

## Network + Labs

**Note: Many of these labs will be repeated, sometimes with minor changes.**

### Router Labs

#### Basic Setup of LinkSys Router

1. Configure the router so that it allows connections both by hard wire and (if available) wireless
2. Configure firewall, wireless security, and admin passwords

For help

[http://www.ehow.com/how\\_2091718\\_set-up-linksys-wireless-router.html?ref=fuel&utm\\_source=yahoo&utm\\_medium=ssp&utm\\_campaign=yssp\\_art](http://www.ehow.com/how_2091718_set-up-linksys-wireless-router.html?ref=fuel&utm_source=yahoo&utm_medium=ssp&utm_campaign=yssp_art)

Note: This lab will be repeated so that each student gets a chance to do it.

#### Cascading a Linksys Router

1. Make sure that both have different IP addresses
2. There are 2 ways to connect the routers
  - a. Connect one of the Ethernet ports (LAN ports) of the second Linksys Router to one of the Ethernet ports (LAN ports) of the main Linksys router. By connecting the second router's Ethernet port to the main router's Ethernet port, the computers connected to both routers will be on the same LAN IP segment.
  - b. Connect the Internet port (WAN port) of the second Linksys Router to one of the Ethernet ports (LAN ports) of the main Linksys router.

For help:

[http://www.extremepcmakeovers.com/tips/how-tos/cascade\\_linksys/](http://www.extremepcmakeovers.com/tips/how-tos/cascade_linksys/)

[http://www.northshore-it.com/tips/how-tos/cascade\\_linksys/](http://www.northshore-it.com/tips/how-tos/cascade_linksys/)

### Windows Client Labs

**Lab 1:** Connect a Windows XP machine to a network, share a folder and exchange data with shared folders.

**Lab 2:** Utilize each of the following command line utilities: ping, tracert, ipconfig, nslookup, netstat. Use their various parameters.

**Lab 3:** Setup Windows XP or Vista security (firewall and updates)

**Lab 4:** Setup and manage user accounts on XP or Vista

## Windows Server Labs

### General Server Labs

**Lab 1:** Install Windows Server 2003 or 2008. Configure one server as a domain controller, the others as not domain controllers.

**Lab 2:** Setup domain security policies including account lockout, password policies, etc. Test your settings.

**Lab 3:** Setup domain accounts and groups, test your settings.

### FTP Server

1. setup your FTP as per these instructions <http://support.microsoft.com/kb/323384>
2. use Windows Explorer on a client to upload a file to the ftp server.

additional help can be found at

[http://www.windowsnetworking.com/articles\\_tutorials/Creating-Configuring-FTP.html](http://www.windowsnetworking.com/articles_tutorials/Creating-Configuring-FTP.html)

### Web Server

1. Setup a Web Server as per these instructions [http://www.ehow.com/how\\_4488401\\_set-up-public-web-server.html?ref=fuel&utm\\_source=yahoo&utm\\_medium=ssp&utm\\_campaign=yssp\\_art](http://www.ehow.com/how_4488401_set-up-public-web-server.html?ref=fuel&utm_source=yahoo&utm_medium=ssp&utm_campaign=yssp_art)
2. You can, alternatively, use these instructions <http://support.microsoft.com/kb/324742>
3. Use Internet Explorer on a client to pull up that default web site.

### General Tutorials

1. This site has several step by step guides to various Windows Server 2003 configuration issues <http://www.visualwin.com/>
2. This site has many tutorials as well [http://www.windowsnetworking.com/articles\\_tutorials/Windows\\_2003/](http://www.windowsnetworking.com/articles_tutorials/Windows_2003/)

## Network Utility Labs

1. Wireshark: download and experiment with Wireshark <http://www.wireshark.org/>
2. Whois: use the Whois utility at <http://www.networksolutions.com/whois/index.jsp> to trace down a few IP address and/or domains.
3. PS Suite (found at <http://technet.microsoft.com/en-us/sysinternals/bb896649.aspx> ). Try one (or more) of these utilities to see what information they provide.

## Other Resources

1. Windows 2003 Tutorial Videos <http://www.learnwindows2003.com/>
2. Windows 2003 Security and Articles [http://www.windowsecurity.com/articles\\_tutorials/windows\\_2003\\_security/](http://www.windowsecurity.com/articles_tutorials/windows_2003_security/)

