

Chapter 2

Network Infrastructure and Documentation

Review Questions

1. A technician from your ISP has arrived to help you troubleshoot a weak WAN connection. To what location do you take her?
 - a. DF
 - b. Work area
 - c. CEO's office
 - d. Entrance facility

Answer: d. Entrance facility

2. A transceiver was recently damaged by a lightning strike during a storm. How might you decide whether the ISP is responsible for replacing this device, or whether your company must foot the bill?
 - a. Look at whether the device is located on the ISP's side of the demarc.
 - b. Look at the manufacturer information on the device's label.
 - c. Look at purchase records for the device to determine when it was acquired.
 - d. Look at what kinds of cables are connected to this device.

Answer: a. Look at whether the device is located on the ISP's side of the demarc.

3. Which of the following devices are you likely to find in the MDF? Choose all that apply.

- a. Routers
- b. Switches
- c. Network printer
- d. KVM switch

Answer: a. Routers, b. Switches, and d. KVM switch

4. Which device converts signals from a campus's analog phone equipment into IP data that can travel over the Internet?

- a. VoIP PBX
- b. VoIP endpoint
- c. VoIP gateway
- d. VoIP switch

Answer: c. VoIP gateway

5. If you're shopping for a rack switch, what component on the switch tells you it can be mounted to a rack?

- a. AC adapter
- b. Rack ears
- c. Padded feet

- d. Large fans

Answer: b. Rack ears

6. You need to connect a new network printer to a nearby wall jack. What kind of cable should you use?

- a. Fiber-optic cable
- b. Patch cable
- c. Backbone cable
- d. Plenum-rated cable

Answer: b. Patch cable

7. You've decided to run an Nmap scan on your network. What app could you open to perform this task? Choose all that apply.

- a. Zenmap
- b. Microsoft Edge
- c. Command Prompt
- d. PowerShell

Answer: a. Zenmap, c. Command Prompt, and d. PowerShell

8. What type of diagram shows a graphical representation of a network's wired infrastructure?

- a. Rack diagram
- b. Wiring schematic

- c. Network map
- d. Network topology

Answer: b. Wiring schematic

9. Which of these is considered a secure place to store a list of documented network passwords?
- a. The CEO's smartphone
 - b. A sticky note under the keyboard
 - c. A password manager
 - d. The MDF

Answer: c. A password manager

10. What is the first step of inventory management?
- a. Interview users.
 - b. Back up network data.
 - c. List an administrative account's username and password for each device on a network.
 - d. List all components on the network.

Answer: d. List all components on the network.

11. There is only one _____ per network, but there can be many _____ connecting internal portions of the network.

Answer: MDF, IDFs

12. Why is it important to use a structured cabling standard when installing and managing cabling systems?

Answer: The standard suggests how networking media can best be installed to maximize performance and minimize upkeep.

13. Why is it important to use plenum-rated cabling in the area above the ceiling tile?

Answer: A plenum-rated cable is coated with a flame-resistant jacket that produces less smoke than regular cable coated with PVC (polyvinyl chloride). In the event of a fire, smoke produced by plenum cabling is less toxic than that produced by PVC cabling.

14. What is the unit of measurement that defines the space available in a rack? How tall are standard racks?

Answer: Rack unit; the industry standard height is 42U (about 6 feet)

15. Why is it important to minimize cable clutter in a rack?

Answer: To help prevent airflow blockages and heat buildup

16. What are some elements that are typically included in network diagrams?

Answer: Answers may include: physical layout, logical topology, IP address reserves, names of major network devices, and types of transmission media

17. How can you go about gathering the information needed to assemble a thorough operations manual?

Answer: Answers may include: visits to data rooms, an examination of servers and desktops, a review of receipts for software and hardware purchases, and the use of a protocol analyzer or network management software package

18. List some good names for devices on your home network or on the network in your school's lab. Demonstrate the use of best practices when creating a naming scheme for devices on a computer network.

Answer: Answers may vary.

19. For what time period should you schedule a network change?

Answer: During off-hours (unless it's an emergency)

20. In a large organization, how do you typically request permission to perform a network change?

Answer: Submit a change request document.