

Documentation Development

Objective

Using a systematic approach, troubleshoot issues in a small- to medium-sized business network.

Scenario

As the network administrator for a small business, you want to implement a documentation system to use with troubleshooting network-based problems.

After much thought, you decide to compile simple network documentation information into a file to be used when network problems arise. You also know that if the company gets larger in the future, this file can be used to export the information to a computerized, network software system.

To start the network documentation process, you include:

- A physical diagram of your small business network.
- A logical diagram of your small business network.
- Network configuration information for major devices, including routers and switches.

Resources

- Packet Tracer software
- Word processing software

Step 1: Create a Packet Tracer file to simulate a very small business network. Include these devices:

- One router with at least two Ethernet ports
- Two switches connected to the router (LAN1 and LAN2)
- Five user devices to include PCs, laptops, servers, and printers connected either of the two LANs.

Step 2: Create a word-processing file in matrix format to record each of the following main network-documentation areas:

- a. Physical topology and information
 - 1) Type of device and model name
 - 2) Network hostname
 - 3) Location of the device
 - 4) Cable connections types and ports
- b. Logical topology information
 - 1) IOS or OS image versions
 - 2) IP addresses (IPv4, IPv6, or both)
 - 3) Data-link addresses (MAC)
 - 4) VLAN addresses
- c. Network device configuration information
 - 1) Location of backup file (TFTP server, USB, text file)

- 2) Text-formatted, configuration script per router and switch devices

Step 3: Share your Packet Tracer file and network documentation with a classmate, another group, the class, or your Instructor according to the instructions provided. Discuss how this information could be useful to any network administrator.