



LAB 2: Networking Lab

Objective:

Students working in teams of 2-3 will use the cables they made in the “Cable Making Lab” along with networking equipment and will configure, construct and test a small LAN.

Resources Required:

- Cables (straight-through) made from previous lab
- Switch or Hub
- 2 or more PC's

Step 1: Using the straight-through cables made from the previous lab, connect each PC to the switch or hub (connect the NIC to an empty port on the switch or hub)

Step 2: In each PC, configure a unique IP address and appropriate subnet mask. (Go to Control Panel>Network Connections>View Network Connections>Find the correct NIC connection, right click and go to Properties>Find the TCP/IP configuration, and go to Properties>Enter an IP address, and subnet mask)

Step 3: In each PC, configure a “workgroup” (or domain) name (must be the same for all PC's in the network), and a unique computer name. (Go to My Computer>Right click, go to Properties>Go to Computer Name>Change the computer name and workgroup name)

Step 4: After completing all of the above, check for connectivity by using the “ping” CLI command. (Go to Run>Type in CMD>When the command prompt comes up, type in *ping [ip address]* where the IP address is of the other PC in the network. A successful ping should result in 4 echos sent, 4 received 100% successful.