

Configuring for Ethernet: *Windows 98 and ME*

Check to ensure that your computer and network adaptors are supported on the Columbia network. A description of computer systems and adaptors supported at Columbia can be found here:

<http://www.columbia.edu/acis/support/supported.html>

Setting Up a Wired Ethernet Connection

Step 1. Connect Your Computer to the Network

Plug one end of the network cable into the network card or port in your computer and the other into the Ethernet jack on the wall.

If your Ethernet jack has an orange port, plug your cable directly into that port. If you live in a single room and have two orange ports, try the one on the right side first, as this is usually the single activated port.

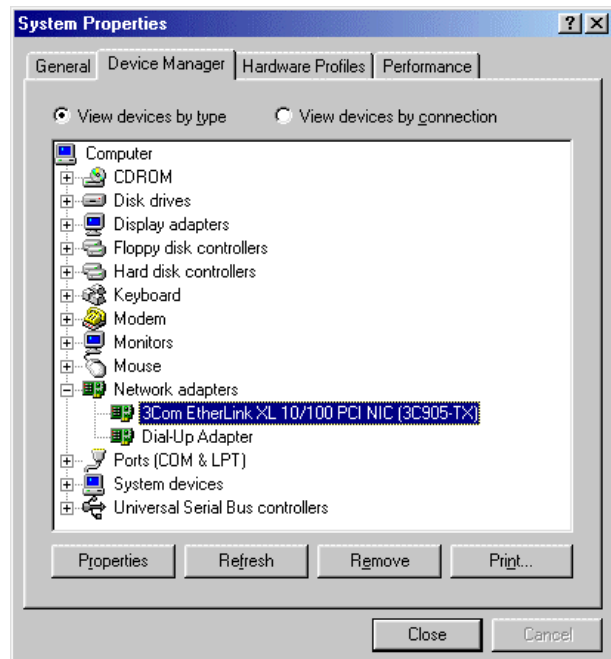
If your jack does not have an orange port, you may have an old-style jack that uses a LanCan. In this case, plug your Ethernet cable into the center port of the LanCan, and then plug the LanCan into the Data port of the jack. If you do not have a LanCan, you should call the Computing Helpdesk at 854-1919.

Step 1. Install Your Ethernet Card

Install your Ethernet card according to the manufacturer's directions. To confirm that your Ethernet card is properly installed, right-click the **My Computer** icon and select **Properties**. Select the **Device Manager** tab. Click on the plus sign next to **Network Adapters**.

If your Ethernet card is installed correctly, you will see an entry for your Ethernet card.

If you do not see an entry for an Ethernet card, you will need to close the **System Properties** window, Click **Start**, point to **Settings**, and then click **Control Panel**. Then click **view all Control Panel Options** and use the **Add New Hardware** icon to install your Ethernet card.



Step 3. Test Your Connection

Test your connection by running a network software program such as Netscape.

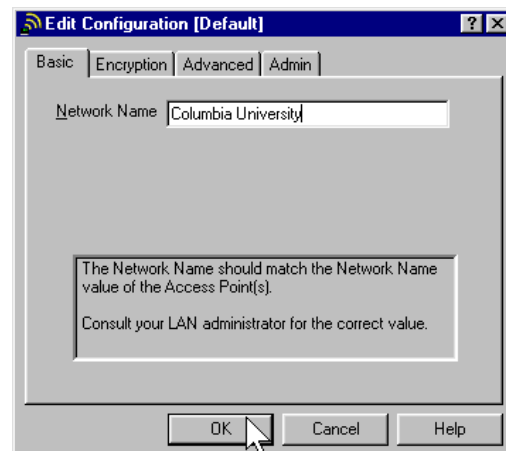
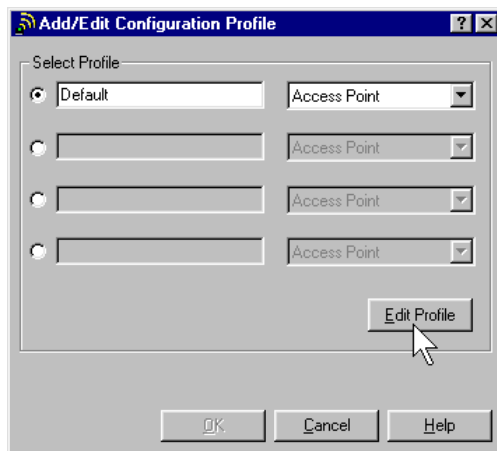
Troubleshooting Wired Ethernet Connections

If you have trouble getting a wireless network connection, you should check the following:

- **Reboot your computer.** Rebooting is always a good and easy first step in problem resolution.
- **Network Control Panel settings.** (1) Double-check that you have configured the Network Control Panel correctly, as described in Appendix A. (2) Check to make sure you are configured to obtain an IP address automatically (equivalent to using the DHCP protocol). See Appendix A.
- **Release/Renew your DHCP lease.** See Appendix B for instructions on releasing and renewing your lease, particularly if you have changed locations.
- **Driver version.** Many cards have outdated drivers, even out of the box. You should make sure your card has the most recent drivers.
- **Check your cable.** Be sure you have properly connected your Ethernet cable to the correct jack.

Setting up a Wireless Connection

Step 1. Install Your Wireless Ethernet Card



1. Install your card and software according to the manufacturer's directions. When you see the **Add/Edit Configuration Profile** screen during installation click **Edit Profile**.
2. Enter **Columbia University** in the **Network Name** text box. Click **OK**, and then click **OK** again.

Step 3. Using Your Wireless Connection

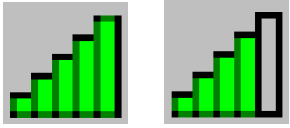
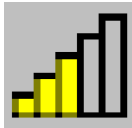
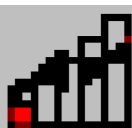
Go to a location on campus where wireless networking is available. A list is at:

<http://www.columbia.edu/acis/access/wireless/coveragemap.html>

Start up your computer and make sure you are connected. You can do this by checking the connection icon on the task bar, shown here.



The bars on the connection icon indicate the strength (and speed) of your wireless connection. The following table shows how the connection icon looks in relation to your connection and explains what each variation of the icon means.

Icon	Description	Icon Bar Color
	If you see <i>green bars</i> , you are connected and have good performance.	Green
	If you see <i>yellow bars</i> , you are connected, but may have slower performance. If you want better performance, you can move to another location.	Yellow
	If you see <i>one red bar</i> , you have no connection at all and will need to move to another location to connect.	Red

Run a network software program such as Netscape Navigator. You should be able to connect to the Internet and browse the Web just as you would with a wired connection.

Troubleshooting Wireless connections

If you have trouble getting a wireless network connection, you should check the following:

- **Reboot your computer.** Rebooting is always a good and easy first step in problem resolution.
- **Signal strength.** If you see red or clear bars instead of yellow or green bars in the taskbar, you are out of range and do not have a connection. You may then want to move to another location where the signal is stronger.
- **Card installation.** A single green light will appear on your card if the card and its drivers are installed properly in your computer. (A second, yellow, blinking light indicates the flow of data over the network.) If you see no green light, check to make sure you have followed instructions on hardware and software installation.

- **Driver version.** Many cards have outdated drivers, even out of the box. You should make sure your card has the most recent drivers.
- **Network Control Panel settings.** (1) Double-check that you have configured the Network Control Panel correctly, as described in Appendix A. (2) Check to make sure you are configured to obtain an IP address automatically (equivalent to using the DHCP protocol). See Appendix A.
- **Release/Renew your DHCP lease.** See Appendix B for instructions on releasing and renewing your lease, particularly if you have changed locations.
- **Password prompt.** If you are prompted for an ID and/or password when you try to connect to the wireless network, it means that you are connecting to a non-AcIS access point. You should report this to *consultant@columbia.edu* and move to a location served by an AcIS access point to try again.

For More Help

- If you have a laptop computer, bring it along with your modem and all cables and manuals to the Computing Support Center, 102 Philosophy Hall, Monday through Thursday, 10am-5pm and Friday, 12 noon - 5pm. **This carry-in service is available for laptop computers only, and you must remain with the consultant while your problem is diagnosed.**
- For telephone support, call the Columbia Computing Helpdesk at 212-854-1919, Monday through Thursday, 8am-8pm and Friday, 8am-5pm.
- Send electronic mail to *consultant@columbia.edu*
- Students in URH residence halls should contact their RCC (Residential Computing Consultant) or send electronic mail to *rhno@columbia.edu*. The RHNO Home Page is at:

<http://www.columbia.edu/acis/rhno>
- For more information about using the campus network, see

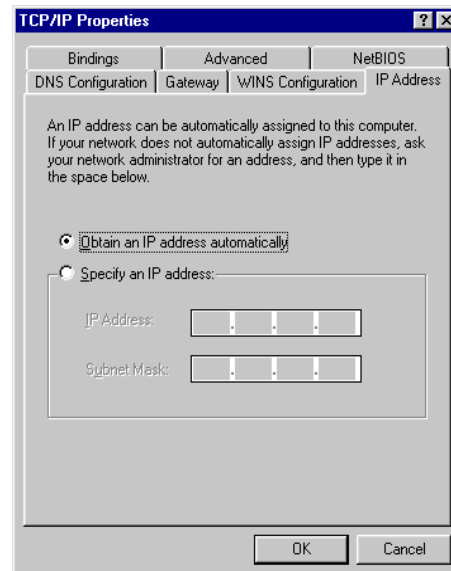
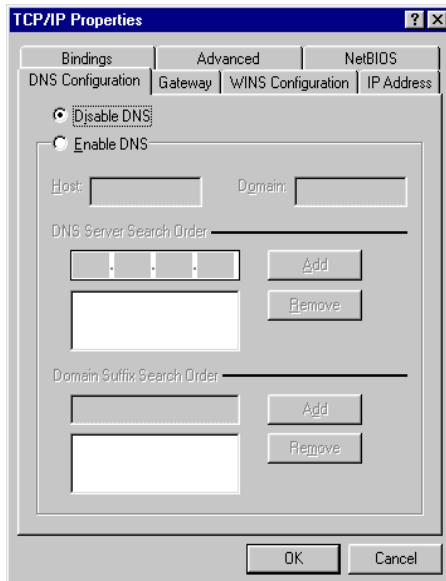
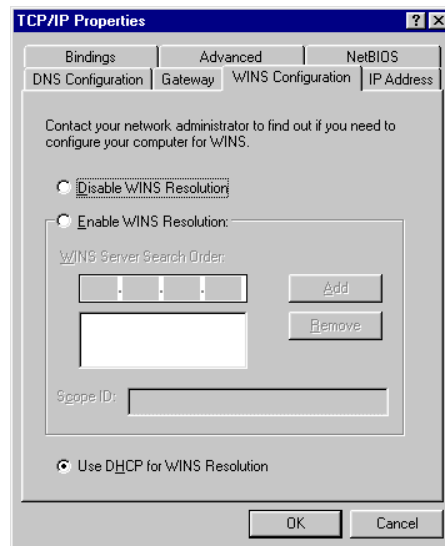
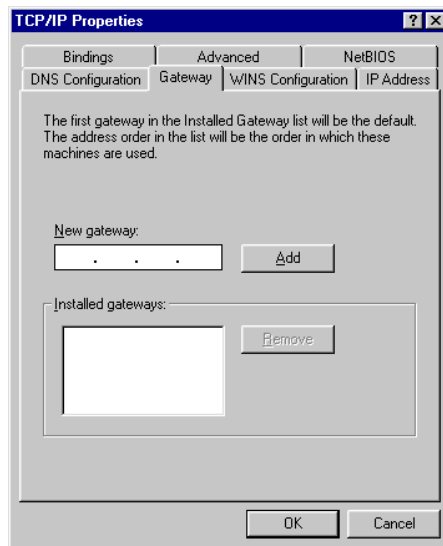
<http://www.columbia.edu/acis/networks>
- For information about printing to AcIS printers from URH undergraduate residence hall rooms and Mobile Networking locations, see:

<http://www.columbia.edu/acis/facilities/printers/>

Appendix A — Default TCP/IP Settings: Configure for DHCP


For both wired and wireless Ethernet connections, TCP/IP settings will be assigned to you by the Columbia network. The default settings that Windows uses (as shown below) are correct for this type of configuration.

To make sure that your computer is configured correctly, go to the **Start -> Settings -> Control Panel**, select **Network**, click the **TCP/IP** protocol and select **Properties**. Check that the following items are correct:



Appendix B - Using WINIPCFG

Use the Windows utility **wiipcfg** to release and renew your DHCP lease and for determining your hardware address

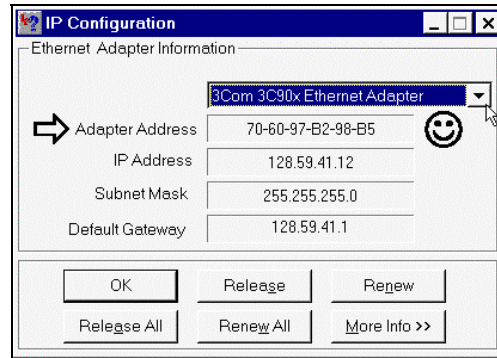
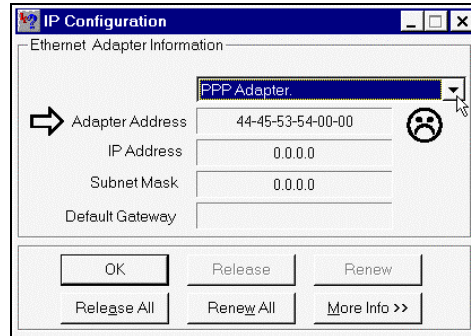
Click , choose **Run**, and type **wiipcfg** into the box. Click **OK**.

If you have a Dial-Up Adapter installed you may see an adapter address that begins with **44**. This is not a valid hardware address. You will need to click on the down arrow and select your Ethernet Adapter.

Your Ethernet hardware address will be displayed in the **Adapter Address** field.

Write down the Adapter Address that appears on your screen and save it for future reference.

If you have need to release or renew your DHCP lease, you can do this by clicking first **Release All** and then **Renew**.



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