
ppp authentication chap
```

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in the exhibit. Why are the routers unable to establish a PPP session?

- ☐ The clock rate must be 56000.
- ☉ The usernames are misconfigured.
- ☐ The IP addresses are on different subnets.
- ☐ The clock rate is configured on the wrong end of the link.
- ☐ The CHAP passwords must be different on the two routers.
- ☐ Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

7

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
                Fa0/0        S0/0/0   S0/0/1          S0/0/0   S0/0/1        Fa0/1
   SW1                   R1                      R2                      R3           SW3
        10.11.1.0/24          10.12.1.0/24          10.23.1.0/24          10.33.1.0/24
```

R1# show run	R2# show run	R3# show run
!	!	!
key chain RIP_KEY	no cdp run	key chain RIP_KEY
key 1	no ip proxy-arp	key 1
key-string cisco	no smtp-server	key-string cisco
!	no ip directed-broadcast	!
int s0/0/0	!	int s0/0/1
ip address 10.12.1.1 255.255.255.0	int s0/0/0	ip address 10.23.1.3 255.255.255.0
ip rip authentication mode md5	ip address 10.23.1.2 255.255.255.0	ip rip authentication mode md5
ip rip authentication key-chain	!	ip rip authentication key-chain
RIP_KEY	int s0/0/1	RIP_KEY
!	ip address 10.12.1.2 255.255.255.0	!
router rip	!	router rip
version 2	router rip	version 2
network 10.11.1.0	version 2	network 10.23.1.0
network 10.12.1.0	network 10.12.1.0	network 10.33.1.0
!	network 10.23.1.0	!
<output omitted>	!	<output omitted>
	<output omitted>	

Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and R3 do not receive RIP routing updates. On the basis of the provided configuration, what should be enabled on router R2 to remedy the problem?

- [ ] proxy ARP
- [ ] CDP updates
- [ ] SNMP services
- [x] RIP authentication

8 Which wireless solution can provide mobile users with non line-of-sight broadband Internet access at speeds comparable to DSL or cable?

- [ ] Wi-Fi
- [ ] WiMAX
- [x] satellite
- [ ] Metro Ethernet

9

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?
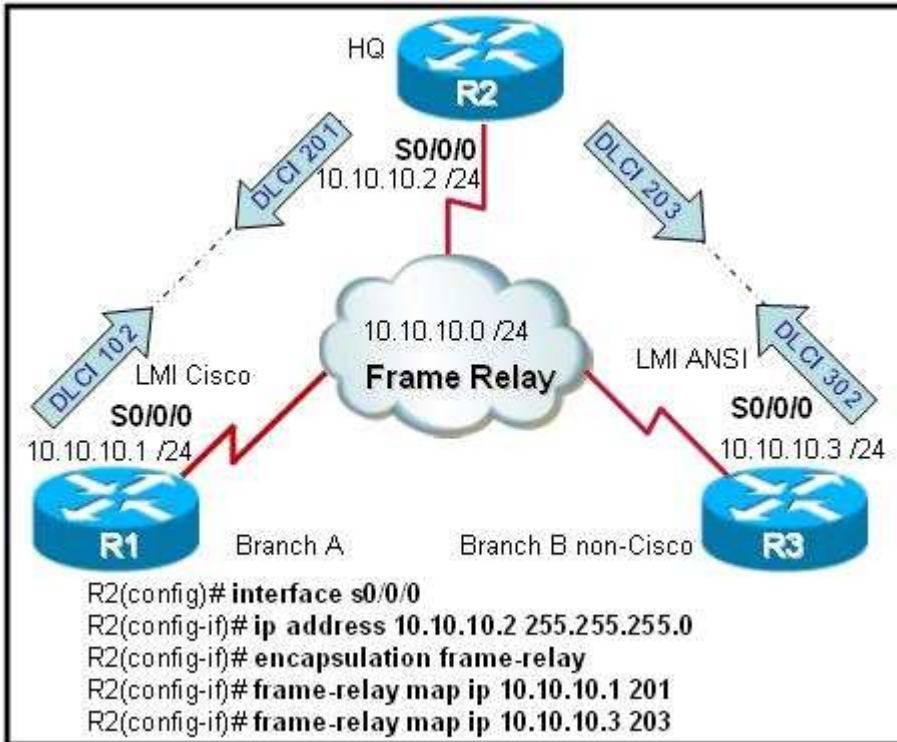
- ○ It matches the incoming packet to the **access-list 201 permit any any** statement and allows the packet into the router.
- ○ It reaches the end of ACL 101 without matching a condition and drops the packet because there is no **access-list 101 permit any any** statement.
- ◉ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, ignores the remaining statements in ACL 101, and allows the packet into the router.
- ○ It matches the incoming packet to the access-list 201 deny icmp 192.168.1.0 0.0.0.255 any statement, continues comparing the packet to the remaining statements in ACL 201 to ensure that no subsequent statements allow FTP, and then drops the packet.

10

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IETF encapsulation. After the commands shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANSI. The LMI is successfully established at both locations. Why is the PVC failing?

☐ The PVC to R3 must be point-to-point.

☐ LMI types must match on each end of a PVC.

☑ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.

☐ The PVCs at R2 use different encapsulation types. A single port can only support one encapsulation type.

11

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Inside Local	Inside Global	Outside Local	Outside Global
10.1.1.2:1234	172.30.20.1:3333	192.168.1.2:80	192.168.1.2:80

Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A has sent a packet to the web server. What is the destination IP address of the return packet from the web server?
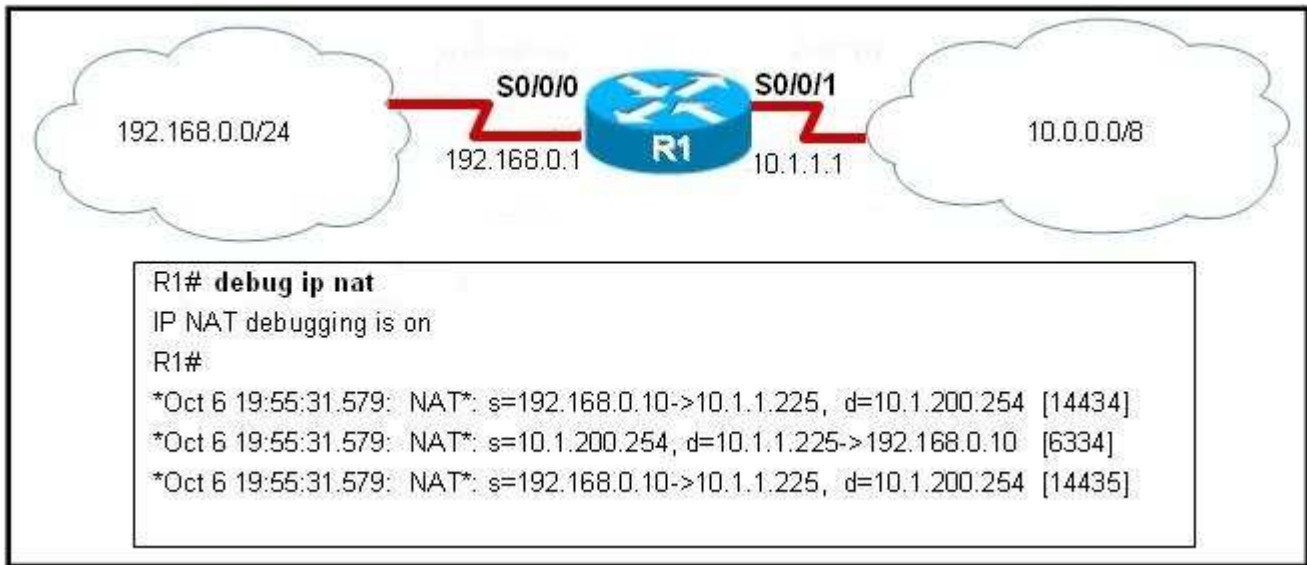
- ☐ 10.1.1.2:1234
- ☐ 172.30.20.1:1234
- ☑ 172.30.20.1:3333
- ☐ 192.168.1.2:80

12 When configuring a Frame Relay connection, what are two instances when a static Frame Relay map should be used? (Choose two.)
- ☐ when the remote router is a non-Cisco router
- ☑ when the remote router does not support Inverse ARP
- ☐ when the local router is using IOS Release 11.1 or earlier
- ☑ when broadcast traffic and multicast traffic over the PVC must be controlled
- ☐ when globally significant rather than locally significant DLCIs are being used

13 Which two statements are true about IPv6? (Choose two.)
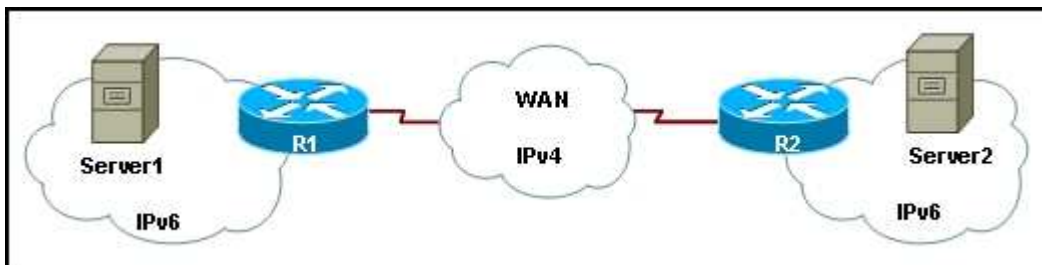- ☑ Security options are build into IPv6.
- ☐ IPv6 addresses require less router overhead to process.
- ☐ IPv6 can only be configured on an interface that does not have IPv4 on it.
- ☐ There is no way to translate between IPv4 addresses and IPv6 addresses.
- ☑ When enabled on a router, IPv6 can automatically configure link-local IPv6 addresses on all interfaces.

14

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
R1# debug ip nat
IP NAT debugging is on
R1#
*Oct 6 19:55:31.579:  NAT*: s=192.168.0.10->10.1.1.225,  d=10.1.200.254  [14434]
*Oct 6 19:55:31.579:  NAT*: s=10.1.200.254, d=10.1.1.225->192.168.0.10  [6334]
*Oct 6 19:55:31.579:  NAT*: s=192.168.0.10->10.1.1.225,  d=10.1.200.254  [14435]
```

Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat** command?

- ☐ The 10.1.1.225 host is exchanging packets with the 192.168.0.10 host.
- ☐ The native 10.1.200.254 address is being translated to 192.168.0.10.
- ☑ The 192.168.0.0/24 network is the inside network.
- ☐ Port address translation is in effect.

15

Refer to the exhibit. Company ABC expanded its business and recently opened a new branch office in another country. IPv6 addresses have been used for the company network. The data servers Server1 and Server2 run applications which require end-to-end functionality, with unmodified packets that are forwarded from the source to the destination. The edge routers R1 and R2 support dual stack configuration. What solution should be deployed at the edge of the company network in order to successfully interconnect both offices?

- ☐ a new WAN service supporting only IPv6
- ☐ NAT overload to map inside IPv6 addresses to outside IPv4 address
- ☑ a manually configured IPv6 tunnel between the edge routers R1 and R2

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dynamic NAT for the rest of the inside IPv6 addresses

Time Remaining: 00:46:20

Showing 2 of 4   Next>   Page: 2   GO   <Prev

16

```
R1(config)# interface FastEthernet 0/0
R1(config-if)# ip address 10.0.1.254 255.255.255.0
R1(config-if)# exit
R1(config)# ip dhcp excluded
R1(config)# ip dhcp excluded-address 10.0.1.2 10.0.1.16
R1(config)# ip dhcp excluded-address 10.0.1.254
R1(config)# ip dhcp pool TEST
R1(dhcp-config)# network 10.0.1.0 255.255.255.0
R1(dhcp-config)# default-router 10.0.1.254
R1(dhcp-config)# dns-server 10.0.1.3
R1(dhcp-config)# domain-name netacad.net
```

Refer to the exhibit. How is the TCP/IP configuration information specified by the **default-router** and **dns-server** commands made available?

- The TCP/IP information is forwarded to a 10.0.1.3 to be supplied to DHCP clients.
- The TCP/IP information is used by DHCP clients that are configured to request a configuration from R1.
- ⦿ The TCP/IP information is supplied to any DHCP client on the network connected to the FastEthernet 0/0 interface of R1.
- The TCP/IP information is applied to each packet that enters R1 through the FastEthernet 0/0 interface that are hosts on the 10.0.1.0 /24 network except packets from addresses 10.0.1.2, 10.0.1.16, and 10.0.1.254.

17

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
<output omitted>
ip dhcp pool 192Network
 network 192.168.1.128 255.255.255.128
 default-router 192.168.1.1
 dns-server 192.168.1.1
!
interface FastEthernet0/0
 ip address 192.168.1.1 255.255.255.128
 duplex auto
 speed auto
!
<output omitted>
```

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?
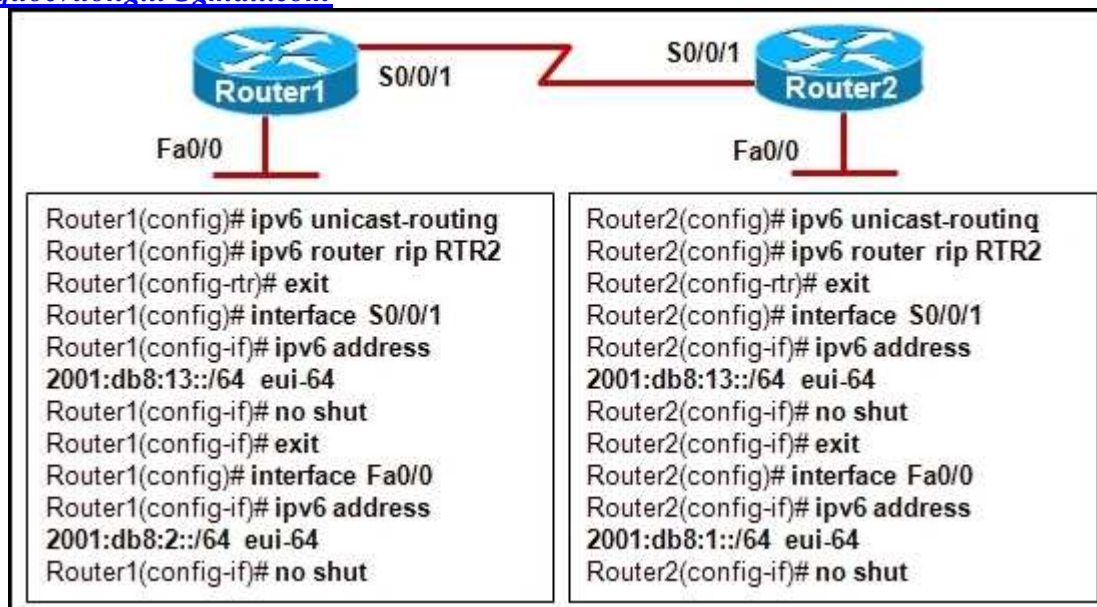
- ☐ The 192.168.1.1 address has not been excluded from the DHCP pool.
- ☑ The pool of addresses for the 192Network pool is incorrect.
- ☐ The default router for the 192Network pool is incorrect.
- ☐ The 192.168.1.1 address is already configured on Fa0/0.

18 An administrator is configuring a dual stack router with IPv6 and IPv4 using RIPng. The administrator receives an error message when trying to enter the IPv4 routes into RIPng. What is the cause of the problem?

- ☐ RIPng is incompatible with dual-stack technology.
- ☐ All interfaces have been configured with the incorrect IPv4 addresses.
- ☑ RIPv1 or RIPv2 needs to be configured in addition to RIPng to successfully use IPv4.
- ☐ When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer technology.

19 A network administrator added two switches and a new VLAN over the past weekend. How can the administrator determine if the additions and changes improved performance and availability on the company intranet?

- ☑ Perform a baseline test and compare the current values to values that were obtained in previous weeks.
- ☐ Interview departmental secretaries and determine if they think load time for web pages is improved.
- ☐ Compare the hit counts on the company web server for the current week to the values that were recorded from previous weeks.
- ☐ Performance on the intranet can be determined by monitoring load times of company web pages from remote sites.

20

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. A network administrator has issued the commands that are shown on Router1 and Router2. A later review of the routing tables reveals that neither router is learning the LAN network of the neighbor router. What is most likely the problem with the RIPng configuration?

- ☐ The serial interfaces are in different subnets.
- ◉ The RIPng process is not enabled on interfaces.
- ☐ The RIPng network command is not configured.
- ☐ The RIPng processes do not match between Router1 and Router2.

21 What three statements describe the roles of devices in a WAN? (Choose three.)

- ☑ A CSU/DSU terminates a digital local loop.
- ☐ A modem terminates a digital local loop.
- ☐ A CSU/DSU terminates an analog local loop.
- ☑ A modem terminates an analog local loop.
- ☑ A router is commonly considered a DTE device.
- ☐ A router is commonly considered a DCE device.

22 A technician has been asked to run Cisco SDM one-step lockdown on the router of a customer. What will be the result of this process?

- ☐ Traffic is only forwarded from SDM-trusted Cisco routers.
- ☐ Security testing is performed and the results are saved as a text file stored in NVRAM.
- ◉ The router is tested for potential security problems and any necessary changes are made.
- ☐ All traffic entering the router is quarantined and checked for viruses before being forwarded.

www.9tut.info www.ccna4u.tk www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

23 At what physical location does the responsibilty for a WAN connection change from the user to the service provider?

- ◻ demilitarized zone (DMZ)
- ◉ demarcation point
- ◻ local loop
- ◻ cloud

24 Which three statements accurately describe a security policy? (Choose three.)

- ☑ It creates a basis for legal action if necessary.
- ☑ It defines a process for managing security violations.
- ☐ It defines acceptable and unacceptable use of network resources.
- ☐ The remote access policy is a component of the security policy that governs acceptable use of e-mail systems.
- ☐ It is kept private from users to prevent the possibility of circumventing security measures.
- ☑ It provides step-by-step procedures to harden routers and other network devices.

25 An administrator is unable to receive e-mail. While troubleshooting the problem, the administrator is able to ping the local mail server IP address successfully from a remote network and can successfully resolve the mail server name to an IP address via the use of the **nslookup** command. At what OSI layer is the problem most likely to be found?

- ◻ physical layer
- ◻ data link layer
- ◻ network layer
- ◉ application layer

26

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands shown when an ACL called Managers already exists on the router?

- ◻ The commands overwrite the existing Managers ACL.
- ◉ The commands are added at the end of the existing Managers ACL.
- ◻ The network administrator receives an error stating that the ACL already exists.
- ◻ The commands will create a duplicate Managers ACL containing only the new commands being entered.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

27 Which three statements are true about creating and applying access lists? (Choose three.)

☐ Access list entries should filter in the order from general to specific.

☑ One access list per port per protocol per direction is permitted.

☐ Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destination.

☑ There is an implicit deny at the end of all access lists.

☑ Statements are processed sequentially from top to bottom until a match is found.

☐ The **inbound** keyword refers to traffic entering the network from the router interface where the ACL is applied.

28

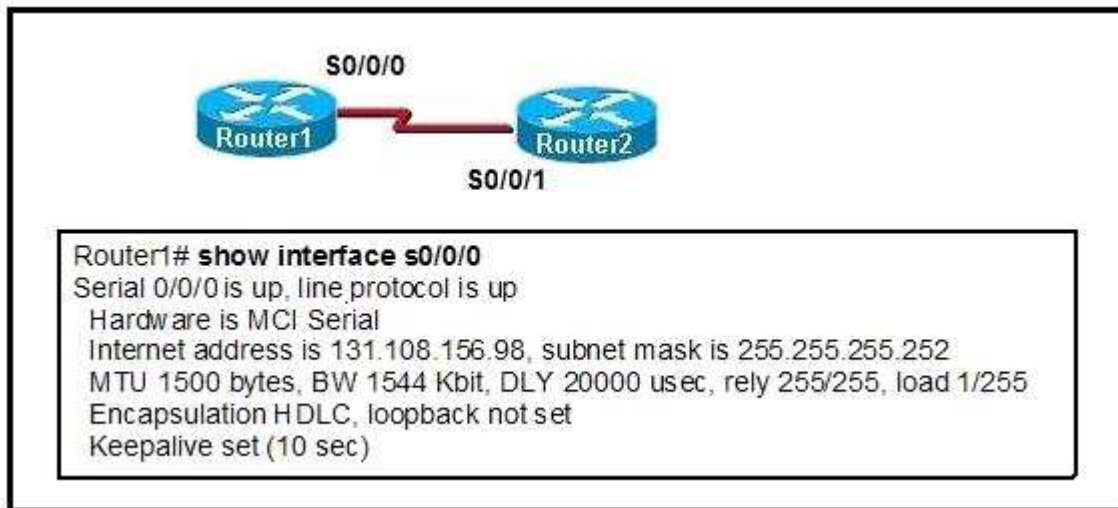Refer to the exhibit. From the output of the **show interface** commands, at which OSI layer is a fault indicated?

☐ application

☐ transport

☐ network

◉ data link

☐ physical

29 Which combination of Layer 2 protocol and authentication should be used to establish a link without sending authentication information in plain text between a Cisco and a non-Cisco router?

☐ PPP with PAP

◉ PPP with CHAP

☐ HDLC with PAP

13

www.9tut.info *www.ccna4u.tk* *www.ccnastudy.info*
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ HDLC with CHAP

30

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a network problem. What two conclusions can be determined by from the output shown? (Choose two.)

☑ The bandwidth has been set to the value of a T1 line.

☐ Encapsulation should of this inteface be changed to PPP.

☑ There is no failure indicated in an OSI Layer 1 or Layer 2.

☐ The physical connection between the two routers has failed.

☐ The IP address of S0/0 is invalid, given the subnet mask being used.

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)

Time Remaining: | 00:45:47 |

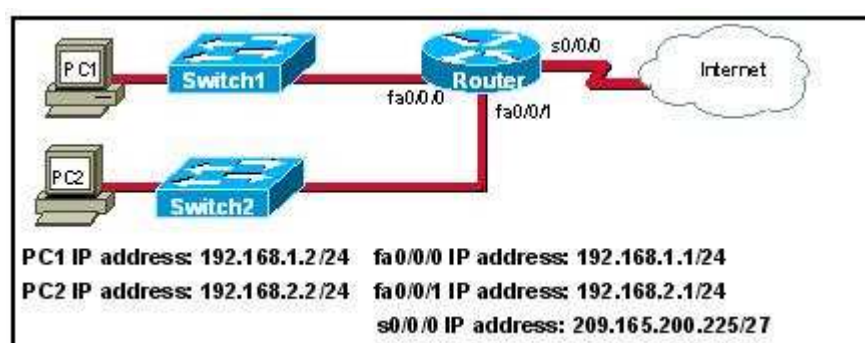Showing 3 of 4   Next>   Page: | 3   ▼ | GO   <Prev

31   What are two main components of data confidentiality? (Choose two.)

☐ checksum

☐ digital certificates

☑ encapsulation

☑ encryption

☐ hashing

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

32Which statement is true regarding wildcard masks?

- ☐ The wildcard mask and subnet mask perform the same function.
- ☐ The wildcard mask is always the inverse of the subnet mask.
- ☑ A "0" in the wildcard mask identifies IP address bits that must be checked.
- ☐ A "1" in the wildcard mask identifies a network or subnet bit.

33

PC1 IP address: 192.168.1.2/24   fa0/0/0 IP address: 192.168.1.1/24
PC2 IP address: 192.168.2.2/24   fa0/0/1 IP address: 192.168.2.1/24
                                  s0/0/0 IP address: 209.165.200.225/27

Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction should it be applied?

- ☐ interface fa0/0/0, inbound
- ☐ interface fa0/0/0, outbound
- ☐ interface fa0/0/1, inbound
- ☑ interface fa0/0/1, outbound

34Which three guidelines would help contribute to creating a strong password policy? (Choose three.)

- ☐ Once a good password is created, do not change it.
- ☐ Deliberately misspell words when creating passwords.
- ☑ Create passwords that are at least 8 characters in length.
- ☑ Use combinations of upper case, lower case, and special characters.
- ☑ Write passwords in locations that can be easily retrieved to avoid being locked out.
- ☐ Use long words found in the dictionary to make passwords that are easy to remember.

35   What is a major characteristic of a worm?

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☐ malicious software that copies itself into other executable programs

- ☐ tricks users into running the infected software

- ☐ a set of computer instructions that lies dormant until triggered by a specific event

- ☑ exploits vulnerabilities with the intent of propagating itself across a network

36 A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?

- ☐ Configure DHCP and static NAT.

- ☐ Configure dynamic NAT for ten users.

- ☐ Configure static NAT for all ten users.

- ☑ Configure dynamic NAT with overload.

37 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

- ☐ exchange information about the status of virtual circuits

- ☑ map DLCIs to network addresses

- ☑ provide flow control

- ☐ provide error notification

- ☐ provide congestion notification

- ☑ send keepalive packets to verify operation of the PVC

38 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both companies are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why Company A reports higher download speeds than Company B?

- ☐ Company B has a higher volume of POTS voice traffic than Company A.

- ☐ Company B shares the conection to the DSLAM with more clients than Company A.

- ☐ Company A only uses microfilters on branch locations.

- ☑ Company A is closer to the service provider.

39 What can a network administrator do to recover from a lost router password?

- ☐ use the **copy tftp: flash:** command

- ☐ boot the router to bootROM mode and enter the **b** command to load the IOS manually

- ☐ telnet from another router and issue the **show running-config** command to view the password
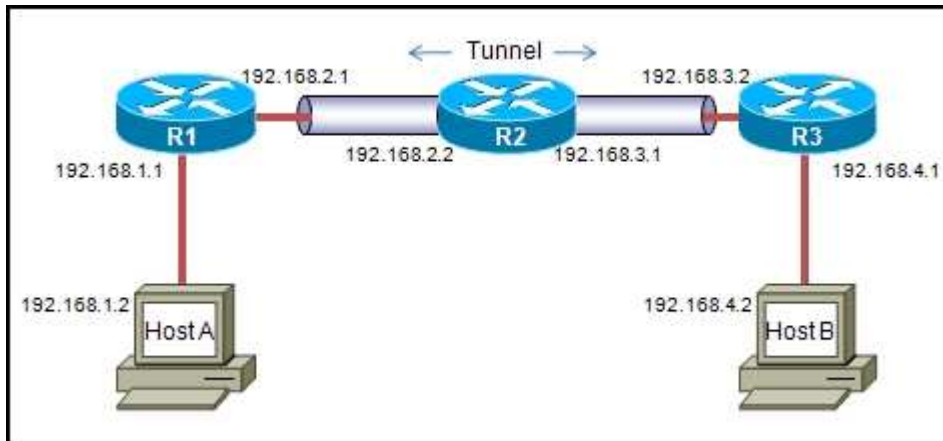
www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ⦿ boot the router to ROM monitor mode and configure the router to ignore the startup configuration when it initializes

40 A network administrator is working with an applications team to fix a problem that a server based application is having with response time. The administrator has examined the network portions of the data path and identified several possible problem areas. The applications team has simultaneously identified potential issues with the current release of software. The network administrator begins addressing the network issues while the applications team implements software patches.

Which statement applies to this situation?
- ☐ Changes to the network will reveal problems that are caused by the new patches.
- ⦿ Scheduling will be more difficult if the network and software teams work independently.
- ☐ It will be difficult to isolate the problem if two teams are implementing changes independently.
- ☐ Results from changes will be easier to reconcile and document if each team works in isolation.

41

Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel between R1 and R3. When the packet first arrives at R3, what are the source and destination IP addresses of the packet?
- ☐ Source 192.168.1.2 - Destination 192.168.4.2
- ☐ Source 192.168.3.1 - Destination 192.168.3.2
- ⦿ Source 192.168.2.1 - Destination 192.168.3.2
- ☐ Source 192.168.3.1 - Destination 192.168.4.2

42

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
Serial0/0/0 is up, line protocol is down
  Hardware is HD64570
  Internet address is 10.1.1.1/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation PPP, loopback not set, keepalive set (10 sec)
  LCP Closed
  Closed: LEXCP, BRIDGECP, IPCP, CCP, CDPCP, LLC2, BACP
  <output omitted>
  Queueing strategy: weighted fair
  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 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, 1 interface resets
     0 output buffer failures, 0 output buffers swapped out
     0 carrier transitions
     DCD=up DSR=up DTR=up RTS=up CTS=up
```

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output shown, what is the most likely cause?

- ☐ improper LMI type
- ☐ interface reset
- ☉ PPP negotiation failure
- ☐ unplugged cable

43

```
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          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. Which two conclusions can be drawn from the output shown? (Choose two.)

- ☑ This network is experiencing congestion.
- ☐ The Frame Relay connection is in the process of negotiation.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ Data is not flowing in this network.

☑ The network is discarding eligible packets.

☐ The DLCI is globally significant.

---

44 An established company has recently transitioned from outsourced LAN support to a completely in-house staff. The outsourcing company is no longer in business, so no records are available. There are many user complaints about application speed and availability. What two considerations apply to this situation? (Choose two.)

☐ A network utilization baseline should quickly reveal application availability.

☐ A period of 24 to 48 hours should provide a sufficient baseline to track normal network activity.

☐ It is easier to start with monitoring all available data inputs on application servers, and then fine-tune to fewer variables along the way.

☐ The initial baseline results have little relevance to current values after the network has been modified or grown in usage.

☑ When it is practical, network administrators should attempt to automate the collection of performance data and stay away from manual collection.

☑ Creating a network baseline data helps determine device thresholds for alerting.

---

45 Which three items are LCP options that can be configured for PPP? (Choose three.)

☑ CHAP

☑ Stacker

☐ IPCP

☐ CDPCP

☑ Multilink

Showing 3 of 4   Next>   Page: | 3   ▼ | GO   <Prev

Take Assessment - EWAN Final Exam - CCNA Exploration: Accessing the WAN (Version 4.0)
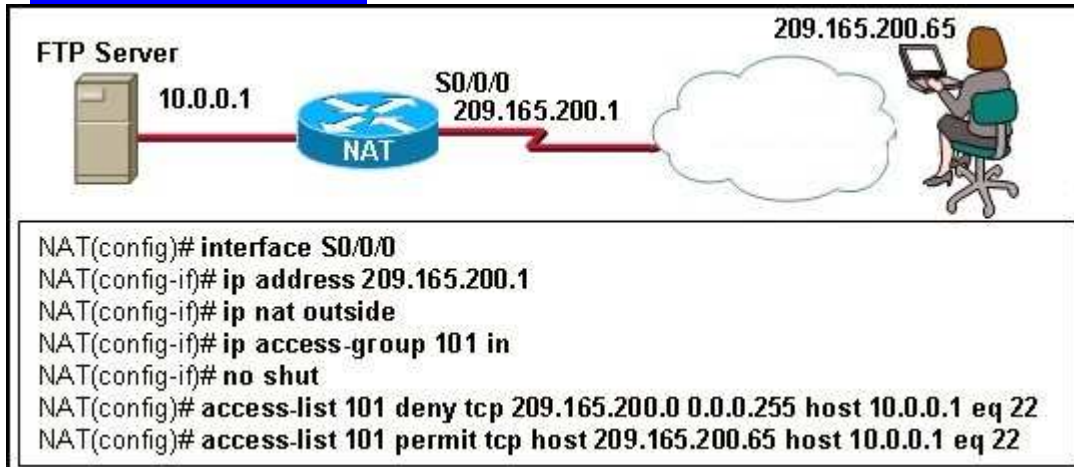
Time Remaining: | 00:45:20

Showing 4 of 4   Next>   Page: | 4   ▼ | GO   <Prev

46

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
NAT(config)# interface S0/0/0
NAT(config-if)# ip address 209.165.200.1
NAT(config-if)# ip nat outside
NAT(config-if)# ip access-group 101 in
NAT(config-if)# no shut
NAT(config)# access-list 101 deny tcp 209.165.200.0 0.0.0.255 host 10.0.0.1 eq 22
NAT(config)# access-list 101 permit tcp host 209.165.200.65 host 10.0.0.1 eq 22
```

Refer to the exhibit. The SSH connections between the remote user and the server are failing. The correct configuration of NAT has been verified. What is the most likely cause of the problem?

- ☐ SSH is unable to pass through NAT.
- ☑ There are incorrect access control list entries.
- ☐ The access list has the incorrect port number for SSH.
- ☐ The **ip helper** command is required on S0/0/0 to allow inbound connections.

47 Which technology would provide the highest bandwidth connections between company sites at the lowest cost?

- ☑ broadband Internet site-to-site VPN connections
- ☐ satellite based network connections
- ☐ dedicated point-to-point circuits
- ☐ Frame Relay PVCs

48 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administrator provide?

- ☐ Named ACLs are less efficient than numbered ACLs.
- ☐ Standard ACLs should be applied closest to the core layer.
- ☐ ACLs applied to outbound interfaces are the most efficient.
- ☑ Extended ACLs should be applied closest to the source that is specified by the ACL.

49 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has not been activated?

- ☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

    ○ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

    ◉ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

    ○ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

50 What functionality do access control lists provide when implementing dynamic NAT on a Cisco router?

    ◉ defines which addresses can be translated

    ○ defines which addresses are assigned to a NAT pool

    ○ defines which addresses are allowed out of the router

    ○ defines which addresses can be accessed from the inside network

51 A company is looking for a WAN solution to connect its headquarters site with four remote sites. What advantage would dedicated leased lines provide to the customer compared to a shared Frame Relay solution?
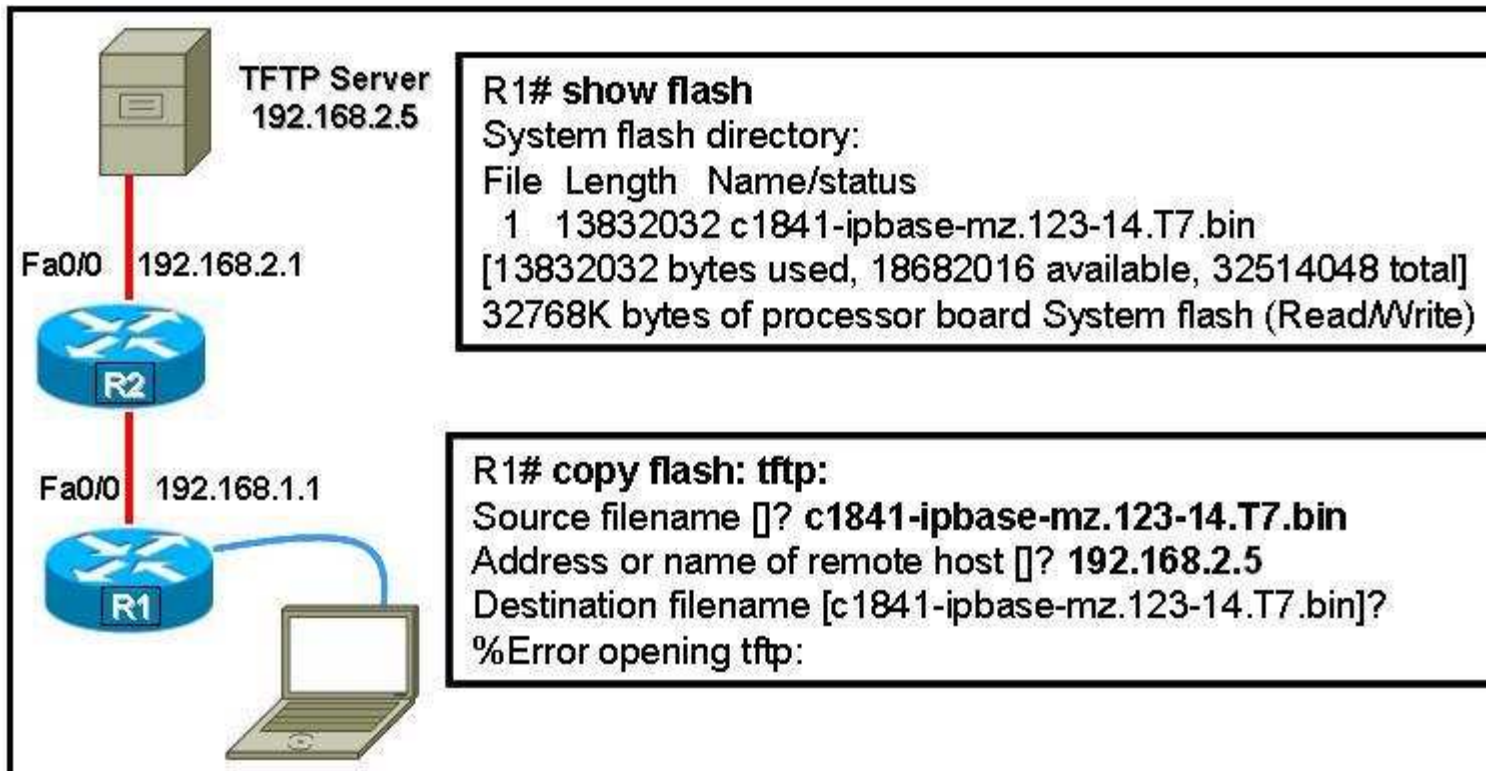
    ○ lower cost

    ○ lower latency and jitter

    ◉ variable bandwidth capacity

    ○ fewer physical router interfaces

52 Which statement about a VPN is true?

    ○ VPN link establishment and maintenance is provided by LCP.

    ○ DLCI addresses are used to identify each end of the VPN tunnel.

    ◉ VPNs use virtual Layer 3 connections that are routed through the Internet.

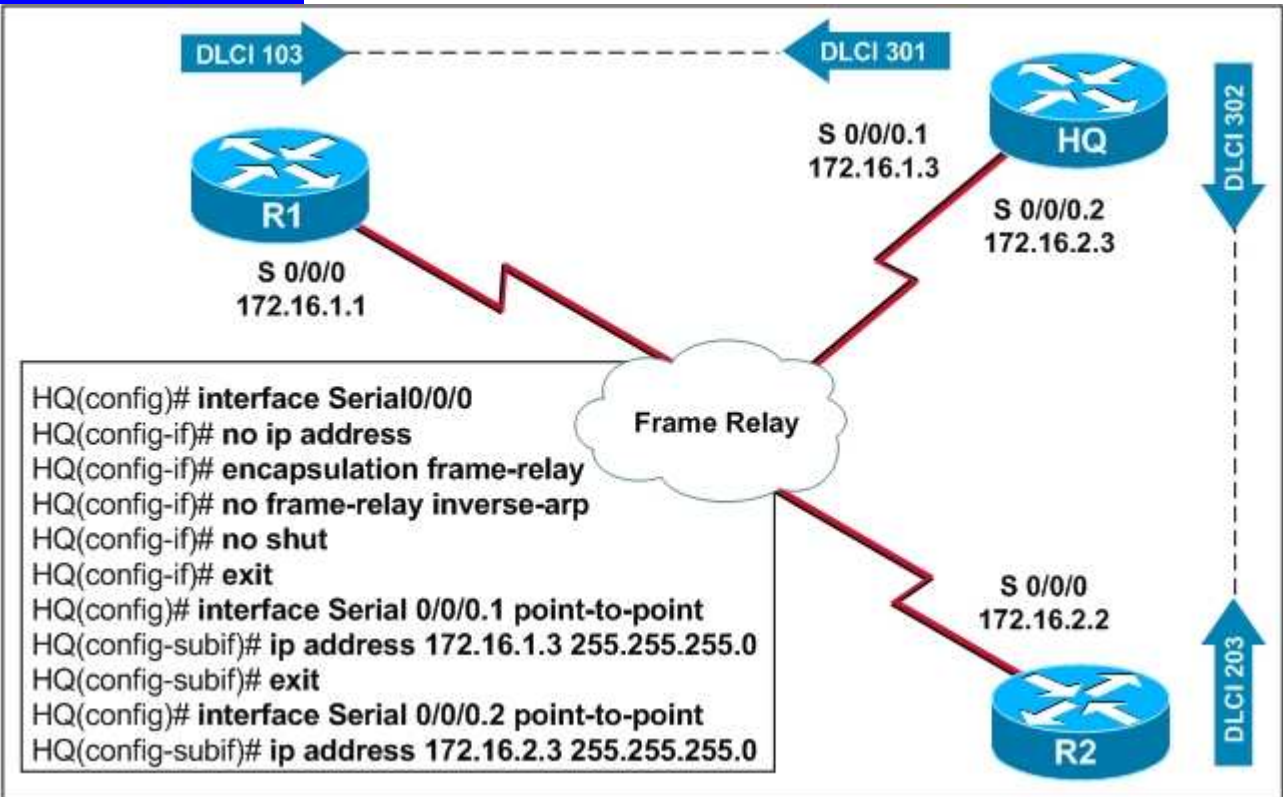   ○ Only IP packets can be encapsulated by a VPN for tunneling through the Internet.

53 What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www** command have when implemented inbound on the f0/0 interface?

    ○ All TCP traffic is permitted, and all other traffic is denied.

    ○ The command is rejected by the router because it is incomplete.

    ○ All traffic from 172.16.4.0/24 is permitted anywhere on any port.

    ◉ Traffic originating from 172.16.4.0/24 is permitted to all TCP port 80 destinations.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

54

R1# show flash
System flash directory:
File Length Name/status
 1   13832032 c1841-ipbase-mz.123-14.T7.bin
[13832032 bytes used, 18682016 available, 32514048 total]
32768K bytes of processor board System flash (Read/Write)

R1# copy flash: tftp:
Source filename []? c1841-ipbase-mz.123-14.T7.bin
Address or name of remote host []? 192.168.2.5
Destination filename [c1841-ipbase-mz.123-14.T7.bin]?
%Error opening tftp:

Refer to the exhibit. The network administrator is adding R1 to an existing network. As a part of the corpo
procedures, the administrator attempts to back up the router Cisco IOS software of R1 and receives the c
shown. The network administrator then attempts unsuccessfully to ping the TFTP server from the console
session. What should be done next to isolate this problem?

  From R2, validate that interface Fa0/0 is operational.
  From the TFTP server, verify that the software on the TFTP server is operational.
  From the TFTP server, confirm there is enough room on the TFTP server for the Cisco IOS software.
  From the console session, make sure that R1 has a route to the network where the TFTP server resid

55

22

Refer to the exhibit. You are a network administrator who has been tasked with completing the Frame Re
topology that interconnects two remote sites. How should the point-to-point subinterfaces be configured o
to complete the topology?

- ☐ HQ(config-subif)#**frame-relay interface-dlci 103** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay interface-dlci 203** on Serial 0/0/0.2
- ◉ HQ(config-subif)#**frame-relay interface-dlci 301** on Serial 0/0/0.1
  HQ(config-subif)# **frame-relay interface-dlci 302** on Serial 0/0/0.2
- ☐ HQ(config-subif)#**frame-relay map ip 172.16.1.1 103 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 203 broadcast** on Serial 0/0/0.2
- ☐ HQ(config-subif)#**frame-relay map ip 172.16.1.1 301 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 302 broadcast** on Serial 0/0/0.2

www.9tut.info www.ccna4u.tk www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

A technician has been asked to run Cisco SDM one-step lockdown on the router of a customer. What will be the result of this process?

☐ Traffic is only forwarded from SDM-trusted Cisco routers.

☐ Security testing is performed and the results are saved as a text file stored in NVRAM.

☑ The router is tested for potential security problems and any necessary changes are made.

☐ All traffic entering the router is quarantined and checked for viruses before being forwarded.

2

```
<output omitted>
!
username sdm privilege 15 password 0 sdm
!
ip http server
ip http authentication local
ip http secure-server
ip http timeout-policy idle 600 life 86400 requests 10000
!
<output omitted>
!
line con 0
line aux 0
line vty 0 4
 privilege level 15
 login local
 transport input none
```

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is not functioning correctly. What could be the problem?

☐ The username and password are not configured correctly.

☐ The authentication method is not configured correctly.

☐ The HTTP timeout policy is not configured correctly.

☑ The vtys are not configured correctly.

3 Which combination of Layer 2 protocol and authentication should be used to establish a link without sending authentication information in plain text between a Cisco and a non-Cisco router?

☐ PPP with PAP

☑ PPP with CHAP

☐ HDLC with PAP

☐ HDLC with CHAP

4 What is a major characteristic of a worm?

☐ malicious software that copies itself into other executable programs

☐ tricks users into running the infected software

☐ a set of computer instructions that lies dormant until triggered by a specific event

☑ exploits vulnerabilities with the intent of propagating itself across a network

5 What can a network administrator do to recover from a lost router password?

☐ use the **copy tftp: flash:** command

1

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ⬤ boot the router to bootROM mode and enter the **b** command to load the IOS manually

- ⬤ telnet from another router and issue the **show running-config** command to view the password

- 🔘 boot the router to ROM monitor mode and configure the router to ignore the startup configuration when it initializes

6 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has not been activated?

- ⬤ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

- ⬤ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

- ⬤ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.

- 🔘 **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

7


```
192.168.2.0/24


Router1    S0/0/0    Router2

192.168.1.0/24     192.168.3.0/24

Router1(config)# access-list 201 deny icmp 192.168.1.0 0.0.0.255 any
Router1(config)# access-list 201 deny icmp 192.168.2.0 0.0.0.255 any
Router1(config)# access-list 201 permit any any
Router1(config)# access-list 101 deny tcp any 192.168.1.0 0.0.0.255 eq 8080
Router1(config)# access-list 101 deny tcp any 192.168.1.0 0.0.0.255 eq 80
Router1(config)# access-list 101 deny icmp any 192.168.1.0 0.0.0.255
Router1(config)# access-list 101 deny icmp any 192.168.2.0 0.0.0.255
Router1(config)# access-list 101 permit ip any 192.168.1.0 0.0.0.255
Router1(config)# access-list 101 permit ip any 192.168.2.0 0.0.0.255
Router1(config)# int s0/0/0
Router1(config-if)# ip access-group 101 in
Router1(config-if)# ip access-group 201 out
```

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?
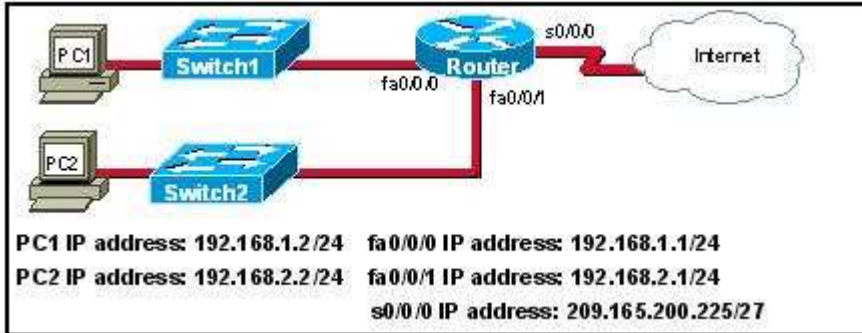
- ⬤ It matches the incoming packet to the **access-list 201 permit any any** statement and allows the packet into the router.

- ⬤ It reaches the end of ACL 101 without matching a condition and drops the packet because there is no **access-list 101 permit any any** statement.

- 🔘 It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, ignores the remaining statements in ACL 101, and allows the packet into the router.

- ⬤ It matches the incoming packet to the access-list 201 deny icmp 192.168.1.0 0.0.0.255 any statement, continues comparing the packet to the remaining statements in ACL 201 to ensure that no subsequent statements allow FTP, and then drops the packet.

8 Which three statements accurately describe a security policy? (Choose three.)

- ☑ It creates a basis for legal action if necessary.

- ☑ It defines a process for managing security violations.

- ☐ It defines acceptable and unacceptable use of network resources.

- ☐ The remote access policy is a component of the security policy that governs acceptable use of e-mail systems.

- ☐ It is kept private from users to prevent the possibility of circumventing security measures.

www.9tut.info **www.ccna4u.tk** **www.ccnastudy.info**
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☑   It provides step-by-step procedures to harden routers and other network devices.

9

PC1 IP address: 192.168.1.2 /24   fa0/0/0 IP address: 192.168.1.1/24
PC2 IP address: 192.168.2.2 /24   fa0/0/1 IP address: 192.168.2.1/24
                                   s0/0 /0 IP address: 209.165.200.225/27

Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction should it be applied?

○   interface fa0/0/0, inbound

○   interface fa0/0/0, outbound

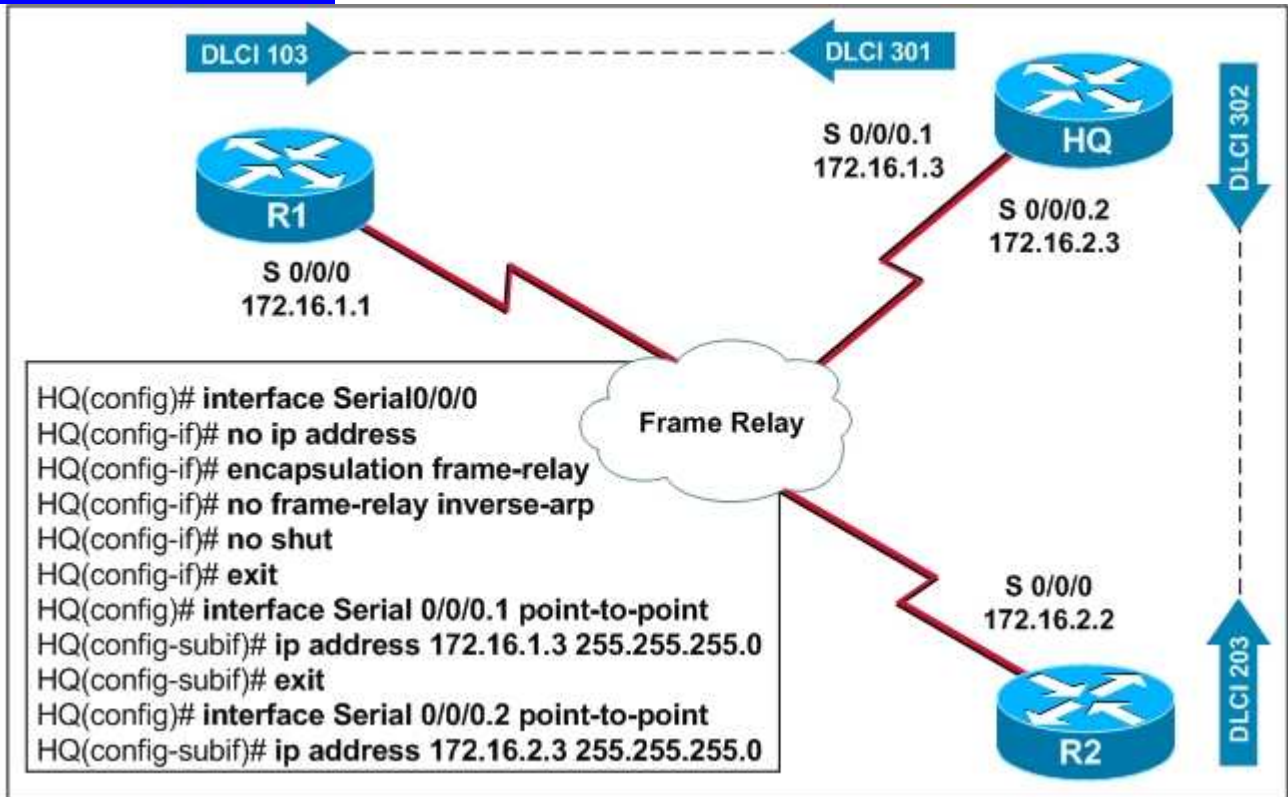○   interface fa0/0/1, inbound

◉   interface fa0/0/1, outbound

10

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in the exhibit. Why are the routers unable to establish a PPP session?

○   The clock rate must be 56000.

◉   The usernames are misconfigured.

○   The IP addresses are on different subnets.

○   The clock rate is configured on the wrong end of the link.

○   The CHAP passwords must be different on the two routers.

○   Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

11

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. You are a network administrator who has been tasked with completing the Frame Relay topology that interconnects two remote sites. How should the point-to-point subinterfaces be configured on HQ to complete the topology?

- ☐ HQ(config-subif)#**frame-relay interface-dlci 103** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay interface-dlci 203** on Serial 0/0/0.2

- ☐ HQ(config-subif)#**frame-relay interface-dlci 301** on Serial 0/0/0.1
  HQ(config-subif)# **frame-relay interface-dlci 302** on Serial 0/0/0.2

- ☐ HQ(config-subif)#**frame-relay map ip 172.16.1.1 103 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 203 broadcast** on Serial 0/0/0.2

- ☑ HQ(config-subif)#**frame-relay map ip 172.16.1.1 301 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 302 broadcast** on Serial 0/0/0.2

12 What three statements describe the roles of devices in a WAN? (Choose three.)

- ☑ A CSU/DSU terminates a digital local loop.

- ☑ A modem terminates a digital local loop.

- ☐ A CSU/DSU terminates an analog local loop.

- ☐ A modem terminates an analog local loop.

- ☑ A router is commonly considered a DTE device.

- ☐ A router is commonly considered a DCE device.

13 An administrator is configuring a dual stack router with IPv6 and IPv4 using RIPng. The administrator receives an error message when trying to enter the IPv4 routes into RIPng. What is the cause of the problem?

- ☐ RIPng is incompatible with dual-stack technology.

- ☐ All interfaces have been configured with the incorrect IPv4 addresses.

- ☑ RIPv1 or RIPv2 needs to be configured in addition to RIPng to successfully use IPv4.

- ☐ When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer technology.

www.9tut.info www.ccna4u.tk www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

14 An administrator is unable to receive e-mail. While troubleshooting the problem, the administrator is able to ping the local mail server IP address successfully from a remote network and can successfully resolve the mail server name to an IP address via the use of the **nslookup** command. At what OSI layer is the problem most likely to be found?

- ☐ physical layer
- ☐ data link layer
- ☐ network layer
- ⦿ application layer

15 Which three guidelines would help contribute to creating a strong password policy? (Choose three.)

- ☐ Once a good password is created, do not change it.
- ☑ Deliberately misspell words when creating passwords.
- ☑ Create passwords that are at least 8 characters in length.
- ☑ Use combinations of upper case, lower case, and special characters.
- ☐ Write passwords in locations that can be easily retrieved to avoid being locked out.
- ☐ Use long words found in the dictionary to make passwords that are easy to remember.

A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

- ☐ The router forwards the frame to all ports in the network and learns the address from the reply frame.
- ☐ The destination host IP address is embedded in the DLCI.
- ☑ The router searches Inverse ARP tables for maps of DLCIs to IP addresses.
- ☑ A table of static mappings can be searched.
- ☐ The router broadcasts a request for the required IP address.

17 A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?

- ☐ Configure DHCP and static NAT.
- ☐ Configure dynamic NAT for ten users.
- ☐ Configure static NAT for all ten users.
- ⦿ Configure dynamic NAT with overload.

18 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both companies are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why Company A reports higher download speeds than Company B?

- ☐ Company B has a higher volume of POTS voice traffic than Company A.
- ☐ Company B shares the conection to the DSLAM with more clients than Company A.
- ☐ Company A only uses microfilters on branch locations.
- ⦿ Company A is closer to the service provider.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
**Email: quocvuong.it@gmail.com**

19 When configuring a Frame Relay connection, what are two instances when a static Frame Relay map should be used? (Choose two.)

☐ when the remote router is a non-Cisco router

☑ when the remote router does not support Inverse ARP

☐ when the local router is using IOS Release 11.1 or earlier

☑ when broadcast traffic and multicast traffic over the PVC must be controlled

☐ when globally significant rather than locally significant DLCIs are being used

---

20 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administrator provide?

☐ Named ACLs are less efficient than numbered ACLs.

☐ Standard ACLs should be applied closest to the core layer.

☐ ACLs applied to outbound interfaces are the most efficient.

☉ Extended ACLs should be applied closest to the source that is specified by the ACL.

21
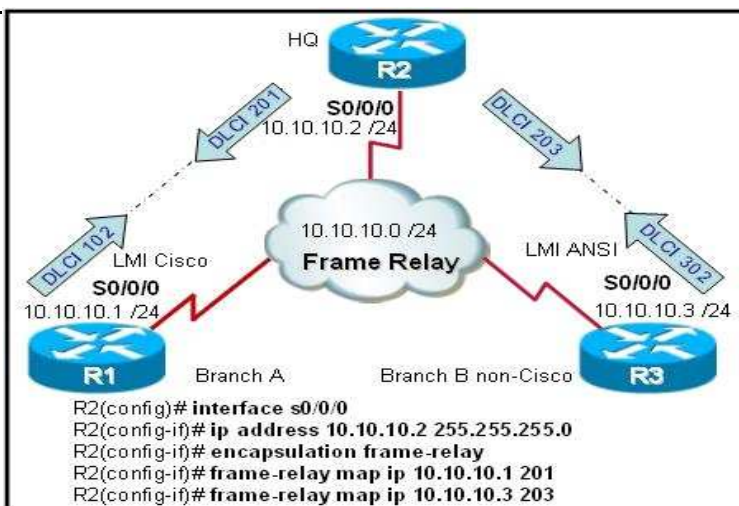
Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IETF encapsulation. After the commands shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANSI. The LMI is successfully established at both locations. Why is the PVC failing?

☐ The PVC to R3 must be point-to-point.

☐ LMI types must match on each end of a PVC.

☉ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.

☐ The PVCs at R2 use different encapsulation types. A single port can only support one encapsulation type.

---

22 Which two statements are true about IPv6? (Choose two.)

☑ Security options are build into IPv6.

☐ IPv6 addresses require less router overhead to process.

☐ IPv6 can only be configured on an interface that does not have IPv4 on it.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐   There is no way to translate between IPv4 addresses and IPv6 addresses.

☑   When enabled on a router, IPv6 can automatically configure link-local IPv6 addresses on all interfaces.

23

Refer to the exhibit. Which two conclusions can be drawn from the output shown? (Choose two.)

☑   This network is experiencing congestion.

☐   The Frame Relay connection is in the process of negotiation.

☐   Data is not flowing in this network.

☑   The network is discarding eligible packets.

☐   The DLCI is globally significant.

24   What functionality do access control lists provide when implementing dynamic NAT on a Cisco router?

◉   defines which addresses can be translated

◯   defines which addresses are assigned to a NAT pool

◯   defines which addresses are allowed out of the router

◯   defines which addresses can be accessed from the inside network

25

www.9tut.info   **www.ccna4u.tk**   **www.ccnastudy.info**
Updated daily… New updated Mar 01 2009 by quocvuong
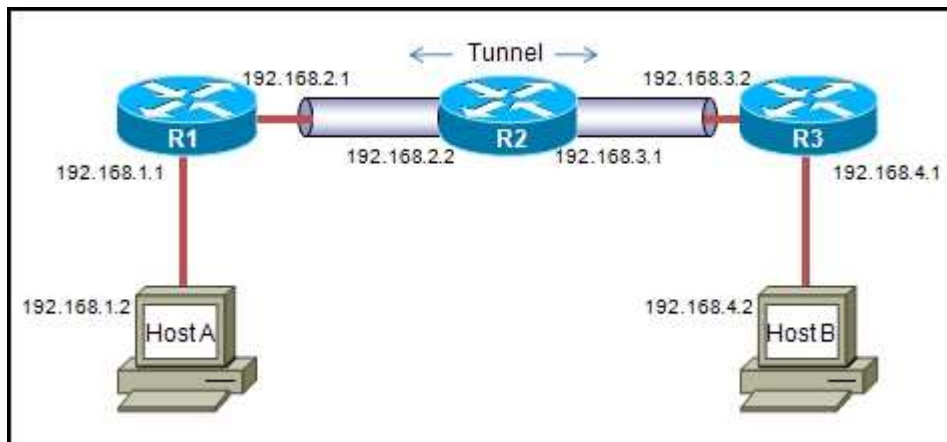**Email: quocvuong.it@gmail.com**

```
Serial0/0/0 is up, line protocol is down
  Hardware is HD64570
  Internet address is 10.1.1.1/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation PPP, loopback not set, keepalive set (10 sec)
  LCP Closed
  Closed: LEXCP, BRIDGECP, IPCP, CCP, CDPCP, LLC2, BACP
  <output omitted>
  Queueing strategy: weighted fair
  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 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, 1 interface resets
    0 output buffer failures, 0 output buffers swapped out
    0 carrier transitions
    DCD=up DSR=up DTR=up RTS=up CTS=up
```

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output shown, what is the most likely cause?

- ☐ improper LMI type

- ☐ interface reset

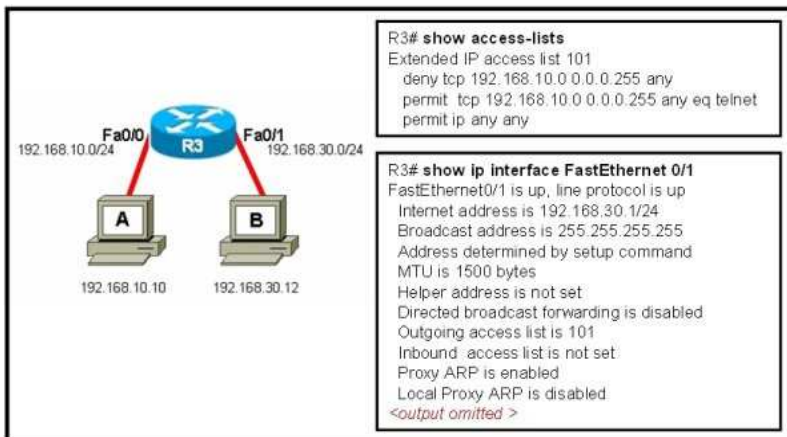- ☒ PPP negotiation failure

- ☐ unplugged cable

26

Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel between R1 and R3. When the packet first arrives at R3, what are the source and destination IP addresses of the packet?

- ☒ Source 192.168.1.2 - Destination 192.168.4.2

- ☐ Source 192.168.3.1 - Destination 192.168.3.2

- ☐ Source 192.168.2.1 - Destination 192.168.3.2

- ☐ Source 192.168.3.1 - Destination 192.168.4.2

27 An established company has recently transitioned from outsourced LAN support to a completely in-house staff. The outsourcing company is no longer in business, so no records are available. There are many user complaints about application speed and availability. What two considerations apply to this situation? (Choose two.)

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☐ A network utilization baseline should quickly reveal application availability.

☐ A period of 24 to 48 hours should provide a sufficient baseline to track normal network activity.

☐ It is easier to start with monitoring all available data inputs on application servers, and then fine-tune to fewer variables along the way.

☐ The initial baseline results have little relevance to current values after the network has been modified or grown in usage.

☑ When it is practical, network administrators should attempt to automate the collection of performance data and stay away from manual collection.

☑ Creating a network baseline data helps determine device thresholds for alerting.
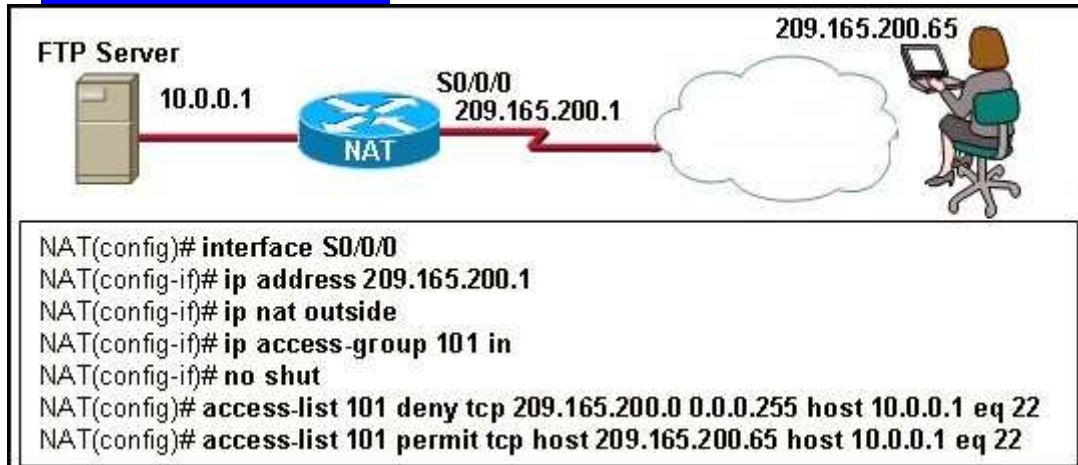
28

Refer to the exhibit. Partial results of the **show access-lists** and **show ip interface FastEthernet 0/1** commands for router R3 are shown. There are no other ACLs in effect. Host A is unable to telnet to host B. Which action will correct the problem but still restrict other traffic between the two networks?

○ Apply the ACL in the inbound direction.

○ Apply the ACL on the FastEthernet 0/0 interface.

○ Reverse the order of the TCP protocol statements in the ACL.

◉ Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

29 What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www** command have when implemented inbound on the f0/0 interface?
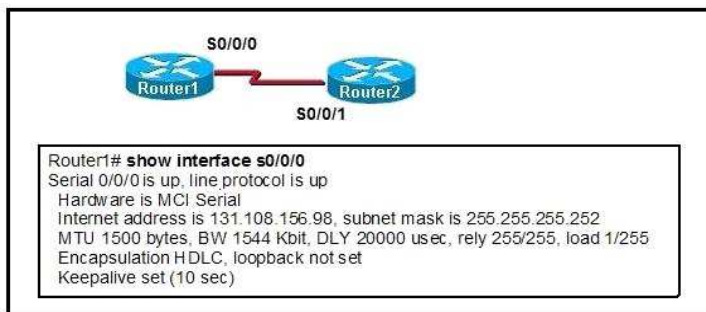
○ All TCP traffic is permitted, and all other traffic is denied.

○ The command is rejected by the router because it is incomplete.

○ All traffic from 172.16.4.0/24 is permitted anywhere on any port.

◉ Traffic originating from 172.16.4.0/24 is permitted to all TCP port 80 destinations.

30

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
NAT(config)# interface S0/0/0
NAT(config-if)# ip address 209.165.200.1
NAT(config-if)# ip nat outside
NAT(config-if)# ip access-group 101 in
NAT(config-if)# no shut
NAT(config)# access-list 101 deny tcp 209.165.200.0 0.0.0.255 host 10.0.0.1 eq 22
NAT(config)# access-list 101 permit tcp host 209.165.200.65 host 10.0.0.1 eq 22
```

Refer to the exhibit. The SSH connections between the remote user and the server are failing. The correct configuration of NAT has been verified. What is the most likely cause of the problem?

☐ SSH is unable to pass through NAT.

☑ There are incorrect access control list entries.

☐ The access list has the incorrect port number for SSH.

☐ The **ip helper** command is required on S0/0/0 to allow inbound connections.


```
Router1# show interface s0/0/0
Serial 0/0/0 is up, line protocol is up
  Hardware is MCI Serial
  Internet address is 131.108.156.98, subnet mask is 255.255.255.252
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
```

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a network problem. What two conclusions can be determined by from the output shown? (Choose two.)

☑ The bandwidth has been set to the value of a T1 line.

☐ Encapsulation should of this inteface be changed to PPP.

☑ There is no failure indicated in an OSI Layer 1 or Layer 2.

☐ The physical connection between the two routers has failed.

☐ The IP address of S0/0 is invalid, given the subnet mask being used.

32 A company is looking for a WAN solution to connect its headquarters site with four remote sites. What advantage would dedicated leased lines provide to the customer compared to a shared Frame Relay solution?

☐ lower cost

☐ lower latency and jitter

☐ variable bandwidth capacity

☑ fewer physical router interfaces

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
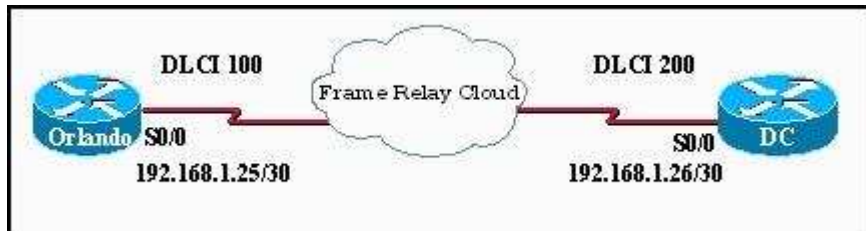**Email: quocvuong.it@gmail.com**

33 At what physical location does the responsibilty for a WAN connection change from the user to the service provider?

- ◯ demilitarized zone (DMZ)
- ⦿ demarcation point
- ◯ local loop
- ◯ cloud

34 Which three items are LCP options that can be configured for PPP? (Choose three.)

- ☑ CHAP
- ☑ Stacker
- ☐ IPCP
- ☐ CDPCP
- ☑ Multilink

35

Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the DC office of ABC Company to the Orlando office?

- ◯ MAC address of the Orlando router
- ◯ MAC address of the DC router
- ◯ 192.168.1.25
- ◯ 192.168.1.26
- ◯ DLCI 100
- ⦿ DLCI 200

36 Which three statements are true about creating and applying access lists? (Choose three.)

- ☐ Access list entries should filter in the order from general to specific.
- ☑ One access list per port per protocol per direction is permitted.
- ☐ Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destination.
- ☑ There is an implicit deny at the end of all access lists.
- ☑ Statements are processed sequentially from top to bottom until a match is found.
- ☐ The **inbound** keyword refers to traffic entering the network from the router interface where the ACL is applied.

37 Which statement is true regarding wildcard masks?

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ☐ The wildcard mask and subnet mask perform the same function.

- ☐ The wildcard mask is always the inverse of the subnet mask.

- ◉ A "0" in the wildcard mask identifies IP address bits that must be checked.

- ☐ A "1" in the wildcard mask identifies a network or subnet bit.

38

```
<output omitted>
ip dhcp pool 192Network
  network 192.168.1.128 255.255.255.128
  default-router 192.168.1.1
  dns-server 192.168.1.1
!
interface FastEthernet0/0
  ip address 192.168.1.1 255.255.255.128
  duplex auto
  speed auto
!
<output omitted>
```
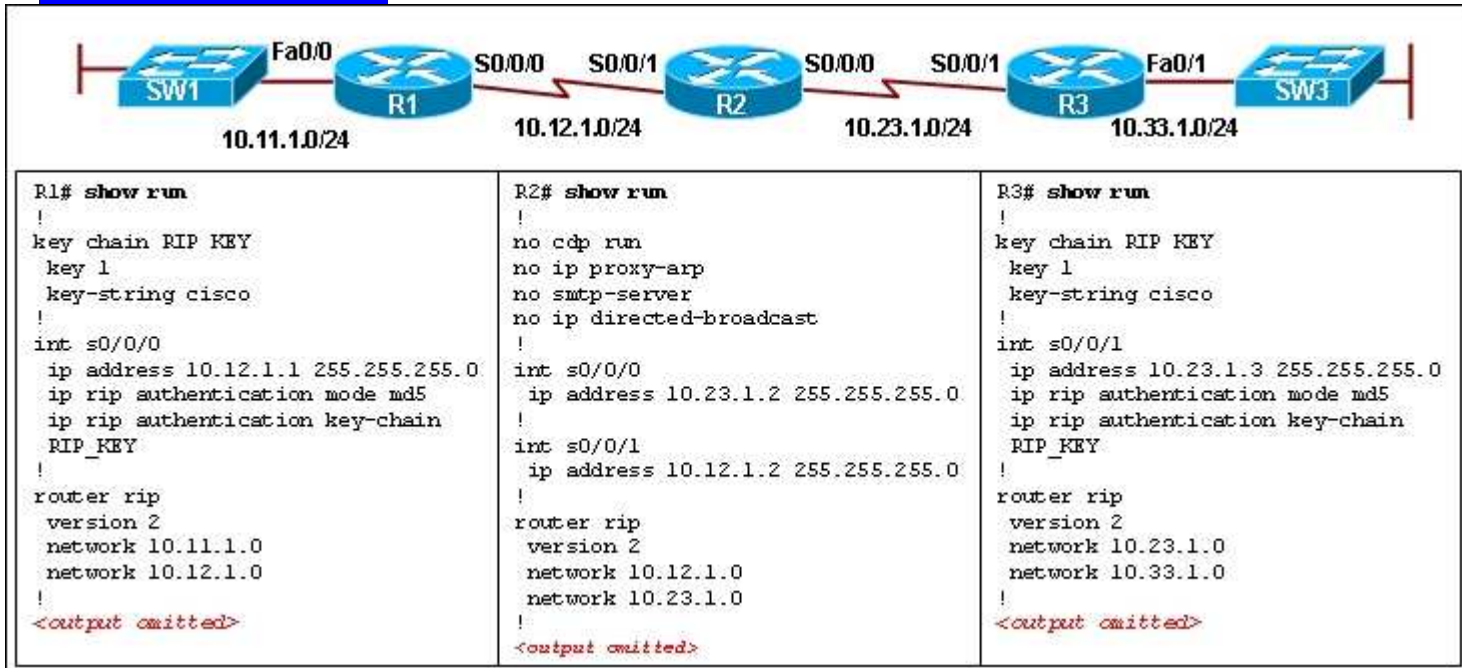
Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?

- ☐ The 192.168.1.1 address has not been excluded from the DHCP pool.

- ◉ The pool of addresses for the 192Network pool is incorrect.

- ☐ The default router for the 192Network pool is incorrect.

- ☐ The 192.168.1.1 address is already configured on Fa0/0.

39   Which statement about a VPN is true?

- ☐ VPN link establishment and maintenance is provided by LCP.

- ☐ DLCI addresses are used to identify each end of the VPN tunnel.

- ☐ VPNs use virtual Layer 3 connections that are routed through the Internet.

- ☐ Only IP packets can be encapsulated by a VPN for tunneling through the Internet.

40

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and R3 do not receive RIP routing updates. On the basis of the provided configuration, what should be enabled on router R2 to remedy the problem?
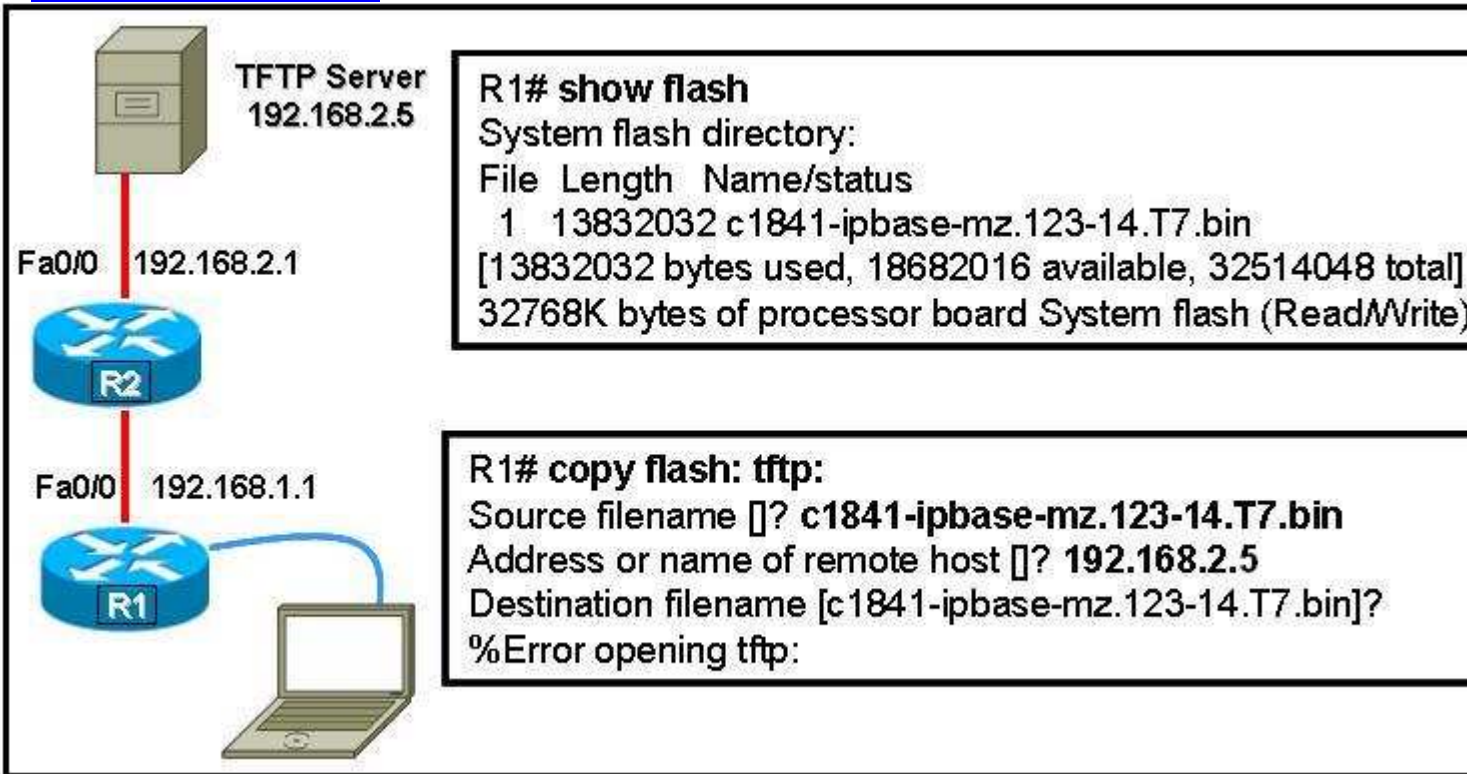
- ☐ proxy ARP
- ☐ CDP updates
- ☐ SNMP services
- ☑ RIP authentication

41   Which technology would provide the highest bandwidth connections between company sites at the lowest cost?
- ☐ broadband Internet site-to-site VPN connections
- ☐ satellite based network connections
- ☐ dedicated point-to-point circuits
- ☑ Frame Relay PVCs

42 Which wireless solution can provide mobile users with non line-of-sight broadband Internet access at speeds comparable to DSL or cable?
- ☐ Wi-Fi
- ☑ WiMAX
- ☐ satellite
- ☐ Metro Ethernet

43

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

```
R1# show flash
System flash directory:
File  Length   Name/status
  1   13832032 c1841-ipbase-mz.123-14.T7.bin
[13832032 bytes used, 18682016 available, 32514048 total]
32768K bytes of processor board System flash (Read/Write)
```

```
R1# copy flash: tftp:
Source filename []? c1841-ipbase-mz.123-14.T7.bin
Address or name of remote host []? 192.168.2.5
Destination filename [c1841-ipbase-mz.123-14.T7.bin]?
%Error opening tftp:
```

Refer to the exhibit. The network administrator is adding R1 to an existing network. As a part of the corporate IT procedures, the administra
to back up the router Cisco IOS software of R1 and receives the output shown. The network administrator then attempts unsuccessfully to
TFTP server from the console session. What should be done next to isolate this problem?

☐   From R2, validate that interface Fa0/0 is operational.

◉   From the TFTP server, verify that the software on the TFTP server is operational.

☐   From the TFTP server, confirm there is enough room on the TFTP server for the Cisco IOS software.

☐   From the console session, make sure that R1 has a route to the network where the TFTP server resides.

44

```
R1(config)# interface FastEthernet 0/0
R1(config-if)# ip address 10.0.1.254 255.255.255.0
R1(config-if)# exit
R1(config)# ip dhcp excluded
R1(config)# ip dhcp excluded-address 10.0.1.2 10.0.1.16
R1(config)# ip dhcp excluded-address 10.0.1.254
R1(config)# ip dhcp pool TEST
R1(dhcp-config)# network 10.0.1.0 255.255.255.0
R1(dhcp-config)# default-router 10.0.1.254
R1(dhcp-config)# dns-server 10.0.1.3
R1(dhcp-config)# domain-name netacad.net
```

Refer to the exhibit. How is the TCP/IP configuration information specified by the **default-router** and **dns-server** commands made availabl
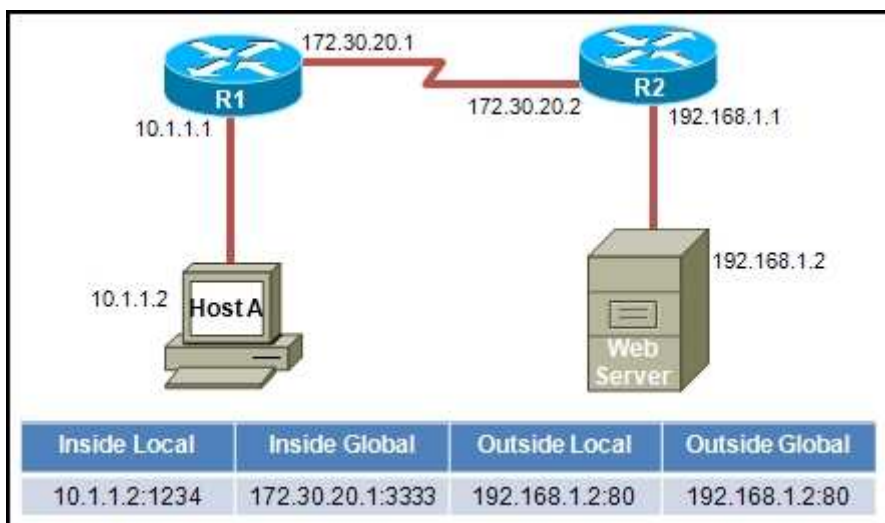
☐   The TCP/IP information is forwarded to a 10.0.1.3 to be supplied to DHCP clients.

☐   The TCP/IP information is used by DHCP clients that are configured to request a configuration from R1.

14

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

- ⦿ The TCP/IP information is supplied to any DHCP client on the network connected to the FastEthernet 0/0 interface of R1.
- ⬜ The TCP/IP information is applied to each packet that enters R1 through the FastEthernet 0/0 interface that are hosts on the 10.0.1.0 network except packets from addresses 10.0.1.2, 10.0.1.16, and 10.0.1.254.

---

45 A network administrator is working with an applications team to fix a problem that a server based application is having with response time. The administrator has examined the network portions of the data path and identified several possible problem areas. The applications team has simultaneously identified potential issues with the current release of software. The network administrator begins addressing the network issues while the applications team implements software patches.

Which statement applies to this situation?

- ⬜ Changes to the network will reveal problems that are caused by the new patches.

- ⬜ Scheduling will be more difficult if the network and software teams work independently.

- ⬜ It will be difficult to isolate the problem if two teams are implementing changes independently.

- ⬜ Results from changes will be easier to reconcile and document if each team works in isolation.

Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A has sent a packet to the web server. What is the destination IP address of the return packet from the web server?

- ⬜ 10.1.1.2:1234

- ⬜ 172.30.20.1:1234

- ⦿ 172.30.20.1:3333

- ⬜ 192.168.1.2:80

47

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands shown when an ACL called Managers already exists on the router?

- ⬜ The commands overwrite the existing Managers ACL.

- ⦿ The commands are added at the end of the existing Managers ACL.

15

www.9tut.info www.ccna4u.tk www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

◌ The network administrator receives an error stating that the ACL already exists.

◌ The commands will create a duplicate Managers ACL containing only the new commands being entered.

48 What will be the result of adding the command **ip dhcp excluded-address 172.16.4.1 172.16.4.5** to the configuration of a local router that has been configured as a DHCP server?

◌ Traffic that is destined for 172.16.4.1 and 172.16.4.5 will be dropped by the router.

◌ Traffic will not be routed from clients with addresses between 172.16.4.1 and 172.16.4.5.

◉ The DHCP server function of the router will not issue the addresses between 172.16.4.1 and 172.16.4.5.

◌ The router will ignore all traffic that comes from the DHCP servers with addresses 172.16.4.1 and 172.16.4.5.
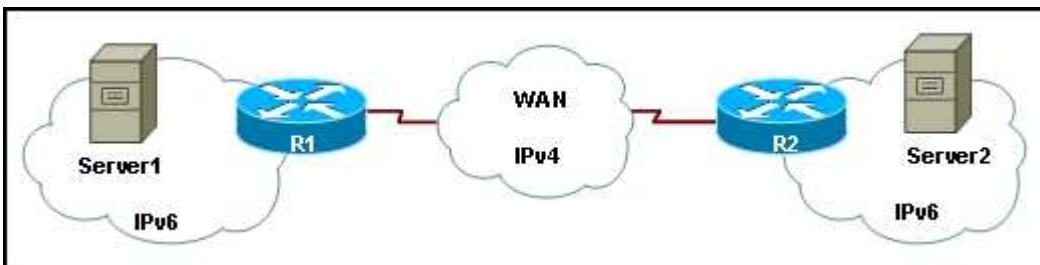
49
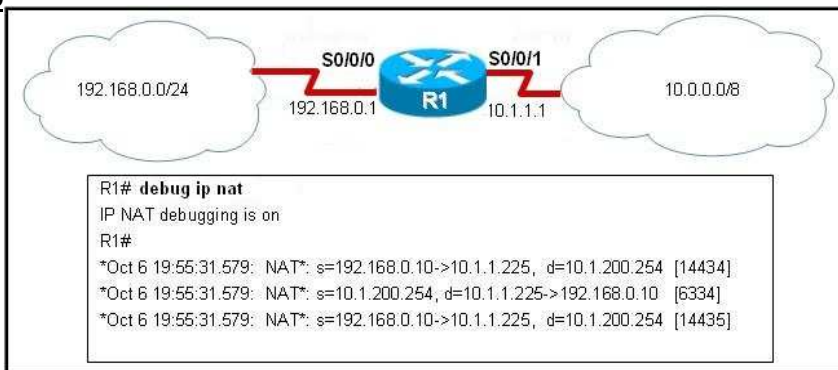
Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat** command?

◌ The 10.1.1.225 host is exchanging packets with the 192.168.0.10 host.

◉ The native 10.1.200.254 address is being translated to 192.168.0.10.

◌ The 192.168.0.0/24 network is the inside network.

◌ Port address translation is in effect.
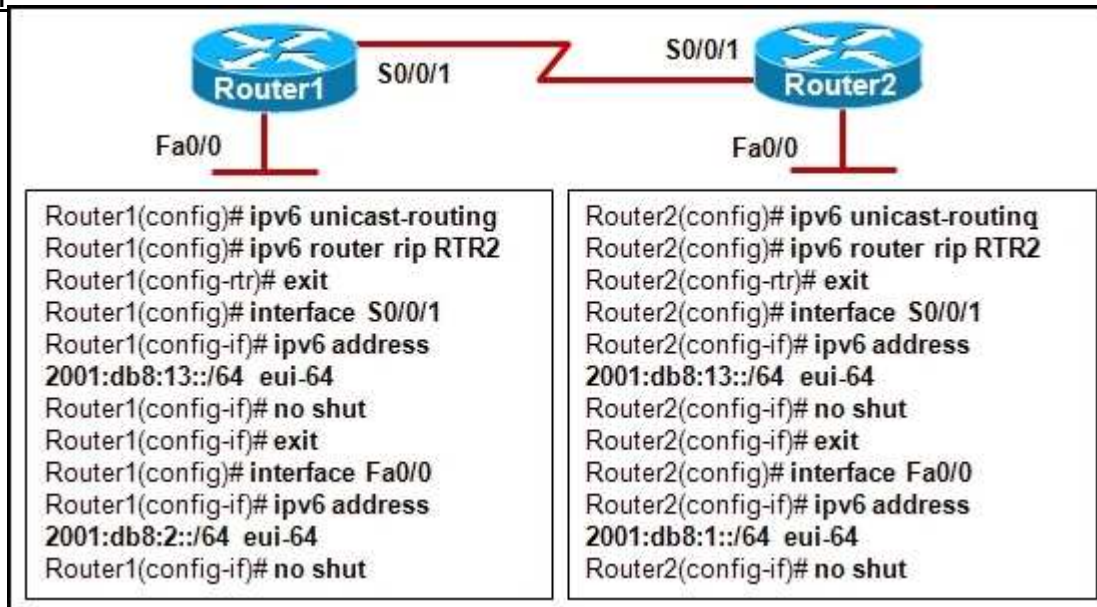
50

Refer to the exhibit. Company ABC expanded its business and recently opened a new branch office in another country. IPv6 addresses have been used for the company network. The data servers Server1 and Server2 run applications which require end-to-end functionality, with unmodified packets that are forwarded from the source to the destination. The edge routers R1 and R2 support dual stack configuration. What solution should be deployed at the edge of the company network in order to successfully interconnect both offices?

◌ a new WAN service supporting only IPv6

◌ NAT overload to map inside IPv6 addresses to outside IPv4 address

16

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

○ a manually configured IPv6 tunnel between the edge routers R1 and R2

◉ static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dynamic NAT for the rest of the inside IPv6 addresses

---

51

Refer to the exhibit. A network administrator has issued the commands that are shown on Router1 and Router2. A later review of the routing tables reveals that neither router is learning the LAN network of the neighbor router. What is most likely the problem with the RIPng configuration?

○ The serial interfaces are in different subnets.

◉ The RIPng process is not enabled on interfaces.

○ The RIPng network command is not configured.

○ The RIPng processes do not match between Router1 and Router2.

---

52 A network administrator added two switches and a new VLAN over the past weekend. How can the administrator determine if the additions and changes improved performance and availability on the company intranet?
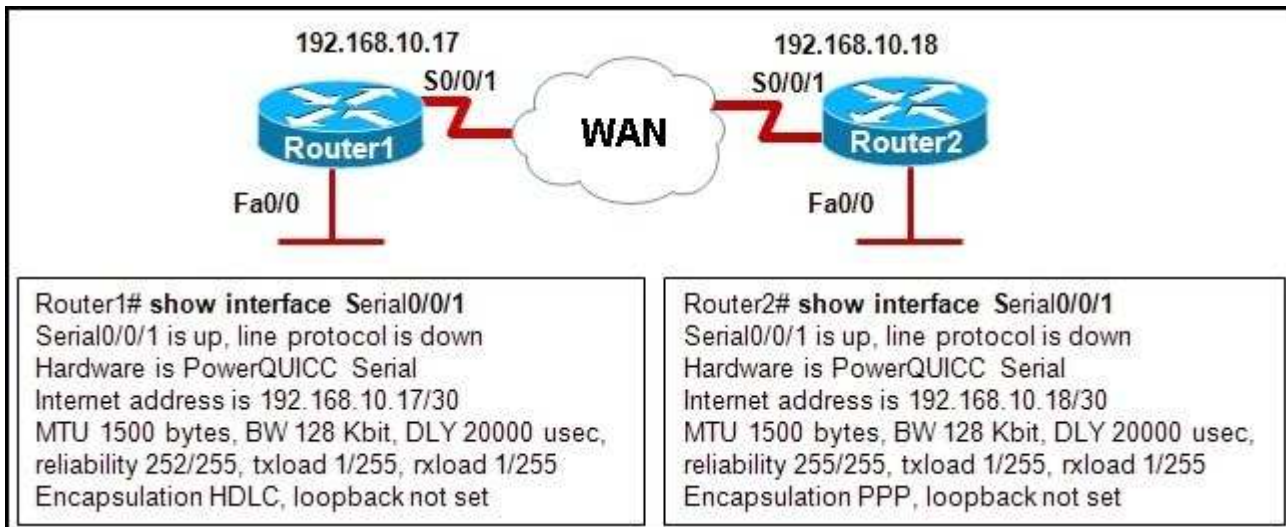
○ Perform a baseline test and compare the current values to values that were obtained in previous weeks.

○ Interview departmental secretaries and determine if they think load time for web pages is improved.

○ Compare the hit counts on the company web server for the current week to the values that were recorded from previous weeks.

○ Performance on the intranet can be determined by monitoring load times of company web pages from remote sites.

---

53 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

☐ exchange information about the status of virtual circuits

☑ map DLCIs to network addresses

☑ provide flow control

☐ provide error notification

☐ provide congestion notification

17

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

☑ send keepalive packets to verify operation of the PVC

54


```
Router1# show interface Serial0/0/1
Serial0/0/1 is up, line protocol is down
Hardware is PowerQUICC Serial
Internet address is 192.168.10.17/30
MTU 1500 bytes, BW 128 Kbit, DLY 20000 usec,
reliability 252/255, txload 1/255, rxload 1/255
Encapsulation HDLC, loopback not set
```

```
Router2# show interface Serial0/0/1
Serial0/0/1 is up, line protocol is down
Hardware is PowerQUICC Serial
Internet address is 192.168.10.18/30
MTU 1500 bytes, BW 128 Kbit, DLY 20000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation PPP, loopback not set
```

Refer to the exhibit. From the output of the **show interface** commands, at which OSI layer is a fault indicated?

☐ application

☐ transport

☐ network

◉ data link

☐ physical

55 What are two main components of data confidentiality? (Choose two.)

☐ checksum

☐ digital certificates

☑ encapsulation

☑ encryption

☐ hashing

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
CCNA 4 - Final Exam (A) 100/100

1. A network administrator is asked to design a system to allow simultaneous access to the Internet for 250 users. The ISP for this network can only supply five public IPs. What can be used to accomplish this task?
• routable translation
• dynamic translation
• static translation
• port address translation

2. The LAN attached to the Ethernet interface of the Raleigh router shown in the graphic is addressed with private IP addresses. If one public IP is assigned to the company, which commands could be used in a configuration that allows all devices with private IPs in this network to access the Internet? (Choose two.)
• ip nat inside source list 1 interface serial0 overload
• ip nat outside source list 1 interface serial0 overload
• ip nat inside serial0
• ip nat inside source list 1 pool Raleigh overload
• ip nat inside Raleigh overload
• ip inside nat source list 1 interface serial0 Raleigh

3. The command output shown in the graphic was taken from a Cisco 806 broadband router. Which kind of address translation is in effect on this router?
• static
• dynamic
• overload
• private
• public

4. Which of the following IP addresses are defined by RFC 1918 as private addresses? (Choose three.)
• 192.168.146.0/22
• 172.10.25.0/16
• 172.31.0.0/16
• 20.0.0.0/8
• 10.172.92.8/29

5. How will data be transmitted from the router to the ISP if the router has the two links shown in the graphic?
• Both links will transmit data at the same rate.
• 1544 bits can be transmitted simultaneously from the router over the T1 line.
• Both links will transmit bits one by one.
• The 56K link will transmit a maximum of 53 bits at the same time.

6. Which statements about DHCP are true? (Choose three.)
• DHCP uses TCP.
• DHCP uses UDP.
• DHCP sends messages to the server on port 67.
• DHCP sends messages to the server on port 68.
• DHCP sends messages to the client on port 67.
• DHCP sends messages to the client on port 68.

7. Which command would be used to exclude the IP address 192.168.24.5 from the
DHCP address pool on a router?
• Router(dhcp-config)# ip dhcp excluded-address 192.168.24.5
• Router# ip dhcp excluded-address 192.168.24.5
• Router(config-excluded)# ip dhcp excluded-address 192.168.24.5
• Router(config)# ip dhcp excluded-address 192.168.24.5
• Router(config)# excluded-address 192.168.24.5
• Router(dhcp-config)# excluded-address 192.168.24.5

8. The WAN connection for a nationwide company with 250 offices must support
constant connections to core layer services for file sharing, and occasional Internet
access. Which combination of WAN technologies will meet these needs with minimum
expense?
• Frame Relay PVC for Internet access and ATM for file server access
• Frame Relay PVC for Internet access and ISDN for file server access
• ISDN for Internet access and X.25 for file server access
• ISDN for Internet access and Frame Relay PVC for file server access

9. Which command would produce the output shown in the graphic?
• show ip dhcp server statistics
• show ip dhcp binding
• debug ip dhcp server events
• debug ip dhcp binding

10. Which of the following devices is used to establish the communications link between
the customer equipment and the local loop for digital lines?
• terminal adapter
• modem
• CSU/DSU
• PBX switch
• ISDN switch
• Frame Relay Switch

11. Which of the following statements are true about Frame Relay? (Choose three.)
• Frame Relay operation is defined by a series of ISO standards.
• Frame Relay is a packet switched, connection-oriented, wide area network service.
• Frame Relay only supports point-to-point connections.
• A router can be considered as data terminal equipment (DTE) in a frame relay system.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

• Frame Relay is a cell switched, connection-oriented, wide area network service.
• Frame Relay networks use a subset of the HDLC protocol to carry information.

12. ITU-T Q.921 specifies the use of which protocol for sending control and signaling messages between the router and the ISDN switch?
• HDLC
• IPCP
• LAPB
• LAPD
• NCP
• SS7

13. A company needs a WAN connection that is capable of transferring voice, video, and data at a minimum data rate of 155 Mbps. Which WAN connection is the best choice?
• X.25
• DSL
• ATM
• ISDN BRI
• ISDN PRI

14. Which statement explains why basic DSL is an unpopular WAN connectivity choice for enterprise computer departments that support home users?
• DSL offers insufficient bandwidth to home users.
• DSL requires the installation of new cables, which is not always possible for home users.
• DSL dialup connection time is too slow for business use.
• DSL has limited geographical availability.

15. When planning simple WAN connections for a small company, which feature of the three layer hierarchical model makes it a good choice for the WAN topology.
• It provides for redundancy.
• It allows for easy WAN expansion in case of company growth.
• It is less expensive.
• It provides faster connection time.
• It provides less latency and jitter.

16. Which of the following terms describes a device that will put data on the local loop?
• DLCI
• CO
• DCE
• DTE
• PRI
• BRI

17. Which of the following are supported by a BRI interface on a router? (Choose two.)
• Two independent channels that can carry analog data with a bandwidth of 64 KHz.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• A single 128 Kbps digital bearer channel.
• Two multiplexed channels carrying digital data.
• A single 64 Kbps signaling channel.
• A multiplexed data channel that can only handle SS7 information.
• A 16 Kbps delta channel used for signaling purposes.

18. A network administrator has been asked to provide the network in the United States with an ISDN WAN link. The router available to provide the WAN connection is a non-modular Cisco router with two serial connections. What must be done to adapt one of the serial interfaces of this router for the ISDN connection?
• Nothing. The router is already suitable.
• Purchase a BRI WAN interface card to install in the router.
• Purchase a U interface to install in the router.
• Purchase a TA/NT1 device to install on the router.

19 (NEED ANSWERS!!!)Which of the following is a function of a DCE device?
• determines the next-hop address for a packet
• multiplexes signals from several sources
• adapts information for use on a service provider's network
• used to directly connect two DTEs to simulate a WAN network

20. Why would data frames be discarded in a Frame Relay network? (Choose two.)
• The frame contains an incorrect IP address.
• An error has been detected in computing the frame check sequence.
• There is not enough bandwidth dedicated for the data contained in the frame.
• Data is transmitted at a rate greater than the access speed.
• The frame contains an incorrect DLCI.

21. Which of the following are commonly used as Data Communications Equipment? (Choose two.)
• modem
• router
• CSU/DSU
• ISDN Switch
• Frame Relay Switch

22. Which of the following LCP options can be configured for PPP? (Choose three.)
• CHAP
• Stacker
• IPCP
• CDPCP
• Multilink

23. Which command will provide for CHAP authentication if the hostname on a challenging router is tampa with a password of florida?
• username tampa password florida

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• username tampa florida
• hostname tampa password florida
• hostname tampa florida

24. Which of the following describes the PAP protocol? (Choose two.)
• sends unencrypted authentication passwords
• performs a three-way handshake
• allows repeated login attempts
• uses the remote router hostname to verify identity
• sends a random challenge throughout the session

25. Why was NAT created? (Choose two.)
• to create firewalls on routers
• to conserve IP addresses
• to translate domain names into IP addresses
• to map network addresses to the corresponding data link address
• to hide internal addresses from external devices

26. An ISDN router is configured for DDR as shown in the graphic to provide Internet
connectivity for the company. Immediately after a user in the company attempts opens a
web browser to connect to the Internet, another user in the company tries to download a
file using FTP. What will happen? (Choose two.)
• The user that opened the browser will connect to the Internet because the DDR link will
consider this traffic interesting.
• The Internet user will be disconnected because the FTP data will cause the DDR link to
shut down.
• The DDR link will allow the FTP traffic because it is interesting.
• The DDR link will not allow the FTP traffic because it is not interesting.
• The FTP connection will fail because the DDR link is already in use for the Internet
connection.
• The FTP connection will succeed because the web user already opened the DDR link.

27. Which command configures the SPID on the first B channel of an ISDN interface?
• Router(config)# isdn spid0 spid-number [ldn]
• Router(config)# isdn spid1 spid-number [ldn]
• Router(config-if)# isdn spid0 spid-number [ldn]
• Router(config-if)# isdn spid1 spid-number [ldn]

28. What does the command debug isdn q921 display?
• exchange of call setup and teardown messages
• PAP and CHAP authentication traffic
• Layer 2 messages on the D channel
• protocol errors and statistics
• Layer 2 messages on the B channel

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

29. When PPP authentication is enabled, which of the following may be checked before establishing a PPP link between two devices? (Choose two.)
• the enable password on the remote device
• the ip host configuration on the remote device
• the security server database for the username and password of the remote device
• the hostname and enable password on the local device
• the local database for the username and password of the remote device

30. How many separate B channel circuits can be provisioned on a PRI interface that uses a T1 line for connectivity?
• 2
• 16
• 23
• 24
• 30
• 128

31. Which operating systems support multiuser capability? (Choose three.)
• Linux
• Windows 98
• Windows ME
• Windows XP
• Windows 2000

32. What is placed in the address field of a frame that will travel from the DC office of ABC company to the Orlando office?
• MAC address of the Orlando router
• MAC address of the DC router
• 192.168.1.25
• 192.168.1.26
• DLCI 100
• DLCI 200

33. What does a DLCI of 0 indicate about a frame? (Choose two.)
• This is the first data frame sent by the router.
• This is a management frame.
• The encapsulation type is Cisco.
• The encapsulation type is IETF.
• The LMI type is Ansi or q933a.
• The LMI type is Cisco.

34. Which of the following protocols can be used to encapsulate data traffic sent from a router BRI interface? (Choose two.)
• Link Access Protocol - Data
• High-Level Data Link Control
• Logical Link Control

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• Serial Data Link Control
• Point to Point protocol
• Binary Synchronous Control protocol

35. An administrator consoled into the Jelly router needs to telnet to the Butter router.
What DLCI will the Jelly router place in the frame to perform this operation?
• 110
• 115
• 220
• 225

36. Which commands can be used to identify which DLCIs are active? (Choose two.)
• show frame-relay map
• show frame-relay lmi
• show frame-relay pvc
• show frame-relay interface
• show interfaces
• show ip route

37. A technician is testing the functionality of a recently installed router. The technician
is unable to ping the serial interface of a remote router. The technician executes the show
interface serial0/0 command on the local router and sees the following line in the output:
Serial0/0 is up, line protocol is down
What are possible causes for this command output? (Choose three.)
• remote CSU/DSU failure
• serial cable missing
• interface shutdown
• keepalives not being sent
• clocking signal missing

38. A router needs to forward a message received from a host. How does the router
identify the correct VC to forward the message? (Choose two.)
• The router forwards the frame to all ports in the network and learns the address from the
reply frame.
• The destination host IP address is embedded in the DLCI.
• The router searches Inverse ARP tables for maps of DLCIs to IP addresses.
• A table of static mappings can be searched.
• The router broadcasts a request for the required IP address.

39. Which of the following statements regarding point-to-point subinterfaces are true?
(Choose two.)
• A point-to-point subinterface on one router must be connected to a similar subinterface
on a remote router.
• Each point-to-point subinterface connection is configured with its own subnet.
• The DLCIs configured on the remote and local routers must be the same for the PVC.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

• LMI frames are not transmitted through a subinterface.
• Routing updates in point-to-point networks are not subject to the split-horizon rule.

40. Which of the following can be concluded from the router output displayed in the graphic? (Choose two.)
• The local DLCI number of this PVC is 100.
• The interface has been configured for subinterfaces and this map is for subinterface 0.
• Inverse ARP has determined the remote ip address as 10.140.1.1.
• The LMI type is ANSI (0×64).
• There is currently no congestion on the link.

41. Which of the following are functions of the Local Management Interface used in Frame Relay networks? (Choose three.)
• exchange information about the status of virtual circuits
• map DLCIs to network addresses
• provide flow control
• provide error notification
• provide congestion notification
• send keepalive packets to verify operation of the PVC

42. Which of the following describe functions of the Point-to-Point protocol with regards to the OSI model? (Choose three.)
• PPP uses Layer 3 of the OSI model to establish and maintain a session between devices.
• PPP operates at all layers of the OSI model.
• PPP uses the data link layer to configure such options as error detection and compression.
• PPP provides a mechanism to multiplex several network layer protocols.
• PPP uses Network Control Protocols (NCP) to test and maintain connectivity between devices.
• PPP can be configured on both synchronous and asynchronous serial interfaces.

43. Which of the following describes the CHAP protocol? (Choose three.)
• exchanges a random challenge number during the session to verfiy identity
• sends authentication password to verify identity
• prevents transmission of login information in plain text
• disconnects the PPP session if authentication fails
• initiates a two-way handshake

44. Which of the following switching types will allow the communication devices in the provider's network to be shared and only allocated to an individual subscriber during data transfer?
• circuit-switched
• packet-switched
• frame-switched
• dedicated-switched lines
• lease-switched

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
45. How does Frame Relay technology 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.

46. Which of the following describes the WAN devices and cabling shown in the graphic? (Choose two.)
• A null-modem cable is used between RouterD and DeviceC for connectivity.
• A DB-25 or DB-9 serial cable is connected to interface S0/0 of RouterA.
• DeviceB and DeviceC are DCE devices.
• The same encoding scheme must be used by DeviceB and DeviceC.
• A synchronous serial connection exists between DeviceB and DeviceC.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

CCNA 4 - Final Exam (B)

1. Identify the factors that contribute to congestion on an Ethernet LAN. (Choose three.)
• improper placement of enterprise level servers
• addition of hosts to a physical segment
• replacement of hubs with workgroup switches
• increasing use of bandwidth intensive network applications
• migration to full-duplex Ethernet within the LAN

2. Which of the following are examples of TCP/IP application layer protocols? (Choose three.)
• a terminal emulation protocol that supports remote console connections with various network devices
• a protocol created by IBM that makes it easier for mainframes to connect to remote offices
• a protocol responsible for transporting electronic mail on TCP/IP networks and the Internet
• a protocol that controls the rate at which data is sent to another computer
• a protocol that exchanges network management information between a network device and a management console

3. Which of the following eliminates switching loops?
• hold-down timers
• poison reverse
• spanning tree protocol
• time to live
• split horizon protocol

4. The show cdp neighbors command is a very useful network troubleshooting tool. Using the output in the graphic, select the statements that are true. (Choose two.)
• CDP operates at the network layer of the OSI model.
• The output of this command displays information about directly connected Cisco devices only.
• The switch is attached to the SanJose1 FastEthernet0/21 interface.
• SanJose1 is running CDP version 12.0.
• SanJose1 has two fully operational, cdp-enabled Cisco switches directly connected to it.
• SanJose2 is a 2600 series router running several routed protocols

5. A network administrator can ping the Denver router, but gets a 'Password Required but None Set' message when trying to connect remotely via Telnet. Which command sequence must be applied to the Denver router to allow remote access?
• Router(config)# line console 0
Router(config-line)# login
Router(config-line)# password cisco
• Router(config)# line vty 0 4

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
Router(config-line)# login
Router(config-line)# password cisco
• Router(config)# line virtual terminal
Router(config-line)# enable login
Router(config-line)# password cisco
• Router(config)# line vty 0 4
Router(config-line)# enable secret
Router(config-line)# password cisco
Router(config)# enable secret cisco
Router(config)# enable cisco

6. Which of the following is associated with link-state routing protocols?
• low processor overhead
• poison reverse
• routing loops
• split horizon
• shortest-path first calculations

7. A router does not load its configuration after a power failure. After running the show startup-configuration command, the adminstrator finds that the original configuration is intact. What is the cause of this problem?
• The configuration register is set for 0×2100.
• The configuration register is set for 0×2101.
• The configuration register is set for 0×2102.
• The configuration register is set for 0×2142.
• Boot system commands are not configured.
• Flash memory is empty causing the router to bypass the configuration in NVRAM
• Nederst på formularen

8. Which commands are used to verify the content and placement of access control lists? (Choose three.)
• show ip interface
• show ip route
• show processes
• show running-config
• show cdp neighbor
• show access-lists

9. Which of the following are required when creating a standard access control list? (Choose two.)
• destination address and wildcard mask
• source address and wildcard mask
• subnet mask and wildcard mask
• access list number between 100 and 199 or 2000 and 2699
• access list number between 1 and 99 or 1300 to 1999

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
10. Which of the following are keywords that can be used in an access control list to replace a dotted decimal wildcard mask? (Choose two.)
• most
• host
• all
• any
• some
• sum

11. Refer to the diagram. All ports on Switch A are in the Sales VLAN and all ports on Switch B are in the Accounting VLAN. How many broadcast domains and how many collision domains are shown? (Choose two).
• 3 collision domains
• 3 broadcast domains
• 5 broadcast domains
• 9 collision domains
• 10 collision domains
• 13 collision domains

12. Refer to the graphic. Using the most efficient IP addressing scheme and VLSM, which address can be configured on one of the serial interfaces?
• 192.168.16.63/27
• 192.168.16.158/27
• 192.168.16.192/27
• 192.168.16.113/30
• 192.168.16.145/30
• 192.168.16.193/30

13. What is the purpose of the Spanning Tree Protocol (STP)?
• prevents Layer 2 loops
• prevents routing loops on a router
• creates smaller collision domains
• creates smaller broadcast domains
• allows Cisco devices to exchange routing table updates

14. What is the purpose of a loopback address when using the OSPF routing protocol?
• activates the OSPF neighboring process
• ensures a persistent router ID for the OSPF process
• provides a backdoor for connectivity during the convergence process
• streamlines and speeds up the convergence process

15. Which statement is true regarding states of the IEEE 802.1d Spanning Tree Protocol?
• Ports are manually configured to be in the forwarding state.
• Ports listen and learn before going into the forwarding state.
• Ports must be blocked before they can be placed in the disabled state.
• It takes 15 seconds for a port to go from blocking to forwarding

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

16. Which sequence of commands is used to configure a loopback address on a router?
• Router1(config)# interface loopback 1
Router1(config-if)# ip address 192.168.1.1
Router1(config)# interface serial 0/0
• Router1(config-if)# loopback 1
Router1(config-if)# ip address 192.168.1.1
Router1(config)# interface serial 0/0
• Router1(config-if)# loopback 1
Router1(config-if)# ip address 192.168.1.1 255.255.255.0
• Router1(config)# interface loopback 1
Router1(config-if)# ip address 192.168.1.1 255.255.255.255

17. Which routing protocols are classful and do not support VLSM? (Choose two.)
• EIGRP
• OSPF
• RIP v1
• RIP v2
• IGRP

18. Refer to the graphic. Two switches are connected together through a trunk port. SW2 displays the message shown. Which of the following will solve the duplex mismatch?
• SW1(config)# interface fastethernet 0/1
SW1(config-if)# duplex full
• SW1(config)# interface fastethernet 0/1
SW1(config-if)# full-duplex
• SW2(config)# interface fastethernet 0/1
SW2(config-if)# duplex full
• SW2(config)# interface fastethernet 0/1
SW2(config-if)# full-duplex

19. Refer to the graphic. Two routers have been configured to use EIGRP. Packets are not being forwarded between the two routers. What could be the problem?
• EIGRP does not support VLSM.
• The routers were not configured to monitor neighbor adjacency changes.
• The default bandwidth was used on the routers.
• An incorrect IP address was configured on a router interface.

20. According to the the provided router output, which of the following statements is true regarding PPP operation?
• Only the link-establishment phase completed successfully.
• Only the network-layer phase completed successfully.
• Neither the link-establishment phase nor the the network-layer phase completed successfully.
• Both the link-establishment and network-layer phase completed successfully

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
21. Frame Relay is configured over a point-to-point connection between two routers. The output of the show frame-relay pvc command indicates that the status of this PVC is inactive. Which of the following devices could be the source of the problem? (Choose two.)
• local router
• local Frame Relay switch
• remote router
• remote Frame Relay switch
• R3 has the following configuration:
• R3# show running-config
• –some output text omitted–
• interface serial0/0
• bandwidth 128
• ip address 192.168.11.2 255.255.255.0
• encapsulation frame-relay
• frame-relay map ip 192.168.11.2 30 broadcast

22. After the command R3# debug frame-relay packet is executed, a ping is issued from R3 to R1 but is unsuccessful. Based on the output of the debug command shown in the graphic and the router configuration, what might be problem?
• No clock rate assigned.
• There is an incorrect DLCI number in the map statement.
• An incorrect IP address exists in the map statement.
• The encapsulation command is missing the broadcast keyword

23. Which statements are true regarding the Frame Relay LMI? (Choose three.)
• The LMI provides a virtual circuit (VC) status mechanism.
• The LMI type must always be manually configured.
• The available LMI types are NI1, DMS100 and 5ESS.
• The LMI types supported by Cisco routers are CISCO and IETF.
• The LMI type configured on the router must match the one used on the Frame Relay switch.
• The LMI uses reserved DLCIs to exchange messages between the DTE and DCE

24. Which statement describes the process that occurs in Network Address Translation (NAT) overloading?
• Multiple private IP addresses are mapped to one public IP address.
• The number of usable addresses assigned to a company is divided into smaller manageable groups.
• A pool of IP addresses are mapped to one or more MAC addresses.
• The router acts as a DHCP server and assigns multiple public IP addresses for each private IP address configured

25. Which two statements are true about the committed information rate on a Frame Relay link? (Choose two.)
• The sum of the CIRs for all PVCs must be less than the port speed.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• The sum of the CIRs for all PVCs must equal the port speed.
• The sum of the CIRs for all PVCs can be greater than the port speed.
• The DE bit will be set on frames that are transmitted in excess of the CIR.
• Frames that are transmitted at greater than the CIR will be discarded at the source.
• It is impossible to transmit frames at a rate in excess of the CIR

26. Which of the following commands would be used to troubleshoot the processing of call control functions such as call setup, signaling, and termination?
• show interface bri0/0
• show isdn active
• debug isdn q921
• debug isdn q931
• debug ppp negotiation
• debug ppp authentication

27. Which of the following statements are true regarding PPP? (Choose three.)
• PPP can use synchronous and asynchronous physical media.
• PPP can only be used between two Cisco devices.
• PPP carries packets from several network layer protocols in LCPs.
• PPP uses LCPs to establish, configure, and test the data link connection.
• PPP uses LCPs to agree on format options such as authentication, compression, and error detection

28. A network administrator is evaluating authentication protocols for a PPP link. Which of the following reasons might lead to the selection of CHAP over PAP as the authentication protocol? (Choose three.)
• establishes identities with a two-way handshake
• uses a three-way authentication periodically during the session to reconfirm identities
• control by the remote host of the frequency and timing of login events
• transmits login information in encrypted format
• uses an unpredictable variable challenge value to prevent playback attacks
• makes authorized network administrator intervention a requirement to establish each session

29. Why are static routes often used with ISDN DDR?
• They are more stable than dynamic routing protocols.
• They are more accurate than dynamic routing protocols because they are put in by a network administrator.
• They are easier to modify when a faster technology is installed.
• They prevent the unnecessary activation of the link

30. Assuming that four bits have been borrowed to make subnets, identify the subnet network addresses. (Choose three.)
• 192.168.14.8
• 192.168.14.16
• 192.168.14.24

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• 192.168.14.32
• 192.168.14.148
• 192.168.14.208

31. A switch can be configured for three different forwarding modes based on how much of a frame is received before the forwarding process begins. Each of the numbered arrows in the accompanying graphic signifies the point in a frame where a particular forwarding mode will begin. Which one of the following groups reflects the sequence of forwarding modes signified by the numbered arrows?
• 1) fast forward
• 2) fragment free
• 3) store-and-forward
• 1) store-and-forward
2) fragment free
3) fast forward
• 1) fragment free
2) fast forward
3) store-and-forward
• 1) fast forward
2) store-and-forward
3) fragment free

32. Which of the following commands will display a communication message on a router before the router prompt is shown?
• banner motd * Property of TLC. UNAUTHORIZED USERS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW. *
• message Property of TLC. UNAUTHORIZED USERS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.
• banner * Property of TLC. UNAUTHORIZED USERS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW. *
• hostname (Property of TLC. UNAUTHORIZED USERS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.)
• Øverst på formularen

33. A router needs to be added to OSPF area 0. Which commands should be used to enable OSPF on the router? (Choose two.)
• RouterA(config)# router ospf
• RouterA(config)# router ospf 1
• RouterA(config-router)# network 192.168.2.0 0.0.0.255 0
• RouterA(config-router)# network 192.168.2.0 0.0.0.255 area 0
• RouterA(config-router)# network 192.168.2.0 255.255.255.0 0

34. Refer to the graphic. Which of the following commands will configure router A for OSPF?
• router ospf 1
network 192.168.10.0

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

• router ospf 1
network 192.168.10.64 0.0.0.63 area 0
network 192.168.10.192 0.0.0.3 area 0
• router ospf 1
network 192.168.10.64 255.255.255.192
network 192.168.10.192 255.255.255.252
• router ospf 1
network 192.168.10.0 area 0

35. Which of the following protocols would exchange information between routers to share network addresses and their metrics?
• TCP
• RIP
• CSMA/CD
• Ethernet

36. Which ISDN device can be directly connected to a two-wire local loop in a North American city?
• a router with a serial interface
• a router with an S/T interface
• a router with a U interface
• an ISDN terminal adapter

37. The output of the show ip interfaces brief command indicates that Serial0 is up but the line protocol is down. Which of the following are possible causes for the line protocol being in the down state? (Choose two.)
• The clock rate is not set on the DTE.
• An incorrect default gateway is set on the router.
• A network is missing from the routing protocol configuration.
• The encapsulation on the Serial0 interface is incorrect.
• Keepalives are not being sent by the remote device

38. Which of the following is a characteristics of TCP? (Choose two.)
• data transport reliability
• best path determination
• establishing, maintaining, and terminating virtual circuits
• encapsulation of packets in a data frame with source and destination MAC addresses
• best-effort datagram delivery

39. Which statement is true regarding the command ip route 192.168.7.24 255.255.255.248 192.168.7.9? (Choose two.)
• A packet destined for host 192.168.7.30 will be forwarded to address 192.168.7.9.
• 192.168.7.9 is the destination network for this route.
• 192.168.7.24 is the next-hop router in this command.
• This command is issued from the interface configuration mode.
• This command is used to define a static route

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

40. Which of the following application layer protocols use TCP? (Choose three.)
• SMTP
• FTP
• SNMP
• HTTP
• TFTP
• DHCP

41. Which terms refer to Frame Relay congestion management mechanisms? (Choose three.)
• BECN
• DLCI
• DE
• FECN
• LMI
• Inverse ARP

42. Which of the following router commands will verify that a path exists to a destination network?
• Router# show ip interfaces brief
• Router# show ip route
• Router# show cdp neighbors
• Router# show running-config
• Router# show protocols

43. When EIGRP is configured on a router, which table of DUAL information is used to calculate the best route to each destination router?
• router table
• topology table
• DUAL table
• CAM table
• ARP table

44. Refer to the graphic. Routers A and B have EIGRP configured and automatic summarization has been disabled on both routers. Which of the following commands is used on router A to summarize the attached routes, and to which interface is this command applied? (Choose two)
• ip summary-address eigrp 1 192.168.10.64 255.255.255.192
• ip area-range eigrp 1 192.168.10.80 255.255.255.224
• summary-address 192.168.10.80 0.0.0.31
• ip summary-address eigrp 1 192.168.10.64 0.0.0.63
• serial interface on router A
• serial interface on router B

45. A router with two LAN interfaces, two WAN interfaces, and two loopback interfaces configured is operating with OSPF as its routing protocol. What is used by the OSPF

9

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
process to assign the router ID?
• the IP address of the interface configured with priority 0
• the OSPF area ID configured on the interface with the highest IP address
• the loopback with the highest IP address configured
• the highest IP address on the LAN interfaces
• the highest IP address configured on the WAN interfaces

46. Given the IP address and subnet mask of 172.16.134.56 255.255.255.224, on which subnetwork does this address reside?
• 172.0.0.0
• 172.16.134.0
• 172.16.134.32
• 172.16.134.48
• 172.16.134.47
• 172.16.134.63

47. Which commands show when the last IGRP routing update was received? (Choose two.)
• Router# show ip protocols
• Router# show version
• Router# show interfaces
• Router# show ip updates
• Router# show ip route

48. When using access control lists to filter traffic, which of the following is used to track multiple sessions occurring between hosts?
• IP addresses
• subnet masks
• port numbers
• routed protocols
• routing protocols
• interfaces

49. Given the IP address and subnet mask of 172.16.134.64 255.255.255.224, which of the following would describe this address?
• This is a useable host address.
• This is a broadcast address.
• This is a network address.
• This is not a valid address

50. The company network shown in the drawing has to be subnetted. The company has leased the Class C IP address of 200.1.2.0. Which of the following network addresses and masks would be appropriate for one of the subnetworks?
• 200.1.2.96 255.255.255.192
• 200.1.2.160 255.255.255.224

• 200.1.2.80 255.255.255.224
• 200.1.2.32 255.255.255.240

CCNA 4 - Final Exam (C) 100/100

1. Which of the following describes the roles of devices in a WAN? (Choose three.)
• A CSU/DSU terminates a digital local loop.
• A modem terminates a digital local loop.
• A CSU/DSU terminates an analog local loop.
• A modem terminates an analog local loop.
• A router is commonly considered a DTE device.
• A router is commonly considered a DCE device.

2. What value in the address field of a Frame Relay header identifies the destination of the frame?
• CIR
• DE
• DLCI
• ISDN
• FRAD
• PVC

3. The serial PPP link between the Left and Right routers is configured as shown in the diagram. Which configuration issue explains why the link is unable to establish a PPP session?
• The IP addresses must be on different subnets.
• The usernames are misconfigured.
• The passwords must be different for the CHAP authentication.
• The clock rate must be 56000.
• The clock rate is configured on the wrong end of the link.
• Interface serial 0/0 on Left must connect to interface serial 0/1 on Right.

4. The output of the show interfaces serial 0/0 command for a frame-relay connection indicates that the serial line is up but the line protocol is down. What are possible causes for this? (Choose two.)
• There is an LMI-type mismatch between the Frame Relay switch and the router.
• There is no clock present on the serial interface.
• The interface is shut down.
• RARP is not functioning on the router.
• The cable is disconnected.

5. Which statements are correct about the point in the network where the responsibility of the service provider ends? (Choose three.)
• The International point is on the customer side of the network terminating unit(NTU).
• The United States point is at the interface of the customer-provided equipment and the local loop.
• The responsibility for this point is controlled by IANA.
• The point is called the demarcation point.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• The point is typically located at the service provider's central office.
• The point is located between the customer's local area networks.

6. While prototyping an internetwork in the corporate lab, a network administrator is testing a serial link between serial 0/0 interfaces on two routers. The labels on the serial cable ends have been damaged and are unreadable. What command can be issued to determine which router is connected to the DCE cable end?
• show interfaces serial 0/0
• show version
• show controllers serial 0/0
• show protocols serial 0/0
• show status serial 0/0

7. A network technician determines DHCP clients are not working properly. The clients are receiving IP configuration information from a DHCP server configured on the router but cannot access the Internet. From the output in the graphic, what is the most likely problem?
• The DHCP server service is not enabled.
• The inside interface for DCHP is not defined.
• The DHCP pool is not bound to the interface.
• The pool does not have a default router defined for the clients.
• All the host addresses have been excluded from the DHCP pool.

8. A technician enters the interface serial 0/0.1 multipoint command when configuring a router. What effect will the multipoint keyword have in this configuration? (Choose two.)
• Split-horizon issues will need to be resolved for this network if RIP is the routing protocol.
• A subinterface will be defined for each PVC.
• All the participating interfaces of remote routers will be configured in the same subnet.
• A single DLCI will be used to define all the PVCs to the remote routers.
• An IP address will need to be configured on the main interface.

9. When configuring a Frame Relay connection, when should a static Frame Relay map be used? (Choose two.)
• when the remote router is a non-Cisco router
• when the remote router does not support Inverse ARP
• when the local router is using IOS Release 11.1 or earlier
• when broadcast traffic and multicast traffic over the PVC must be controlled
• when globally significant rather than locally significant DLCIs are being used

10. Which router command would be used to associate a Layer 2 address with the corresponding Layer 3 address in the internetwork in the diagram?
• RouterA(config-if)#frame-relay pvc 100 192.168.15.2
• RouterA(config-if)#dialer-map ip 192.168.15.1 100 broadcast
• RouterA(config-if)#frame-relay map ip 192.168.15.2 100 broadcast
• RouterA (config-if)#dialer-map 192.168.15.1 101 serial 0 broadcast

www.9tut.info   *www.ccna4u.tk*   *www.ccnastudy.info*
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• RouterA (config-if)#frame-relay dlci 101 192.168.15.1 broadcast
• RouterA (config-if)#dialer-map 192.168.15.1 inverse-arp broadcast

11. Which of the following ISDN protocols is responsible for call setup and call teardown?
• ITU-T Q.921
• ITU-T Q.931
• ITU-T I.430
• ITU-T I.431

12. What are two ways to resolve split-horizon issues in a Frame Relay network? (Choose two.)
• create a full-mesh topology
• disable Inverse ARP
• use point-to-point subinterfaces
• use multipoint subinterfaces
• remove the broadcast keyword from the frame-relay map command

13. What is the purpose of the command marked with an arrow shown in the partial configuration output of a Cisco 806 broadband router?
• defines which addresses are allowed out of the router
• defines which addresses are allowed into the router
• defines which addresses can be translated
• defines which addresses are assigned to a NAT pool

14. A system administrator is unable to ping the Serial0/0 interface of RouterB from RouterA. During the troubleshooting process, the following facts are established:
- IP addressing and subnet masks are correct.
- RouterA is a Cisco router and RouterB is a router from another vendor.
- RouterA is configured with the default encapsulation.
- The serial interfaces on both routers are up.
- The protocol is down on the serial interfaces of both routers.
What should the administrator do to solve the problem?
• Add a clock rate on RouterA.
• Enable the serial interface on RouterB.
• Change the encapsulation on both routers to PPP.
• Connect the serial cable to the correct interface on RouterB.
• Use the correct serial cable to attach the CSU/DSU to RouterB.

15. An ISDN circuit from a branch office is remaining connected to the regional office. A network administrator determines a user has initiated a continuous ping from a desktop computer to the regional office. Which configuration change would allow the ISDN circuit to disconnect during any attempts to ping, while otherwise functioning properly?
• change DDR from legacy to dialer profiles
• remove the dialer list statement from the configuration

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• change the dialer list to exclude ICMP as interesting
• disable inverse ARP

16. Below is a list of DDR steps. Which of the following identifies the proper order of DDR?
1 - dial number is looked up
2 - interesting traffic triggers DDR
3 - route to destination is determined
4 - call is made
• 1,2,3,4
• 1,3,2,4
• 2,3,1,4
• 2,1,3,4
• 3,2,1,4
• 3,1,2,4

17. Which protocol should be chosen to support WAN connectivity in a multi-vendor system and provide strong security through authentication?
• NAT with DHCP
• Frame Relay
• HDLC with encryption
• HDLC with CHAP
• PPP with PAP
• PPP with CHAP

18. Which of the following are valid steps for a basic ISDN BRI configuration? (Choose two.)
• create subinterfaces
• define the LMI type
• set the SPIDs if required by the ISDN switch
• set the interface DLCI
• set the switch type
• specify the encapsulation as either Cisco or IETF

19. A branch office reports excessive connect time charges for an ISDN circuit used to connect to the regional office. Upon investigation of this issue, it is discovered that when an ISDN connection is initiated to the regional office it remains connected for an excessive amount of time. Which of the following configuration changes could be made to DDR on the router to reduce these connect time charges?
• use PPP multilink
• lower idle timer setting
• use CHAP authentication
• change DDR from legacy to dialer profiles

20. A network administrator is having difficulty in establishing a serial link between a Cisco router and a router from another vendor. Both routers are configured for HDLC

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
encapsulation. Which statements are true regarding this configuration? (Choose two.)
• The Cisco HDLC frame uses a proprietary "Type" field that may not be compatible with equipment of other vendors.
• HDLC requires a clock rate to be configured on the routers at both ends of the serial link.
• PPP encapsulation is recommended for serial links between equipment from multiple vendors.
• Usernames must be configured at both ends of the HDLC serial link.
• The HDLC vendor type must be enabled on the Cisco router.
• There is a mismatch in the HDLC authentication password configurations.

21. Given the partial router configuration in the graphic, why does the workstation with the IP address 192.168.1.153/28 fail to access the Internet? (Choose two.)
• The NAT inside interfaces are not configured properly.
• The NAT outside interface is not configured properly.
• The router is not properly configured to use the access control list for NAT.
• The NAT pool is not properly configured to use routable outside addresses.
• The access control list does not include the IP address 192.168.1.153/28 to access the Internet.

22. The serial PPP link between the Left and Right routers is configured as shown in the diagram. Which configuration issue will prevent IP traffic from crossing this link?
• The passwords must be different for the CHAP authentication.
• The usernames are misconfigured.
• The clock rate must be 56000.
• The clock rate is configured on the wrong end of the link.
• The IP addresses must be on the same subnet.
• Interface serial 0/0 on Left must connect to interface serial 0/1 on Right.

23. What causes a DDR call to be placed?
• dial string
• DLCI
• idle time out
• interesting traffic
• PVC

24. Which two layers of the OSI model are described by WAN standards?
• Application Layer, Physical Layer
• Data Link Layer, Physical Layer
• Data Link Layer, Transport Layer
• Physical Layer, Network Layer

25. A technician is testing RouterA in the graphic. What is the condition of the circuit?
• The routers are configured for different encapsulations.
• The clock rate is not properly configured on the routers.
• The circuit from WAN provider has failed.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com
• Authentication is not properly configured on the routers.
• The circuit is functioning properly.

26. A network administrator must provide WAN connectivity between a central office
and three remote sites: Orlando, Atlanta, and Phoenix. The Orlando and Atlanta remote
offices receive sales orders and transmit shipping confirmations to the Central office
consistently throughout the day. The Phoenix remote office consists of one salesperson
traveling through the southwest territory. The salesperson occasionally needs to connect
to the Central office for e-mail access. How should the network administrator connect the
remote sites to the Central office? (Choose two.)
• Connect to the Atlanta and Orlando remote offices with Frame Relay connections.
• Connect to the Atlanta and Orlando remote offices with ISDN connections.
• Connect to the Atlanta and Orlando remote offices with POTS dial-up connections.
• Connect to the Phoenix remote office with a Frame Relay connection.
• Connect to the Phoenix remote office with a POTS dial-up connection.

27. When a Frame Relay switch detects an excessive buildup of frames in its queue,
which of the following may occur? (Choose two.)
• Frames with the DE bit set are dropped from the switch queue.
• Frames with the FECN and BECN bits set are dropped from the switch queue.
• Frames in excess of the CIR are not accepted by the switch.
• The switch sets the FECN bit on all frames it places on the congested link and sets the
BECN bit on all frames it receives on the congested link.
• The switch sets the FECN bit on all frames it receives on the congested link and sets the
BECN bit on all frames it places on the congested link.

28. A system administrator is troubleshooting a connectivity issue between two routers in
a new installation. The administrator enters the debug ppp authentication command on
the WHSE router. The graphic shows a part of the output received. From this output,
what is the most likely cause of this connectivity issue?
• There is not a route to the remote router.
• The ISDN circuit on the remote router has failed.
• The username/password was not properly configured on the WHSE router.
• The remote router has a different authentication protocol configured.

29. What does the output of the show frame-relay map command shown below represent?
(Choose two.)
• Serial 0 (up): ip 172.30.151.4 dlci 122, dynamic, broadcast, status defined, active
• 172.30.151.4 represents the IP address of the remote router.
• 172.30.151.4 represents the IP address of the local serial interface.
• DLCI 122 represents the interface of the remote router.
• broadcast indicates that a dynamic routing protocol such as RIP v1 can send packets
across this PVC.
• dynamic indicates that a dynamic routing protocol is enabled for this connection.
• active indicates that the ARP process is working.

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

30. What does the status inactive indicate in the output of the show frame-relay pvc command?
• The DLCI is programmed in the switch but is not usable.
• The DLCI was formerly programmed in the switch but is no longer there.
• The DLCI is usable but has little activity.
• The DLCI has been renamed for that PVC.

31. Which of the following IP addresses are defined by RFC 1918 as private addresses? (Choose three.)
• 192.168.146.0/22
• 172.10.25.0/16
• 172.31.0.0/16
• 20.0.0.0/8
• 10.172.92.8/29

32. After configuring a dialup ISDN circuit, a network associate begins testing the dialup connection. When attempting to ping a host on the remote network, the local router does not attempt to dial the remote access server. Which of the following are possible errors in this configuration? (Choose three.)
• PPP authentication is not properly configured.
• No dialer map is configured.
• The ISDN circuit connected to the remote access server is busy.
• No interesting traffic is defined.
• No route is determined to the remote network.
• A wrong number is configured in the dial string.

33. Two routers are connected through a Frame Relay, point-to-point PVC. The remote router is from a vendor other than Cisco. Which interface command is required to configure the link between the Cisco router and the other router?
• frame-relay pvc multipoint
• frame-relay pvc point-to-point
• encapsulation frame-relay cisco
• encapsulation frame-relay ietf
• frame-relay lmi-type ansi

34. Which circuit-switched WAN technology is often used to provide a backup for a leased line and additional capacity during peak usage times?
• X.25
• DSL
• ISDN
• cable modem

35. After the ISDN BRI interface is configured, which command can be used to verify that the router is communicating correctly with the ISDN switch?
• show dialer
• show isdn status

www.9tut.info   www.ccna4u.tk   www.ccnastudy.info
Updated daily… New updated Mar 01 2009 by quocvuong
Email: quocvuong.it@gmail.com

• show interfaces bri0/0:1
• show interfaces serial0/0.1

36. A system administrator needs to configure the regional office with ISDN for DDR connections to three remote sites. Each remote site requires different IP subnets, different encapsulations, and different authentication methods. The sites will not be connected at the same time. The company would like to accomplish this in the most cost effective manner. What method can the system administrator use to accomplish this task using the fewest B channels?
• Install and configure a PRI.
• Install and configure a BRI interface with separate SPIDs for each remote site.
• Install and configure a BRI with multiple switch types in global configuration.
• Install and configure a BRI using dialer profiles.
• Install and configure a separate BRI for each remote site.

37. A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?
• Configure static NAT for all ten users.
• Configure dynamic NAT for ten users.
• Configure dynamic NAT with PAT.
• Configure DHCP and static NAT.
• What the administrator wants to do cannot be done.

38. Which of the following are characteristics of Frame Relay? (Choose two.)
• circuit-switched
• connection oriented
• OSI Layer 3
• packet-switched
• reliable

39. Which of the following is the order for the three phases of establishing a PPP serial link with authentication?
• authentication, link-establishment, network layer protocols
• authentication, network layer protocols, link-establishment
• network layer protocols, link-establishment, authentication
• network layer protocols, authentication, link-establishment
• link-establishment, authentication, network layer protocols
• link-establishment, network layer protocols, authentication

1   Which wireless solution can provide mobile users with non line-of-sight broadband Internet access at speeds comparable to DSL or cable?

- ☐ Wi-Fi
- ☐ WiMAX
- ☐ satellite
- ☐ Metro Ethernet

2   What effect would the Router1(config-ext-nacl)# **permit tcp 172.16.4.0 0.0.0.255 any eq www** command have when implemented inbound on the f0/0 interface?

- ☐ All TCP traffic is permitted, and all other traffic is denied.
- ☐ The command is rejected by the router because it is incomplete.
- ☐ All traffic from 172.16.4.0/24 is permitted anywhere on any port.
- ☐ Traffic originating from 172.16.4.0/24 is permitted to all TCP port 80 destinations.

3


```
R2(config)# interface s0/0/0
R2(config-if)# ip address 10.10.10.2 255.255.255.0
R2(config-if)# encapsulation frame-relay
R2(config-if)# frame-relay map ip 10.10.10.1 201
R2(config-if)# frame-relay map ip 10.10.10.3 203
```

Refer to the exhibit. Branch A has a Cisco router. Branch B has a non-Cisco router set for IETF encapsulation. Af commands shown are entered, R2 and R3 fail to establish the PVC. The R2 LMI is Cisco, and the R3 LMI is ANS LMI is successfully established at both locations. Why is the PVC failing?

- ☐ The PVC to R3 must be point-to-point.
- ☐ LMI types must match on each end of a PVC.
- ☐ The **ietf** parameter is missing from the **frame-relay map ip 10.10.10.3 203** command.
- ☐ The PVCs at R2 use different encapsulation types. A single port can only support one encapsulation type.

4

Refer to the exhibit. The network administrator is adding R1 to an existing network. As a part of the corporate IT the administrator attempts to back up the router Cisco IOS software of R1 and receives the output shown. The network administrator then attempts unsuccessfully to ping the TFTP server from the console session. What should be done isolate this problem?

- ☐ From R2, validate that interface Fa0/0 is operational.
- ☐ From the TFTP server, verify that the software on the TFTP server is operational.
- ☐ From the TFTP server, confirm there is enough room on the TFTP server for the Cisco IOS software.
- ☐ From the console session, make sure that R1 has a route to the network where the TFTP server resides.

5   Which three guidelines would help contribute to creating a strong password policy? (Choose three.)
- ☐ Once a good password is created, do not change it.
- ☐ Deliberately misspell words when creating passwords.
- ☐ Create passwords that are at least 8 characters in length.
- ☐ Use combinations of upper case, lower case, and special characters.
- ☐ Write passwords in locations that can be easily retrieved to avoid being locked out.
- ☐ Use long words found in the dictionary to make passwords that are easy to remember.

6   What will be the result of adding the command **ip dhcp excluded-address 172.16.4.1 172.16.4.5** to the configuration of a local router that has been configured as a DHCP server?
- ☐ Traffic that is destined for 172.16.4.1 and 172.16.4.5 will be dropped by the router.
- ☐ Traffic will not be routed from clients with addresses between 172.16.4.1 and 172.16.4.5.
- ☐ The DHCP server function of the router will not issue the addresses between 172.16.4.1 and 172.16.4.5.
- ☐ The router will ignore all traffic that comes from the DHCP servers with addresses 172.16.4.1 and

172.16.4.5.

7 Which three items are LCP options that can be configured for PPP? (Choose three.)

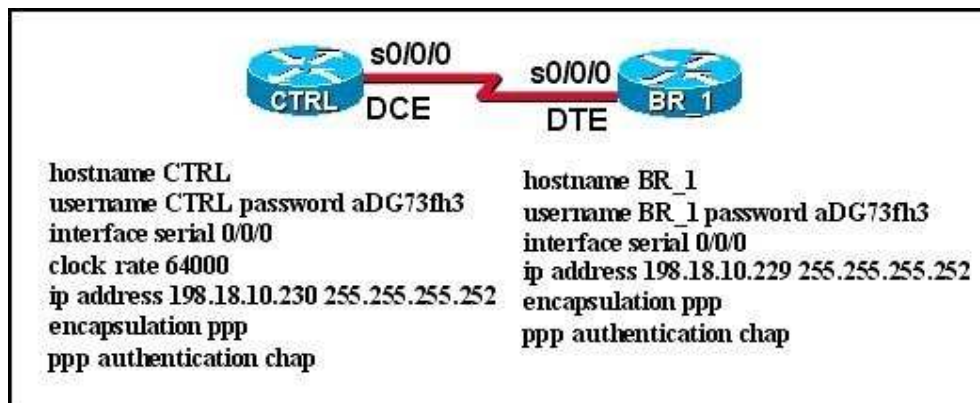- ☐ CHAP
- ☐ Stacker
- ☐ IPCP
- ☐ CDPCP
- ☐ Multilink

8 A technician is talking to a colleague at a rival company and comparing DSL transfer rates between the two companies. Both companies are in the same city, use the same service provider, and have the same rate/service plan. What is the explanation for why Company A reports higher download speeds than Company B?

- ☐ Company B has a higher volume of POTS voice traffic than Company A.
- ☐ Company B shares the conection to the DSLAM with more clients than Company A.
- ☐ Company A only uses microfilters on branch locations.
- ☐ Company A is closer to the service provider.

9 What are the symptoms when the s0/0/0 interface on a router is attached to an operational CSU/DSU that is generating a clock signal, but the far end router on the point-to-point link has not been activated?

- ☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.
- ☐ **show controllers** indicates cable type DCE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.
- ☐ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial up, line protocol down.
- ☐ **show controllers** indicates cable type DTE V.35. **show interfaces s0/0/0** indicates serial down, line protocol down.

10

Refer to the exhibit. The link between the CTRL and BR_1 routers is configured as shown in the exhibit. Why are the routers unable to establish a PPP session?

- ☐ The clock rate must be 56000.

- The usernames are misconfigured.
- The IP addresses are on different subnets.
- The clock rate is configured on the wrong end of the link.
- The CHAP passwords must be different on the two routers.
- Interface serial 0/0/0 on CTRL must connect to interface serial 0/0/1 on BR_1.

11 What are two main components of data confidentiality? (Choose two.)
- checksum
- digital certificates
- encapsulation
- encryption
- hashing

12
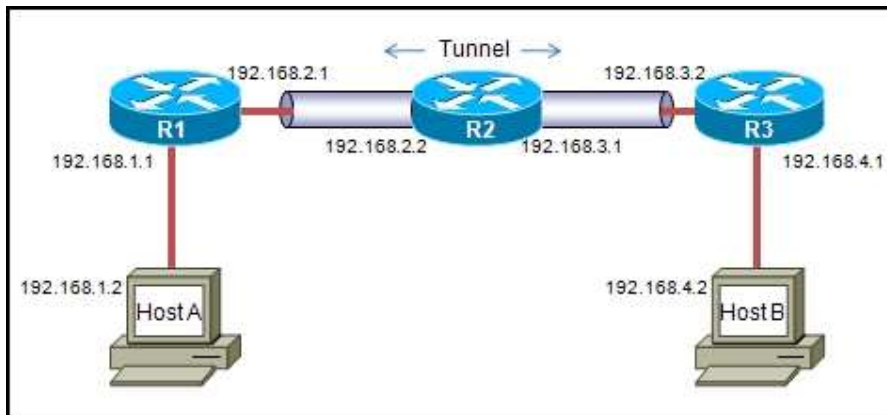
Refer to the exhibit. A packet is being sent from Host A to Host B through the VPN tunnel between R1 and R3. When the packet first arrives at R3, what are the source and destination IP addresses of the packet?
- Source 192.168.1.2 - Destination 192.168.4.2
- Source 192.168.3.1 - Destination 192.168.3.2
- Source 192.168.2.1 - Destination 192.168.3.2
- Source 192.168.3.1 - Destination 192.168.4.2

13 A technician has been asked to run Cisco SDM one-step lockdown on the router of a customer. What will be the result of this process?
- Traffic is only forwarded from SDM-trusted Cisco routers.
- Security testing is performed and the results are saved as a text file stored in NVRAM.
- The router is tested for potential security problems and any necessary changes are made.
- All traffic entering the router is quarantined and checked for viruses before being forwarded.

14
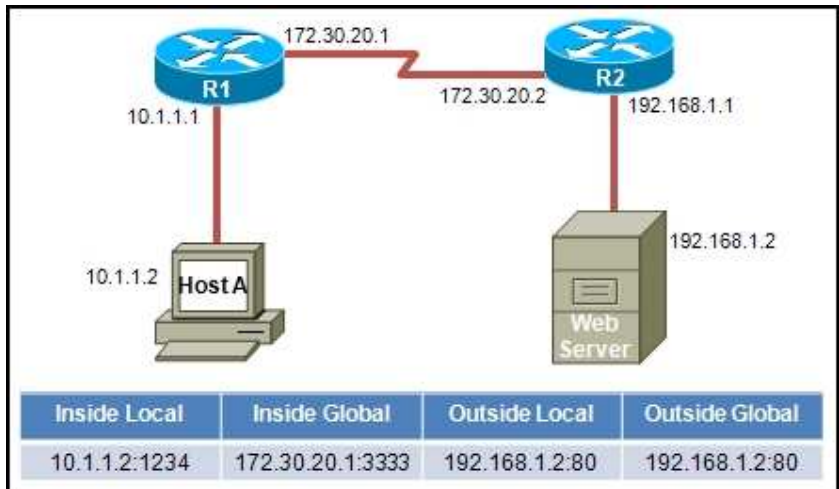
| Inside Local	Inside Global	Outside Local	Outside Global
10.1.1.2:1234	172.30.20.1:3333	192.168.1.2:80	192.168.1.2:80

Refer to the exhibit. R1 is performing NAT overload for the 10.1.1.0/24 inside network. Host A has sent a packet to the web server. What is the destination IP address of the return packet from the web server?

- 10.1.1.2:1234
- 172.30.20.1:1234
- 172.30.20.1:3333
- 192.168.1.2:80

15 A system administrator must provide Internet connectivity for ten hosts in a small remote office. The ISP has assigned two public IP addresses to this remote office. How can the system administrator configure the router to provide Internet access to all ten users at the same time?

- Configure DHCP and static NAT.
- Configure dynamic NAT for ten users.
- Configure static NAT for all ten users.
- Configure dynamic NAT with overload.

Take Assessment - EWAN Final Exam - CCNA Exploration (Version 4.0)
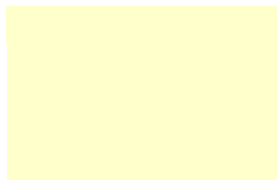
16 Which three statements are true about creating and applying access lists? (Choose three.)

- Access list entries should filter in the order from general to specific.
- One access list per port per protocol per direction is permitted.
- Standard ACLs should be applied closest to the source while extended ACLs should be applied closest to the destination.

☐ There is an implicit deny at the end of all access lists.

☐ Statements are processed sequentially from top to bottom until a match is found.

☐ The **inbound** keyword refers to traffic entering the network from the router interface where the ACL is applied.

17 A company is looking for a WAN solution to connect its headquarters site with four remote sites. What advantage would dedicated leased lines provide to the customer compared to a shared Frame Relay solution?

◻ lower cost

◻ lower latency and jitter

◻ variable bandwidth capacity

◻ fewer physical router interfaces

18

```
Serial0/0/0 is up, line protocol is down
  Hardware is HD64570
  Internet address is 10.1.1.1/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation PPP, loopback not set, keepalive set (10 sec)
  LCP Closed
  Closed: LEXCP, BRIDGECP, IPCP, CCP, CDPCP, LLC2, BACP
  <output omitted>
  Queueing strategy: weighted fair
  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 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, 1 interface resets
    0 output buffer failures, 0 output buffers swapped out
    0 carrier transitions
    DCD=up DSR=up DTR=up RTS=up CTS=up
```

Refer to the exhibit. This serial interface is not functioning correctly. Based on the output shown, what is the most likely cause?

◻ improper LMI type

◻ interface reset

◻ PPP negotiation failure

◻ unplugged cable

19 Which combination of Layer 2 protocol and authentication should be used to establish a link without sending authentication information in plain text between a Cisco and a non-Cisco router?

◻ PPP with PAP

◻ PPP with CHAP

◻ HDLC with PAP

◻ HDLC with CHAP

20
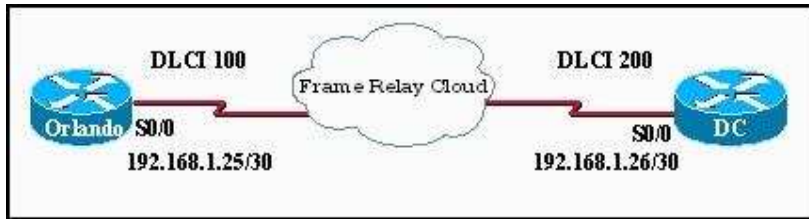
Refer to the exhibit. What is placed in the address field in the header of a frame that will travel from the DC office of ABC Company to the Orlando office?

- [ ] MAC address of the Orlando router
- [ ] MAC address of the DC router
- [ ] 192.168.1.25
- [ ] 192.168.1.26
- [ ] DLCI 100
- [ ] DLCI 200

21 What is a major characteristic of a worm?

- [ ] malicious software that copies itself into other executable programs
- [ ] tricks users into running the infected software
- [ ] a set of computer instructions that lies dormant until triggered by a specific event
- [ ] exploits vulnerabilities with the intent of propagating itself across a network

22
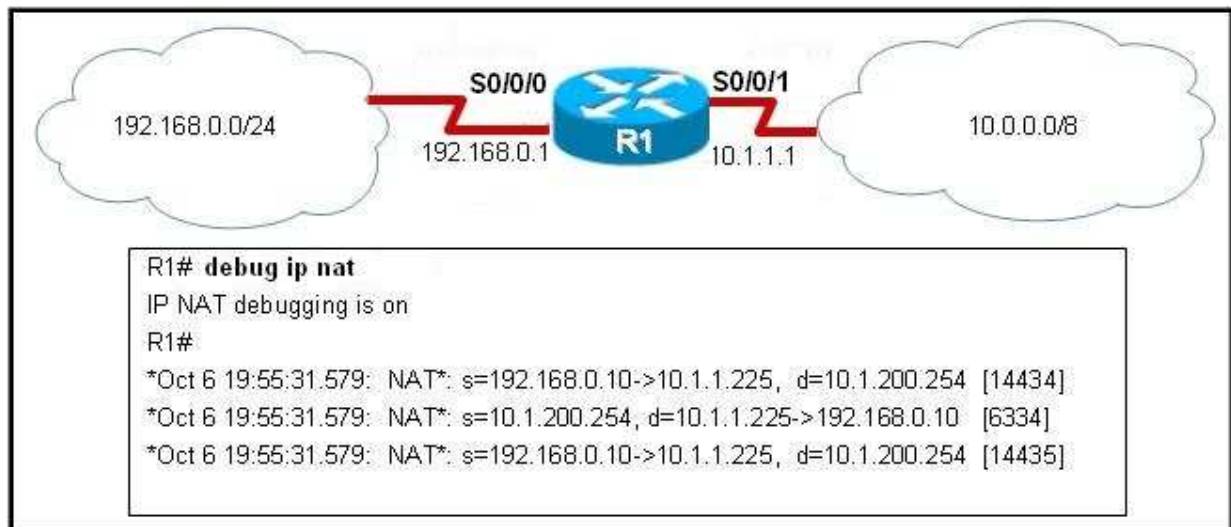
Refer to the exhibit. What can be concluded from the exhibited output of the **debug ip nat** command?

- [ ] The 10.1.1.225 host is exchanging packets with the 192.168.0.10 host.
- [ ] The native 10.1.200.254 address is being translated to 192.168.0.10.
- [ ] The 192.168.0.0/24 network is the inside network.
- [ ] Port address translation is in effect.

23 Which three functions are provided by the Local Management Interface used in Frame Relay networks? (Choose three.)

☐ exchange information about the status of virtual circuits

☐ map DLCIs to network addresses

☐ provide flow control

☐ provide error notification

☐ provide congestion notification

☐ send keepalive packets to verify operation of the PVC

24 What can a network administrator do to recover from a lost router password?

☐ use the **copy tftp: flash:** command

☐ boot the router to bootROM mode and enter the **b** command to load the IOS manually

☐ telnet from another router and issue the **show running-config** command to view the password

☐ boot the router to ROM monitor mode and configure the router to ignore the startup configuration when it initializes

25

```
<output omitted>
ip dhcp pool 192Network
network 192.168.1.128 255.255.255.128
default-router 192.168.1.1
dns-server 192.168.1.1
!
interface FastEthernet0/0
ip address 192.168.1.1 255.255.255.128
duplex auto
speed auto
!
<output omitted>
```

Refer to the exhibit. A host connected to Fa0/0 is unable to acquire an IP address from this DHCP server. The output of the **debug ip dhcp server** command shows "DHCPD: there is no address pool for 192.168.1.1". What is the problem?

☐ The 192.168.1.1 address has not been excluded from the DHCP pool.

☐ The pool of addresses for the 192Network pool is incorrect.

☐ The default router for the 192Network pool is incorrect.

☐ The 192.168.1.1 address is already configured on Fa0/0.

26 Which statement is true regarding wildcard masks?

☐ The wildcard mask and subnet mask perform the same function.

☐ The wildcard mask is always the inverse of the subnet mask.

☐ A "0" in the wildcard mask identifies IP address bits that must be checked.

☐ A "1" in the wildcard mask identifies a network or subnet bit.

27 A network administrator is instructing a technician on best practices for applying ACLs. Which suggestion should the administrator provide?

☐ Named ACLs are less efficient than numbered ACLs.

☐ Standard ACLs should be applied closest to the core layer.

☐ ACLs applied to outbound interfaces are the most efficient.

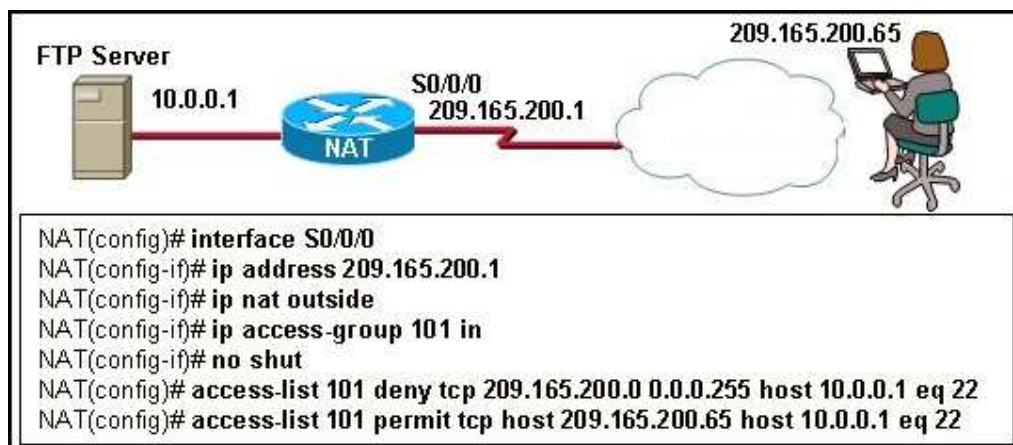☐ Extended ACLs should be applied closest to the source that is specified by the ACL.

28

```
Router(config)# ip access-list extended Managers
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq telnet
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq www
Router(config-ext-nacl)# deny tcp 192.168.1.0 0.0.0.255 any eq ftp
```

Refer to the exhibit. What happens if the network administrator issues the commands shown when an ACL called Managers already exists on the router?

☐ The commands overwrite the existing Managers ACL.

☐ The commands are added at the end of the existing Managers ACL.

☐ The network administrator receives an error stating that the ACL already exists.

☐ The commands will create a duplicate Managers ACL containing only the new commands being entered.

29


```
NAT(config)# interface S0/0/0
NAT(config-if)# ip address 209.165.200.1
NAT(config-if)# ip nat outside
NAT(config-if)# ip access-group 101 in
NAT(config-if)# no shut
NAT(config)# access-list 101 deny tcp 209.165.200.0 0.0.0.255 host 10.0.0.1 eq 22
NAT(config)# access-list 101 permit tcp host 209.165.200.65 host 10.0.0.1 eq 22
```

Refer to the exhibit. The SSH connections between the remote user and the server are failing. The correct configuration of NAT has been verified. What is the most likely cause of the problem?

☐ SSH is unable to pass through NAT.

☐ There are incorrect access control list entries.

☐ The access list has the incorrect port number for SSH.

☐ The **ip helper** command is required on S0/0/0 to allow inbound connections.

30 What three statements describe the roles of devices in a WAN? (Choose three.)

☐ A CSU/DSU terminates a digital local loop.

☐ A modem terminates a digital local loop.

☐   A CSU/DSU terminates an analog local loop.

☐   A modem terminates an analog local loop.

☐   A router is commonly considered a DTE device.

☐   A router is commonly considered a DCE device.

Close Window

31   Which statement about a VPN is true?

☐   VPN link establishment and maintenance is provided by LCP.

☐   DLCI addresses are used to identify each end of the VPN tunnel.

☐   VPNs use virtual Layer 3 connections that are routed through the Internet.

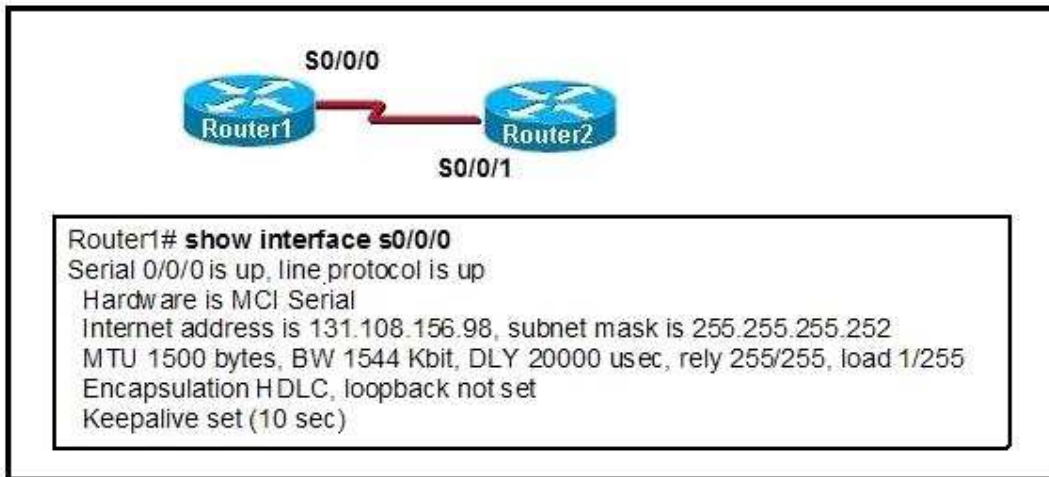☐   Only IP packets can be encapsulated by a VPN for tunneling through the Internet.

32

```
R1(config)# interface FastEthernet 0/0
R1(config-if)# ip address 10.0.1.254 255.255.255.0
R1(config-if)# exit
R1(config)# ip dhcp excluded
R1(config)# ip dhcp excluded-address 10.0.1.2 10.0.1.16
R1(config)# ip dhcp excluded-address 10.0.1.254
R1(config)# ip dhcp pool TEST
R1(dhcp-config)# network 10.0.1.0 255.255.255.0
R1(dhcp-config)# default-router 10.0.1.254
R1(dhcp-config)# dns-server 10.0.1.3
R1(dhcp-config)# domain-name netacad.net
```

Refer to the exhibit. How is the TCP/IP configuration information specified by the **default-router** and **dns-server** commands made available?

☐   The TCP/IP information is forwarded to a 10.0.1.3 to be supplied to DHCP clients.

☐   The TCP/IP information is used by DHCP clients that are configured to request a configuration from R1.

☐   The TCP/IP information is supplied to any DHCP client on the network connected to the FastEthernet 0/0 interface of R1.

☐   The TCP/IP information is applied to each packet that enters R1 through the FastEthernet 0/0 interface that are hosts on the 10.0.1.0 /24 network except packets from addresses 10.0.1.2, 10.0.1.16, and 10.0.1.254.

**33**

Router1# **show interface s0/0/0**
Serial 0/0/0 is up, line protocol is up
  Hardware is MCI Serial
  Internet address is 131.108.156.98, subnet mask is 255.255.255.252
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)

Refer to the exhibit. A technician issues the **show interface s0/0/0** command on R1 while troubleshooting a netw
problem. What two conclusions can be determined by from the output shown? (Choose two.)

☐ The bandwidth has been set to the value of a T1 line.

☐ This interface should be configured for PPP encapsulation.

☐ There is no failure indicated in an OSI Layer 1 or Layer 2.

☐ The physical connection between the two routers has failed.

☐ The IP address of S0/0/0 is invalid, given the subnet mask being used.

34
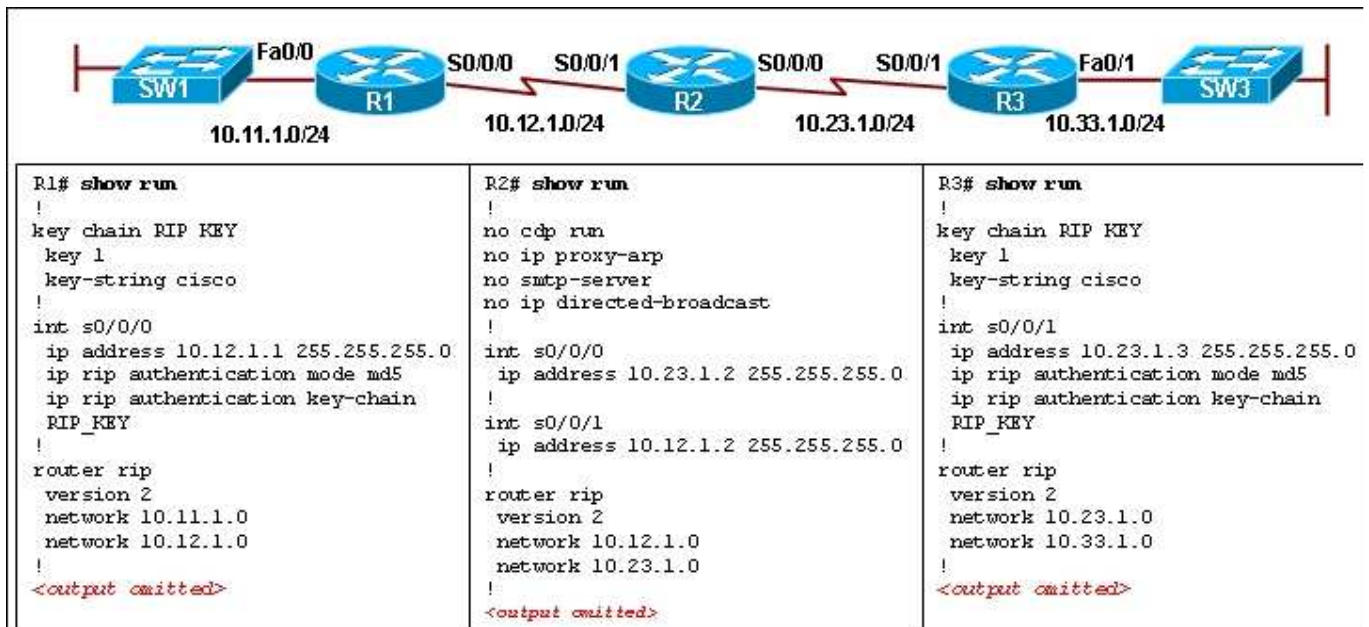
Refer to the exhibit. RIPv2 has been configured on all routers in the network. Routers R1 and R3 do not receive I
routing updates. On the basis of the provided configuration, what should be enabled on router R2 to remedy the
problem?

☐ proxy ARP

- [ ] CDP updates
- [ ] SNMP services
- [ ] RIP authentication

35 Which three statements accurately describe a security policy? (Choose three.)
- [ ] It creates a basis for legal action if necessary.
- [ ] It defines a process for managing security violations.
- [ ] It defines acceptable and unacceptable use of network resources.
- [ ] The remote access policy is a component of the security policy that governs acceptable use of e-mail systems.
- [ ] It is kept private from users to prevent the possibility of circumventing security measures.
- [ ] It provides step-by-step procedures to harden routers and other network devices.

36 An administrator is configuring a dual stack router with IPv6 and IPv4 using RIPng. The administrator receives an error message when trying to enter the IPv4 routes into RIPng. What is the cause of the problem?
- [ ] RIPng is incompatible with dual-stack technology.
- [ ] All interfaces have been configured with the incorrect IPv4 addresses.
- [ ] RIPv1 or RIPv2 needs to be configured in addition to RIPng to successfully use IPv4.
- [ ] When IPv4 and IPv6 are configured on the same interface, all IPv4 addresses are shut down in favor of the newer technology.
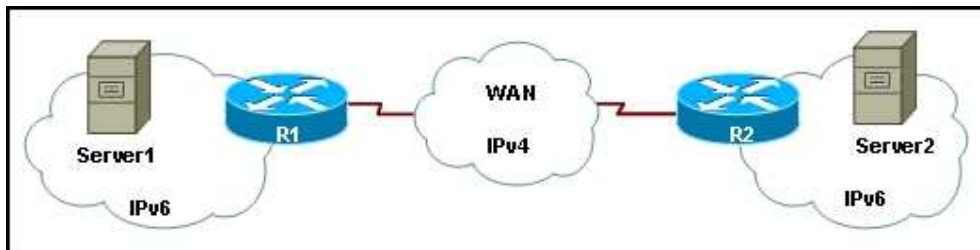
37
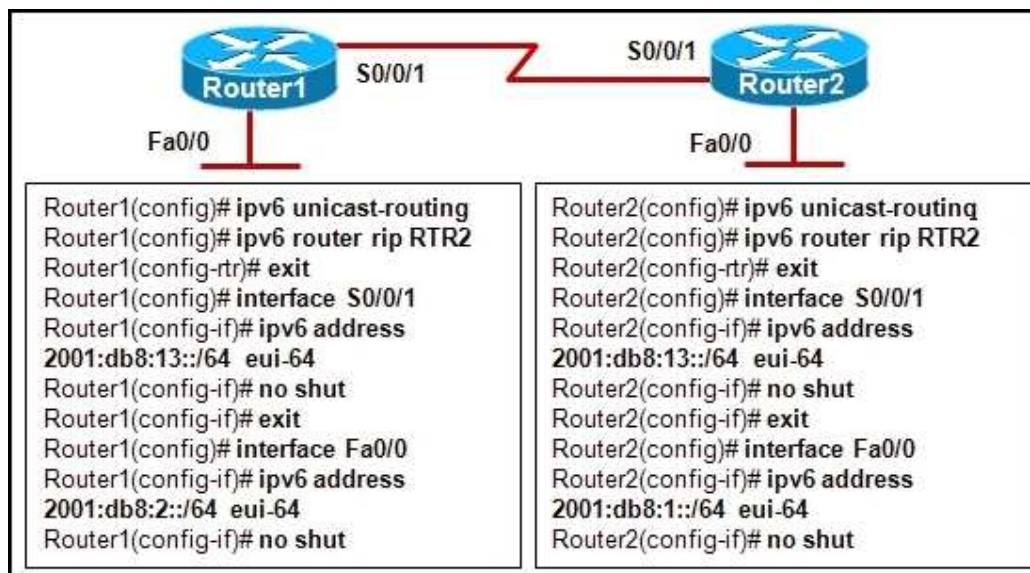
Refer to the exhibit. A network administrator has issued the commands that are shown on Router1 and Router2. A later review of the routing tables reveals that neither router is learning the LAN network of the neighbor router. What is most likely the problem with the RIPng configuration?
- [ ] The serial interfaces are in different subnets.
- [ ] The RIPng process is not enabled on interfaces.

☐ The RIPng network command is not configured.

☐ The RIPng processes do not match between Router1 and Router2.

---

38 When configuring a Frame Relay connection, what are two instances when a static Frame Relay map should be used? (Choose two.)

☐ when the remote router is a non-Cisco router

☐ when the remote router does not support Inverse ARP

☐ when the local router is using IOS Release 11.1 or earlier

☐ when broadcast traffic and multicast traffic over the PVC must be controlled

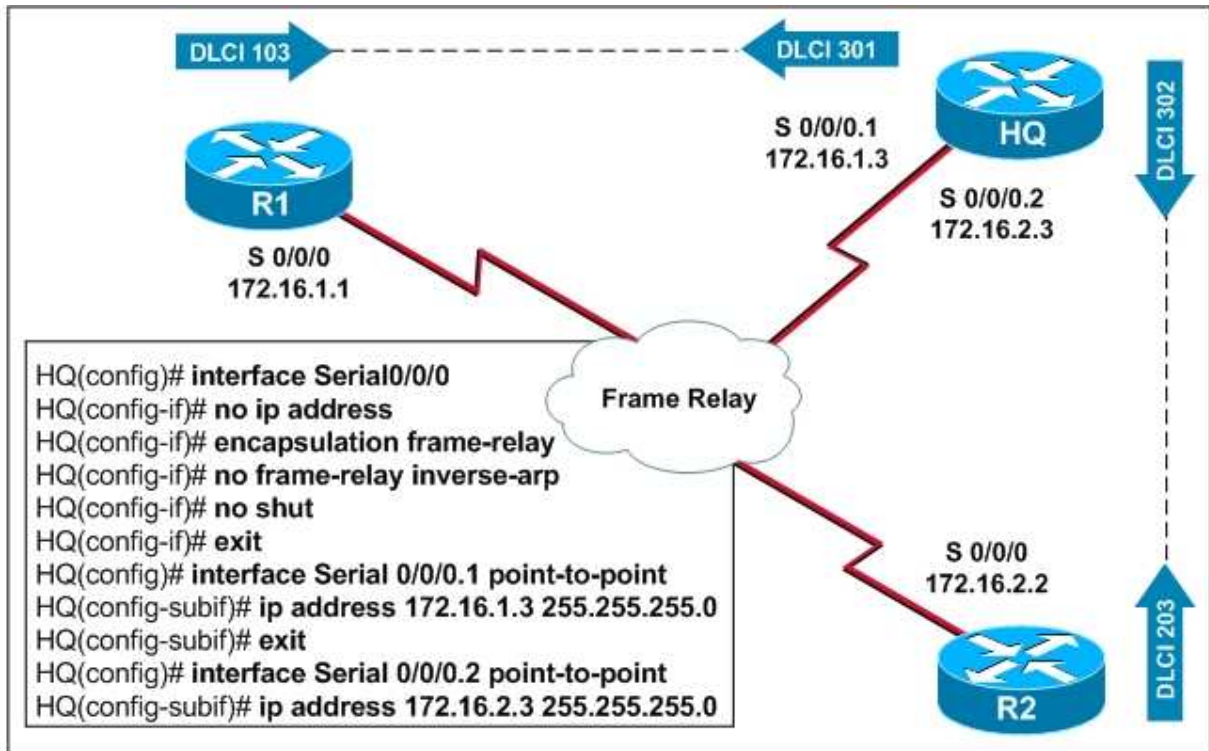☐ when globally significant rather than locally significant DLCIs are being used

---

39

Refer to the exhibit. Company ABC expanded its business and recently opened a new branch office in another country. IPv6 addresses have been used for the company network. The data servers Server1 and Server2 run applications which require end-to-end functionality, with unmodified packets that are forwarded from the source to the destination. The edge routers R1 and R2 support dual stack configuration. What solution should be deployed at the edge of the company network in order to successfully interconnect both offices?

☐ a new WAN service supporting only IPv6

☐ NAT overload to map inside IPv6 addresses to outside IPv4 address

☐ a manually configured IPv6 tunnel between the edge routers R1 and R2

☐ static NAT to map inside IPv6 addresses of the servers to an outside IPv4 address and dynamic NAT for the rest of the inside IPv6 addresses

---

40 A router in a Frame Relay network needs to forward a message received from a host. What two methods does the router use to identify the correct VC to forward the message? (Choose two.)

☐ The router forwards the frame to all ports in the network and learns the address from the reply frame.

☐ The destination host IP address is embedded in the DLCI.

☐ The router searches Inverse ARP tables for maps of DLCIs to IP addresses.

☐ A table of static mappings can be searched.

☐ The router broadcasts a request for the required IP address.

41

Refer to the exhibit. You are a network administrator who has been tasked with completing the Frame Relay topology that interconnects two remote sites. How should the point-to-point subinterfaces be configured on HQ to complete the topology?

- HQ(config-subif)#**frame-relay interface-dlci 103** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay interface-dlci 203** on Serial 0/0/0.2
- HQ(config-subif)#**frame-relay interface-dlci 301** on Serial 0/0/0.1
  HQ(config-subif)# **frame-relay interface-dlci 302** on Serial 0/0/0.2
- HQ(config-subif)#**frame-relay map ip 172.16.1.1 103 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 203 broadcast** on Serial 0/0/0.2
- HQ(config-subif)#**frame-relay map ip 172.16.1.1 301 broadcast** on Serial 0/0/0.1
  HQ(config-subif)#**frame-relay map ip 172.16.2.2 302 broadcast** on Serial 0/0/0.2

42

```
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          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
```
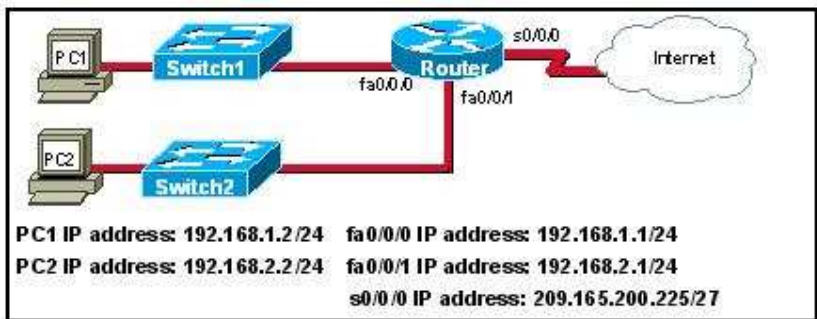
Refer to the exhibit. Which two conclusions can be drawn from the output shown? (Choose two.)

☐   This network is experiencing congestion.

☐   The Frame Relay connection is in the process of negotiation.

☐   Data is not flowing in this network.

☐   The network is discarding eligible packets.

☐   The DLCI is globally significant.

43

PC1 IP address: 192.168.1.2/24   fa0/0/0 IP address: 192.168.1.1/24
PC2 IP address: 192.168.2.2/24   fa0/0/1 IP address: 192.168.2.1/24
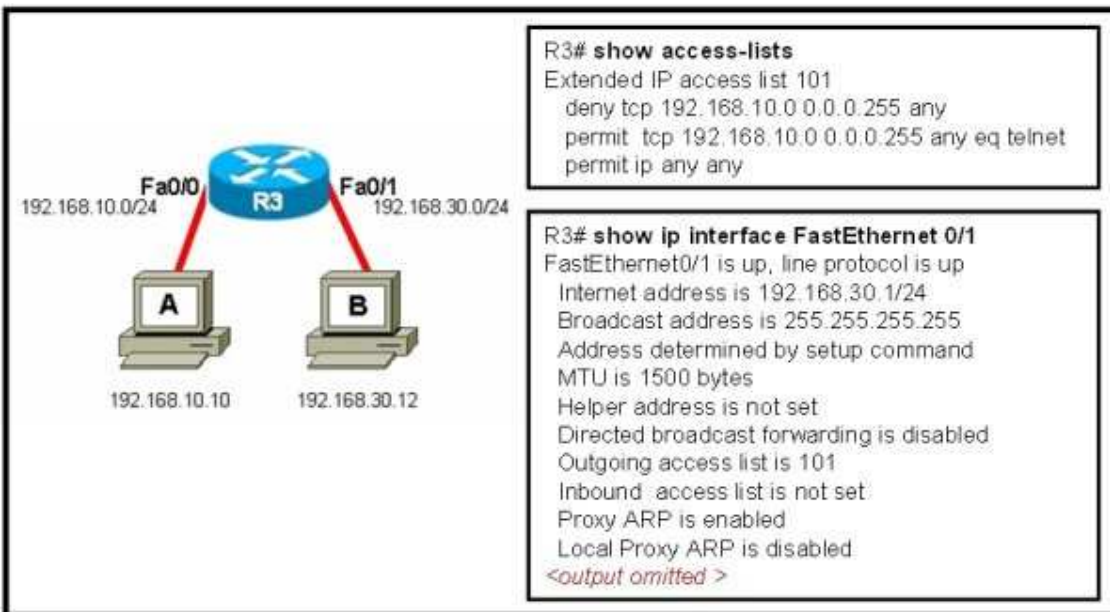   s0/0/0 IP address: 209.165.200.225/27

Refer to the exhibit. The network administrator creates a standard access control list to prohibit traffic from the 192.168.1.0/24 network from reaching the 192.168.2.0/24 network while still permitting Internet access for all networks. On which router interface and in which direction should it be applied?

☐   interface fa0/0/0, inbound

☐   interface fa0/0/0, outbound

☐   interface fa0/0/1, inbound

☐   interface fa0/0/1, outbound

44

R3# **show access-lists**
Extended IP access list 101
    deny tcp 192.168.10.0 0.0.0.255 any
    permit tcp 192.168.10.0 0.0.0.255 any eq telnet
    permit ip any any

R3# **show ip interface FastEthernet 0/1**
FastEthernet0/1 is up, line protocol is up
    Internet address is 192.168.30.1/24
    Broadcast address is 255.255.255.255
    Address determined by setup command
    MTU is 1500 bytes
    Helper address is not set
    Directed broadcast forwarding is disabled
    Outgoing access list is 101
    Inbound access list is not set
    Proxy ARP is enabled
    Local Proxy ARP is disabled

Refer to the exhibit. Partial results of the **show access-lists** and **show ip interface FastEthernet 0/1** commands for router R3 are shown. There are no other ACLs in effect. Host A is unable to telnet to host B. Which action will correct the problem but still restrict other traffic between the two networks?

☐ Apply the ACL in the inbound direction.

☐ Apply the ACL on the FastEthernet 0/0 interface.

☐ Reverse the order of the TCP protocol statements in the ACL.

☐ Modify the second entry in the list to **permit tcp host 192.168.10.10 any eq telnet** .

45 What functionality do access control lists provide when implementing dynamic NAT on a Cisco router?

☐ defines which addresses can be translated

☐ defines which addresses are assigned to a NAT pool

☐ defines which addresses are allowed out of the router

☐ defines which addresses can be accessed from the inside network

46 Which two statements are true about IPv6? (Choose two.)

☐ Security options are build into IPv6.

☐ IPv6 addresses require less router overhead to process.

☐ IPv6 can only be configured on an interface that does not have IPv4 on it.

☐ There is no way to translate between IPv4 addresses and IPv6 addresses.

☐ When enabled on a router, IPv6 can automatically configure link-local IPv6 addresses on all interfaces.

47 At what physical location does the responsibilty for a WAN connection change from the user to the service provider?

- ▢ demilitarized zone (DMZ)
- ▢ demarcation point
- ▢ local loop
- ▢ cloud

48

```
<output omitted>
!
username sdm privilege 15 password 0 sdm
!
ip http server
ip http authentication local
ip http secure-server
ip http timeout-policy idle 600 life 86400 requests 10000
!
<output omitted>
!
line con 0
line aux 0
line vty 0 4
 privilege level 15
 login local
 transport input none
```

Refer to the exhibit. A network administrator is trying to configure a router to use SDM but it is not functioning correctly. What could be the problem?

- ▢ The username and password are not configured correctly.
- ▢ The authentication method is not configured correctly.
- ▢ The HTTP timeout policy is not configured correctly.
- ▢ The vtys are not configured correctly.

49 An administrator is unable to receive e-mail. While troubleshooting the problem, the administrator is able to ping the local mail server IP address successfully from a remote network and can successfully resolve the mail server name to an IP address via the use of the **nslookup** command. At what OSI layer is the problem most likely to be found?

- ▢ physical layer
- ▢ data link layer
- ▢ network layer
- ▢ application layer

50 A network administrator added two switches and a new VLAN over the past weekend. How can the administrator determine if the additions and changes improved performance and availability on the company intranet?

- ▢ Perform a baseline test and compare the current values to values that were obtained in previous weeks.
- ▢ Interview departmental secretaries and determine if they think load time for web pages is improved.
- ▢ Compare the hit counts on the company web server for the current week to the values that were recorded from previous weeks.
- ▢ Performance on the intranet can be determined by monitoring load times of company web pages from
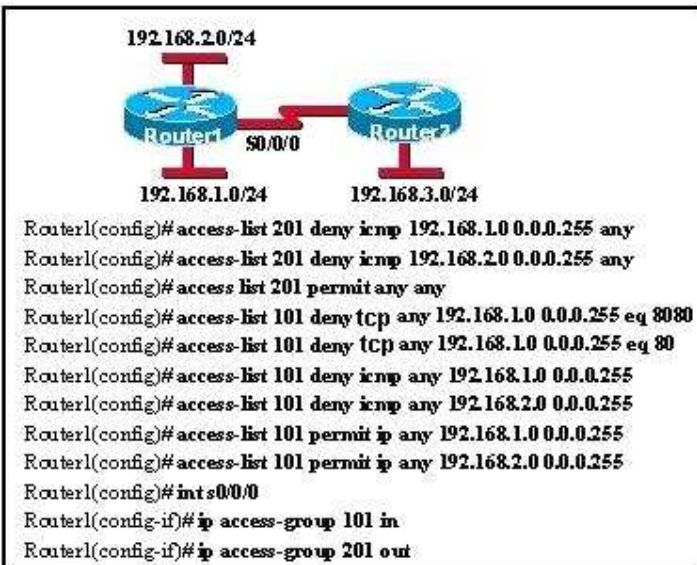
remote sites.

51 A network administrator is working with an applications team to fix a problem that a server based application is having with response time. The administrator has examined the network portions of the data path and identified several possible problem areas. The applications team has simultaneously identified potential issues with the current release of software. The network administrator begins addressing the network issues while the applications team implements software patches.

Which statement applies to this situation?
- ☐ Changes to the network will reveal problems that are caused by the new patches.
- ☐ Scheduling will be more difficult if the network and software teams work independently.
- ☐ It will be difficult to isolate the problem if two teams are implementing changes independently.
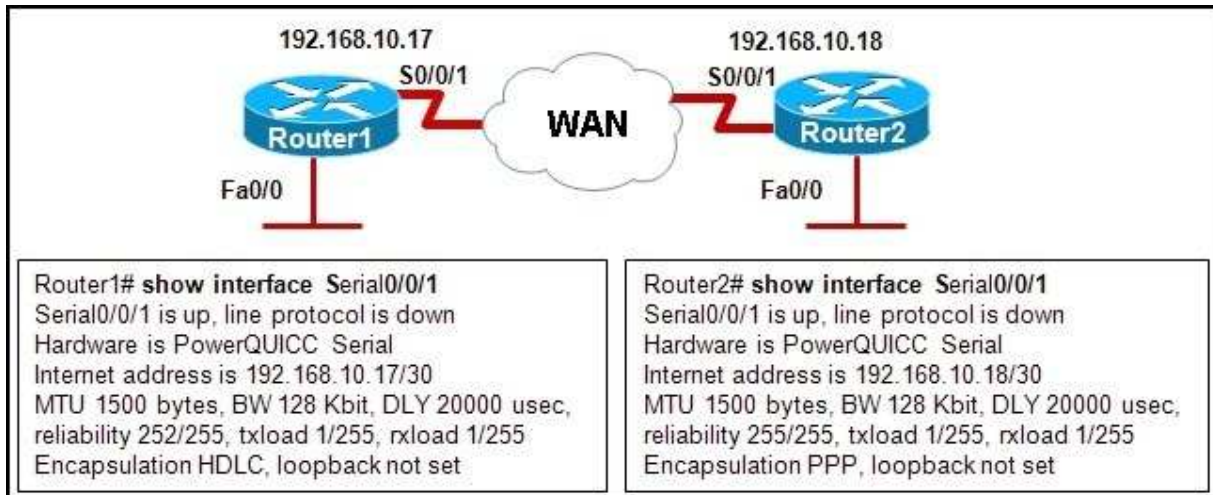- ☐ Results from changes will be easier to reconcile and document if each team works in isolation.

52

Refer to the exhibit. Which statement correctly describes how Router1 processes an FTP request entering interface s0/0/0, destined for an FTP server at IP address 192.168.1.5?
- ☐ It matches the incoming packet to the **access-list 201 permit any any** statement and allows the packet into the router.
- ☐ It reaches the end of ACL 101 without matching a condition and drops the packet because there is no **access-list 101 permit any any** statement.
- ☐ It matches the incoming packet to the **access-list 101 permit ip any 192.168.1.0 0.0.0.255** statement, ignores the remaining statements in ACL 101, and allows the packet into the router.
- ☐ It matches the incoming packet to the access-list 201 deny icmp 192.168.1.0 0.0.0.255 any statement, continues comparing the packet to the remaining statements in ACL 201 to ensure that no subsequent statements allow FTP, and then drops the packet.

53

Router1# **show interface** Serial0/0/1
Serial0/0/1 is up, line protocol is down
Hardware is PowerQUICC Serial
Internet address is 192.168.10.17/30
MTU 1500 bytes, BW 128 Kbit, DLY 20000 usec,
reliability 252/255, txload 1/255, rxload 1/255
Encapsulation HDLC, loopback not set

Router2# **show interface** Serial0/0/1
Serial0/0/1 is up, line protocol is down
Hardware is PowerQUICC Serial
Internet address is 192.168.10.18/30
MTU 1500 bytes, BW 128 Kbit, DLY 20000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation PPP, loopback not set

Refer to the exhibit. From the output of the **show interface** commands, at which OSI layer is a fault indicated?

- application
- transport
- network
- data link
- physical