

Campus Network Design, Security and Management Survey

All answers are confidential. Please do not include your name on this survey

This survey attempts to let us know the overall level of technical understanding of the class. This helps us to determine at what level we should be teaching.

1. How often do you personally use Linux or Unix at the command line?

Daily
Weekly
Monthly
Never

2. If someone tells you that you've been given a "/23" how many usable IP addresses does this represent?
3. What is "jitter"?
4. What is the first command you type in IOS on a Cisco router to be able to configure the router?
5. What command do you use to see the route a network packet takes to get to another machine on the network?
6. What is a feature of UDP that makes it a useful protocol for certain types of services?
 - a. It establishes a reliable connection between two networked devices.
 - b. UDP guarantees that data arrives in the correct order.
 - c. UDP is a connectionless protocol.
7. Is this a public or private IP address: 128.223.32.35
8. On a 10Mbps connection from point A to B that:
 - a. Travels via satellite for a total distance of 30,000KM, or
 - b. travels via fibre optic cable for a total distance of 100KM

What is the difference in transmission delay between these two possible routes?

- a. The transmission delay of a is greater than b
- b. The transmission delay of b is greater than a
- c. The transmission delay of a is the same as b

9. What's faster a 1Mbps or a 1MBps connection?

10. If you see lots of packets, but not very much data arriving and your router's CPU is at 100% utilization what might be happening?

11. PC A has an address of 192.168.4.7/24
PC B has an address of 192.168.4.90/24
PC C has an address of 192.168.5.9/24

To send IP packets from PC A to PC B do you need to go through a router? [Yes] [No]
- Explain your answer:

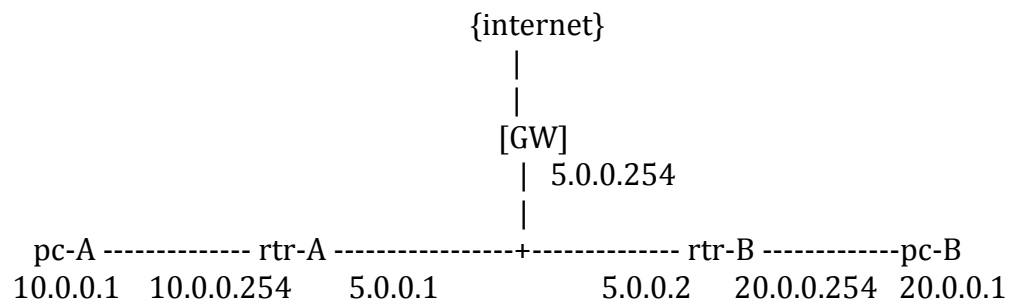
To send IP packets from PC A to PC C do you need to go through a router? [Yes] [No]
- Explain your answer:

12. PC A has an address of 192.168.4.1/29
PC B has an address of 192.168.4.6/29
PC C has an address of 192.168.4.10/29

To send IP packets from PC A to PC B do you need to go through a router? [Yes] [No]
- Explain your answer:

To send IP packets from PC A to PC C do you need to go through a router? [Yes] [No]
- Explain your answer:

13. You have the following network topology:



For pc-A to be able to ping pc-B, what is needed ? (circle all the answers you think are correct)

- a. pc-A needs to set rtr-A (10.0.0.254) as its default gateway
- b. pc-B needs to set rtr-B (20.0.0.254) as its default gateway
- c. pc-A needs to set 5.0.0.2 as its default gateway
- d. pc-B needs to set 5.0.0.1 as its default gateway
- c. rtr-A needs to set a static route to rtr-B (5.0.0.2) to reach network 20.0.0.0
- d. rtr-B needs to set a static route to rtr-A (5.0.0.1) to reach network 10.0.0.0
- e. rtr-A needs to set rtr-B as its default gateway
- f. rtr-B needs to set rtr-A as its default gateway
- g. rtr-A and rtr-B need to set GW as their default gateway