

WIRELESS NETWORK CONFIGURATION AND TROUBLESHOOTING

Step 1: Turning on your Wireless Device

The first step of the process is to ensure that your wireless device is turned on. Depending on your computer brand and model, the steps for doing so will vary. Use the method below that works with your computer.

Many laptop computers have a built-in wireless device that can be enabled through a **switch or button located on the exterior of the computer**. When the switch is slid to a certain direction or the button is pressed, an indicator on the exterior of the computer should be lit to let you know that the device is on.

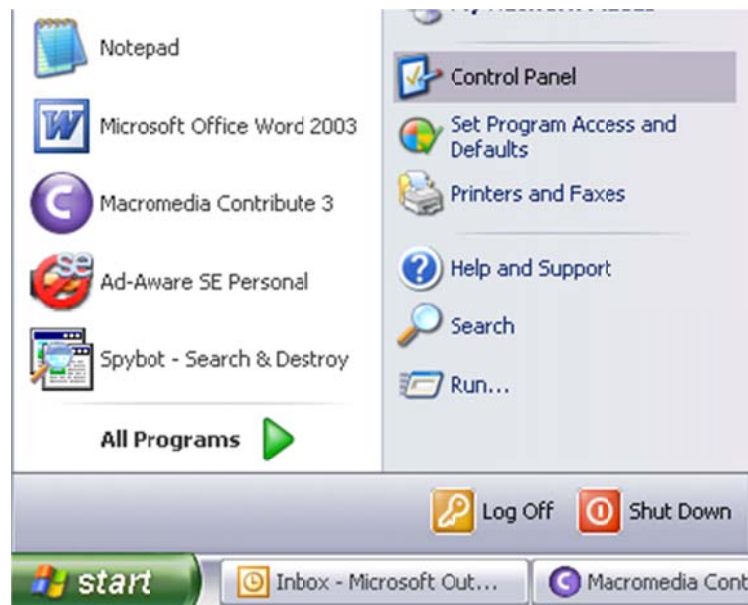
Other laptop computers have a key on the keyboard labeled **Fn**. This key is located in the bottom left corner of the keyboard near the Windows key. On one of the function keys at the top of the keyboard (F1, F2, F3, F4, etc.) There will be a symbol resembling a tower emitting waves. By holding down the **Fn** and pressing the appropriate function key, the device will turn on and the following icon will appear in the task tray on the bottom right corner of your screen either emitting green waves as shown in the picture or marked with a red X.



Desktop computers and some older laptops do not have a built in wireless device. These laptops require a device to be plugged into them. When the device is plugged in, it should **turn on automatically**. The icon above will appear in the task tray on the bottom right corner of your screen either emitting green waves as shown in the picture or marked with a red X.

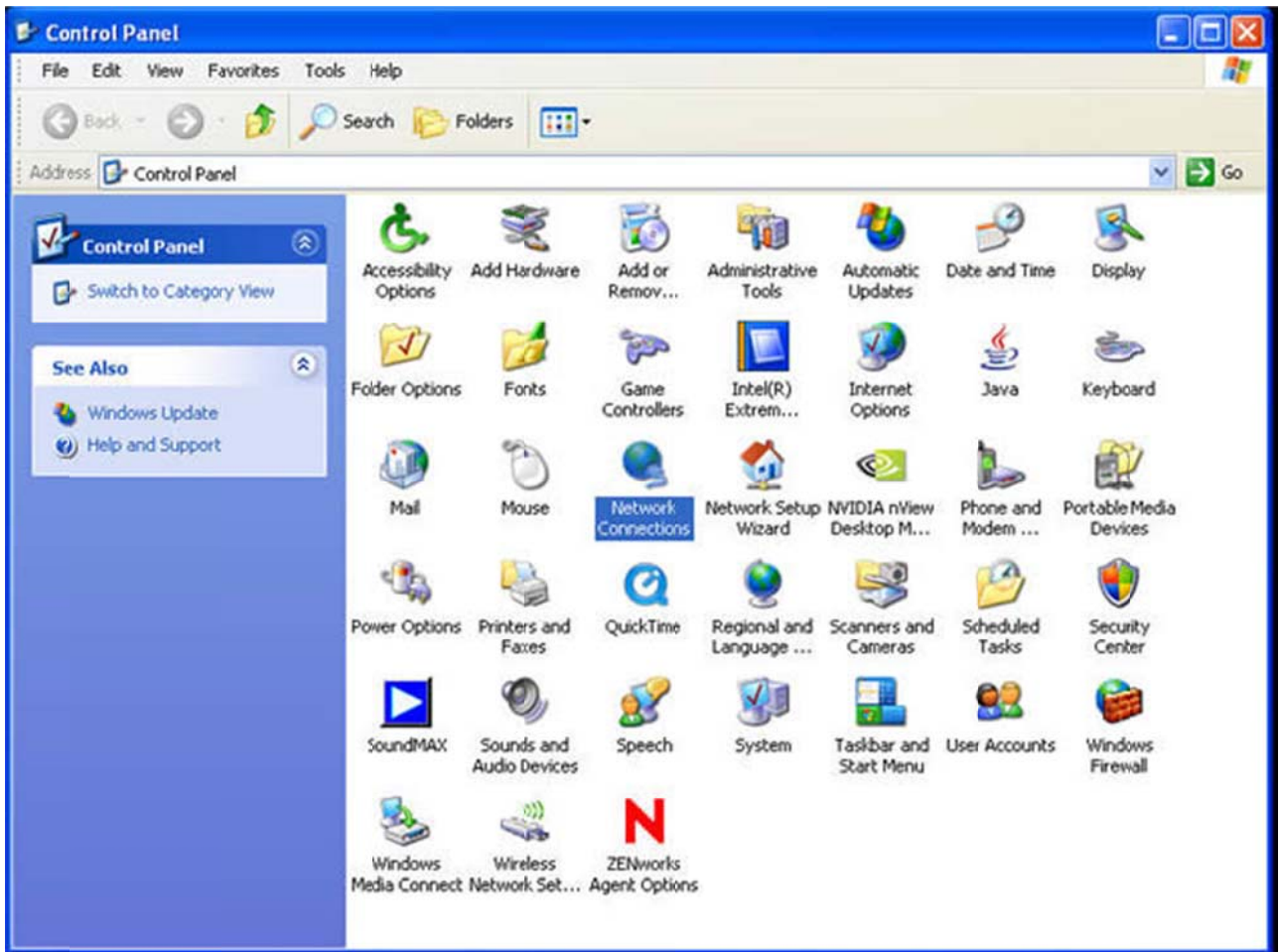
Step 2: Bringing up the Control Panel

Click **Start**. Then click on the **Control Panel**.



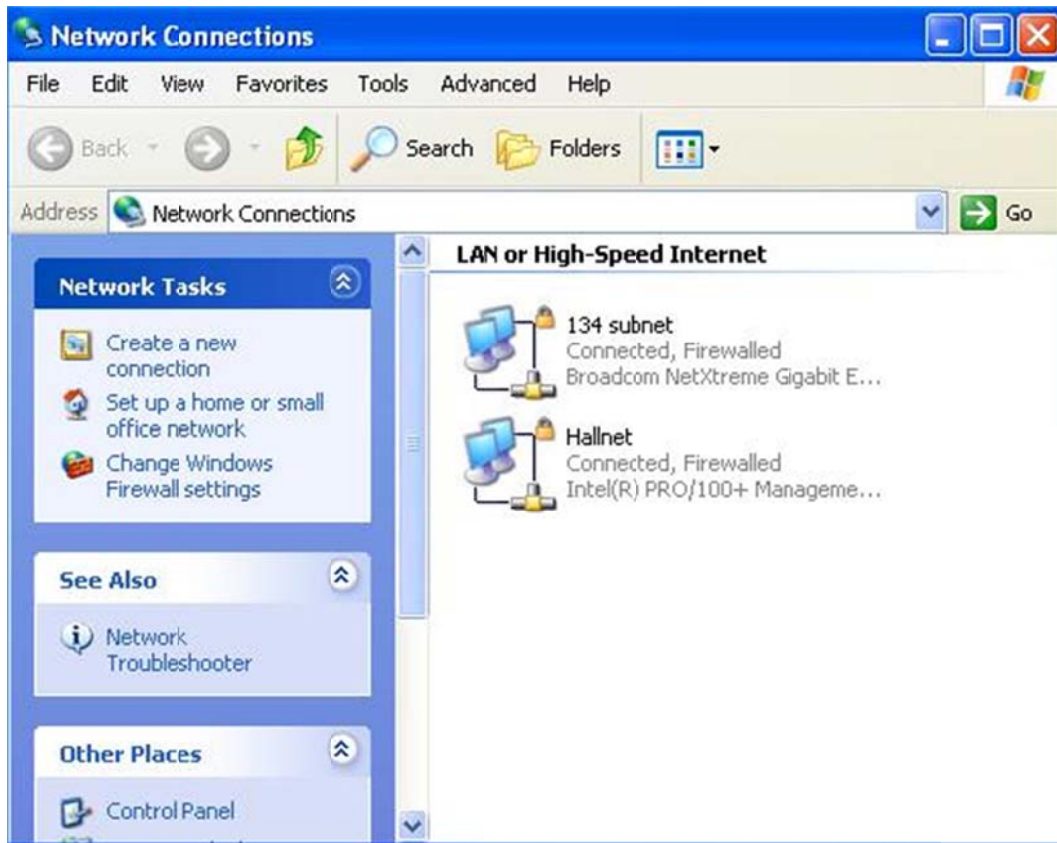
Step 3: Bring up the Network Connections Window

Once the Control Panel is open, double-click on the **Network Connections** icon.



Step 4: Removing Bridged Connections

A list of connections should appear. If you see an entry titled **Bridged Connection**, right-click on it. A pop-up menu will appear. Click **Delete**. Repeat this process for each bridged connection displayed.

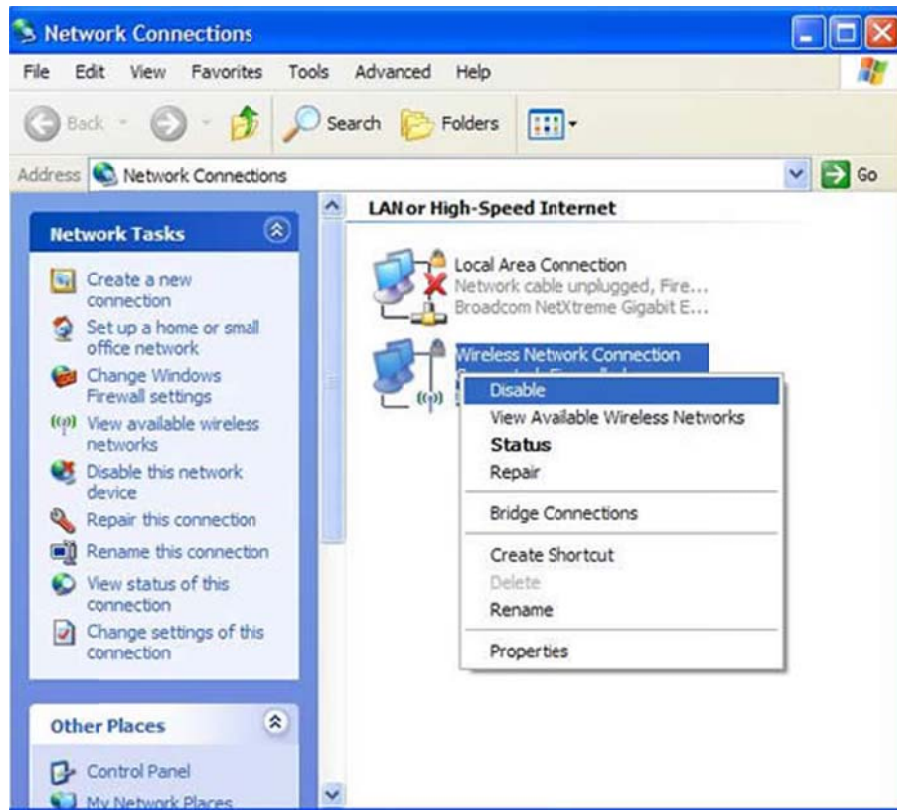


Step 5: Disable and Enable the Network Connection

Right-click the **Wireless Network Connection** icon. A pop-up menu should appear.

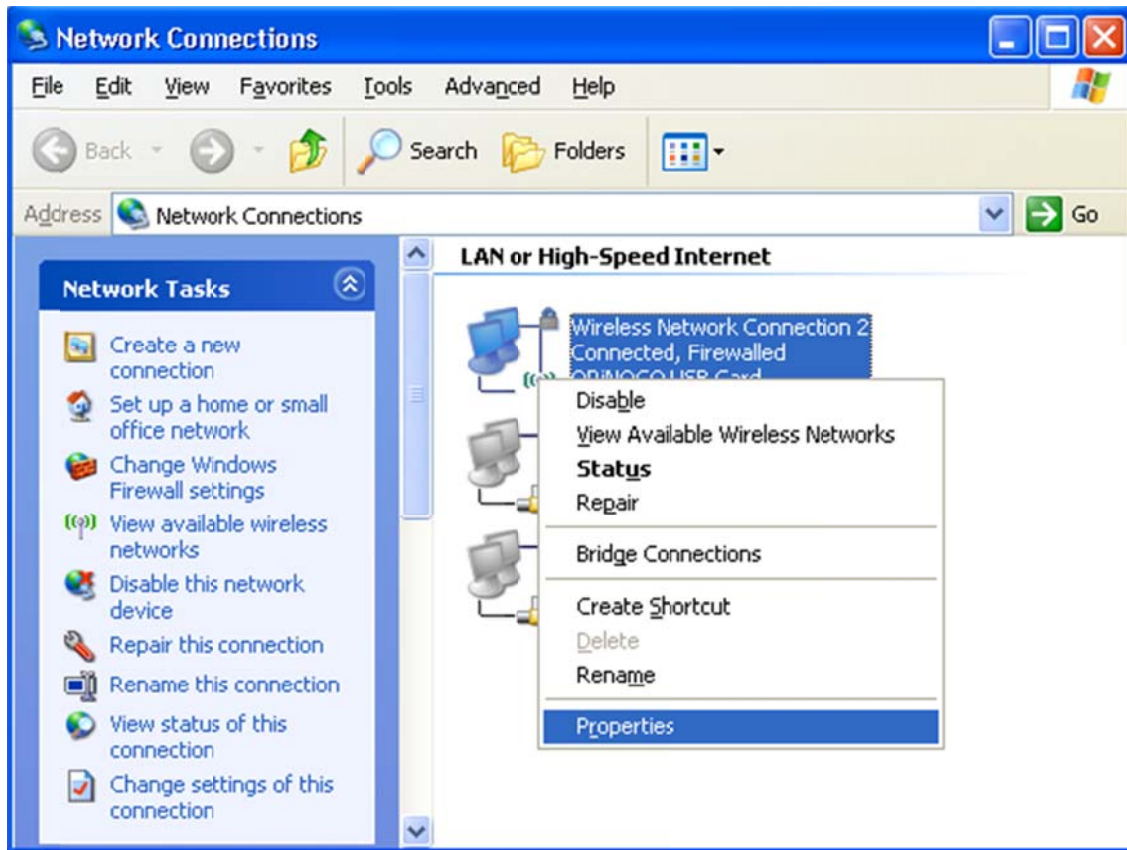
If **Enable** appears in the pop-up menu, click it and proceed to step 6.

Otherwise, if **Disable** appears in the pop-up menu, click it. Right-click the icon again. This time, click **Enable** in the pop-up menu. Finally, proceed to step 6.



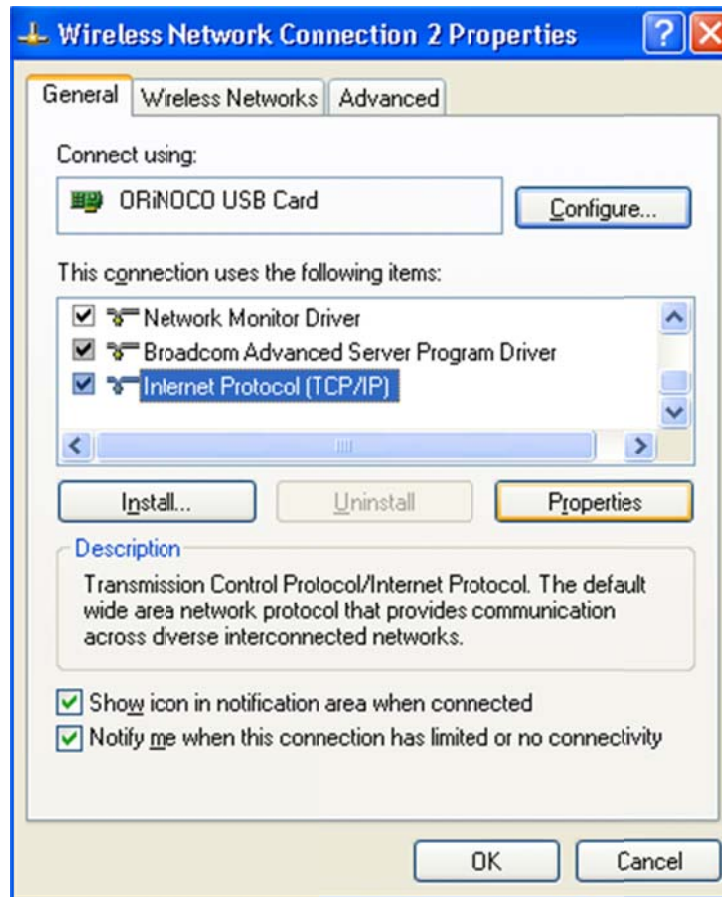
Step 6: Bring up the Wireless Connection Properties Window

Right-click the **Wireless Network Connection** icon. A pop-up menu should appear. Click **Properties** in the pop-up menu.



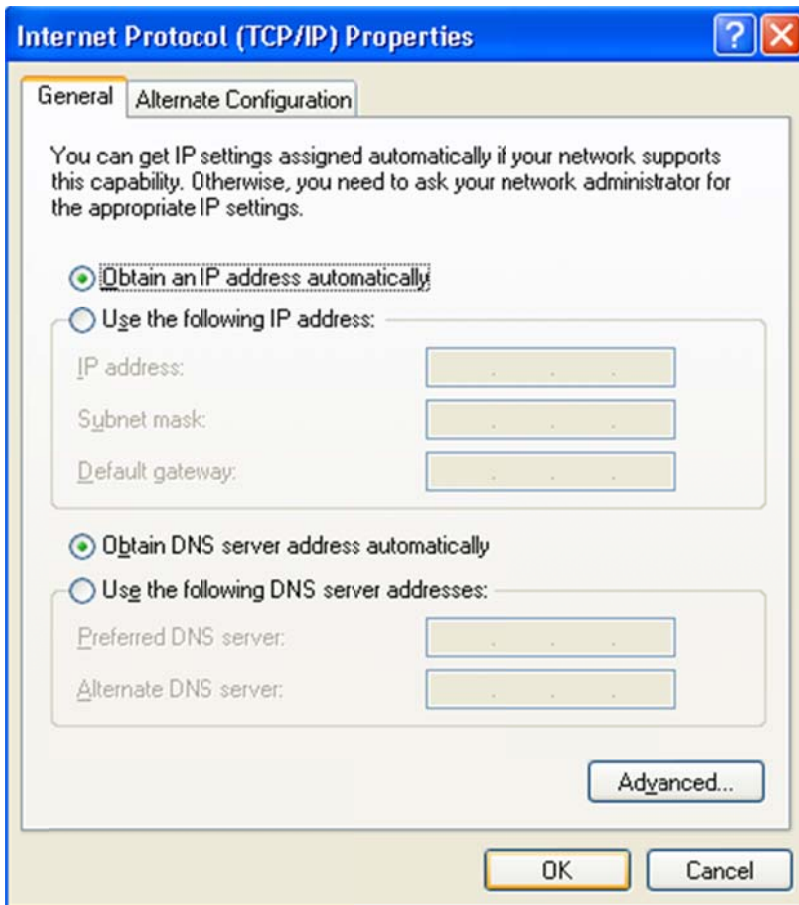
Step 7: Bring up the Internet Protocol Properties Window

A connection properties window will appear. Scroll down in the **This connection uses the following items:** list. Click on the text (rather than the checkbox) for **Internet Protocol (TCP/IP)**. Then, click the **Properties** button.



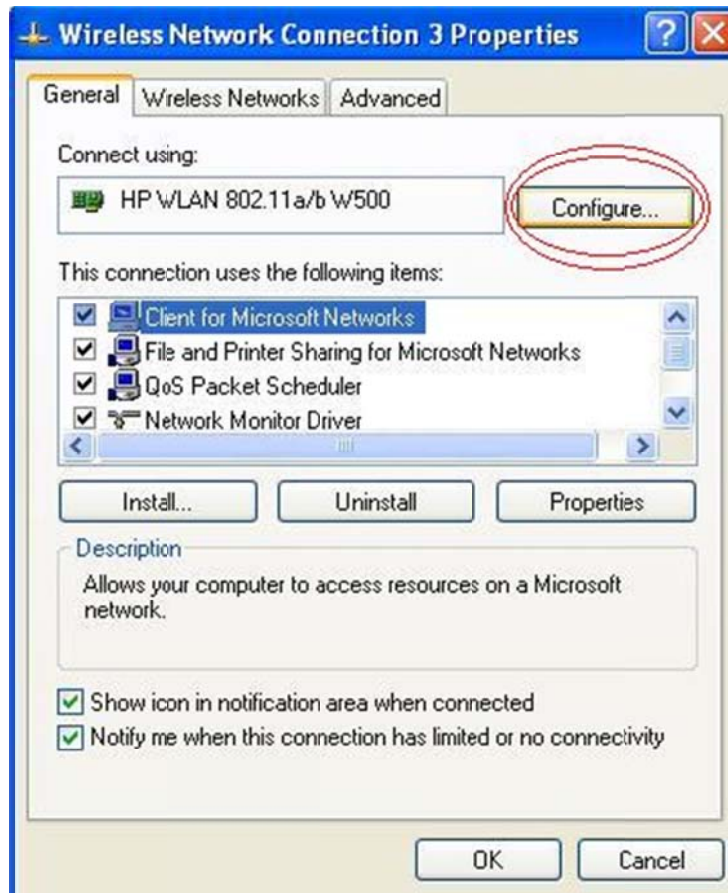
Step 8: Obtain all Values Automatically

The Internet Protocol Properties window will appear. Make sure the radio button in front of **Obtain an IP address automatically** is checked. Also, make sure that the checkbox in front of **Obtain DNS server address automatically** is checked. When you click the **OK** button in the Internet Protocol Properties window, you will be returned to the connection properties window.



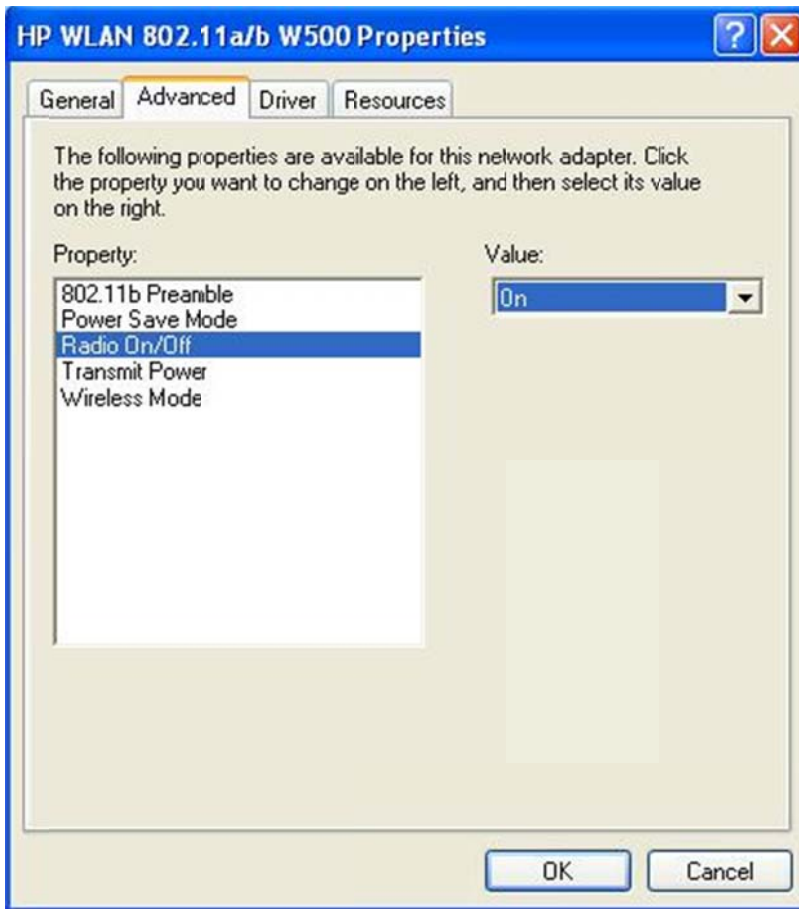
Step 9: Configure the Wireless Device

Click the **Configure** button. This will bring up another window with your wireless device settings.



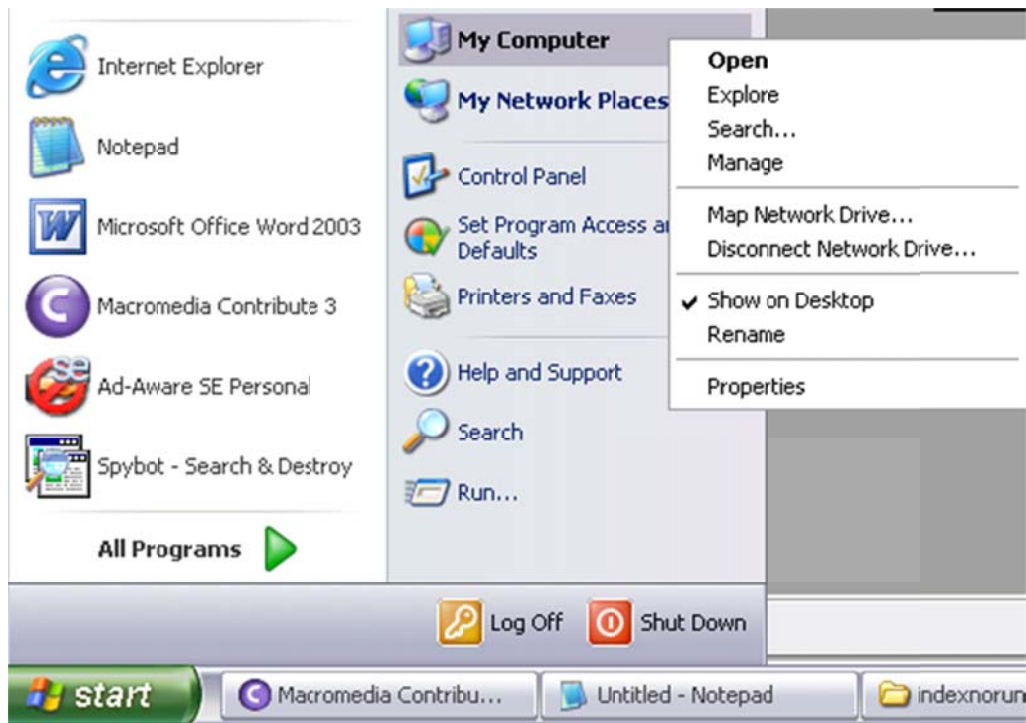
Step 10: Enabling the Radio

Click on the **Advanced** tab. Click the entry for **Radio On/Off**. In the drop-down menu on the right, select **On**. Then, click **OK**. You will be returned to the Wireless Network Connection Properties window. Click **OK** in this window as well.



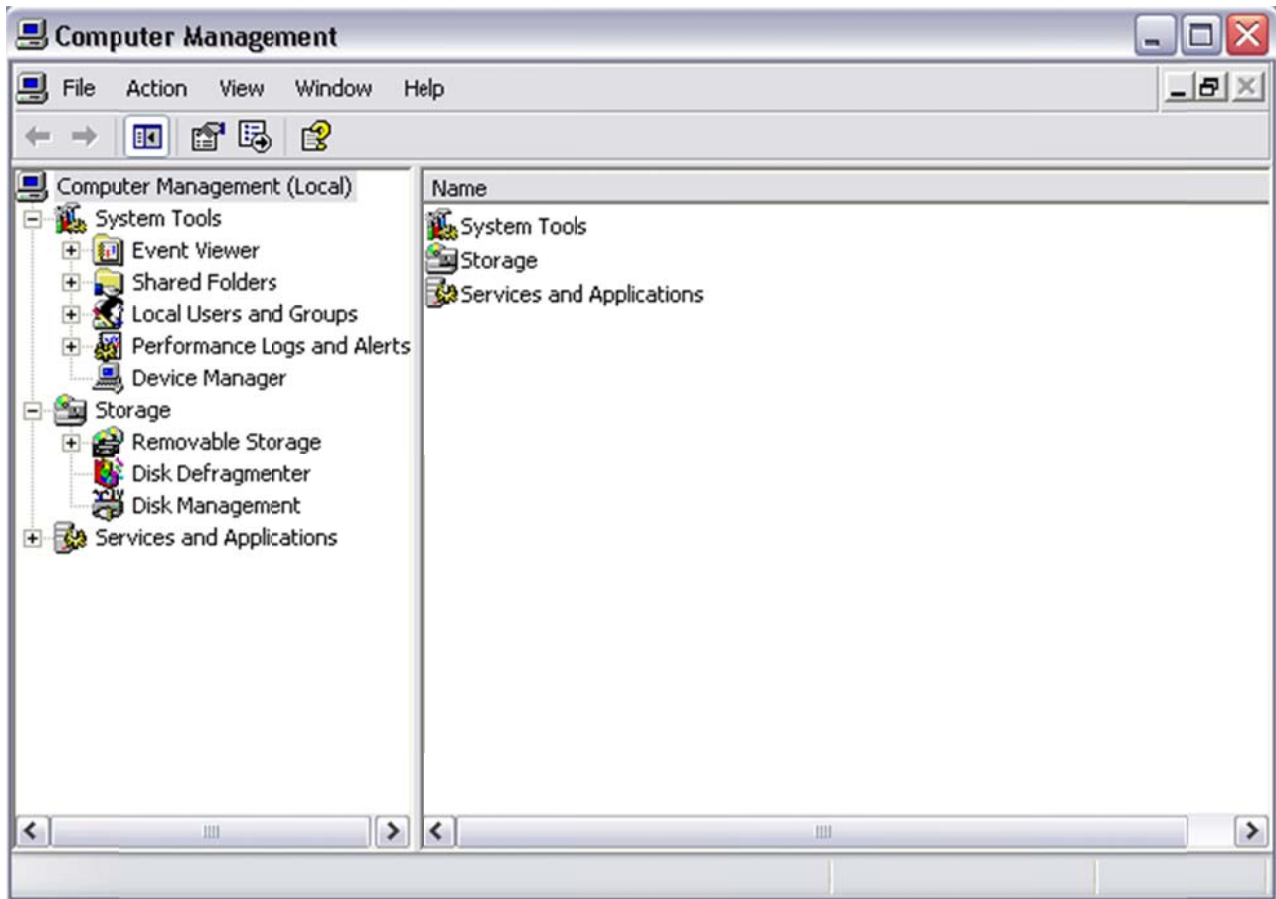
Step 11: Manage My Computer

Click Start. Then, right-click **My Computer**. A pop-up menu should appear. Click **Manage**.



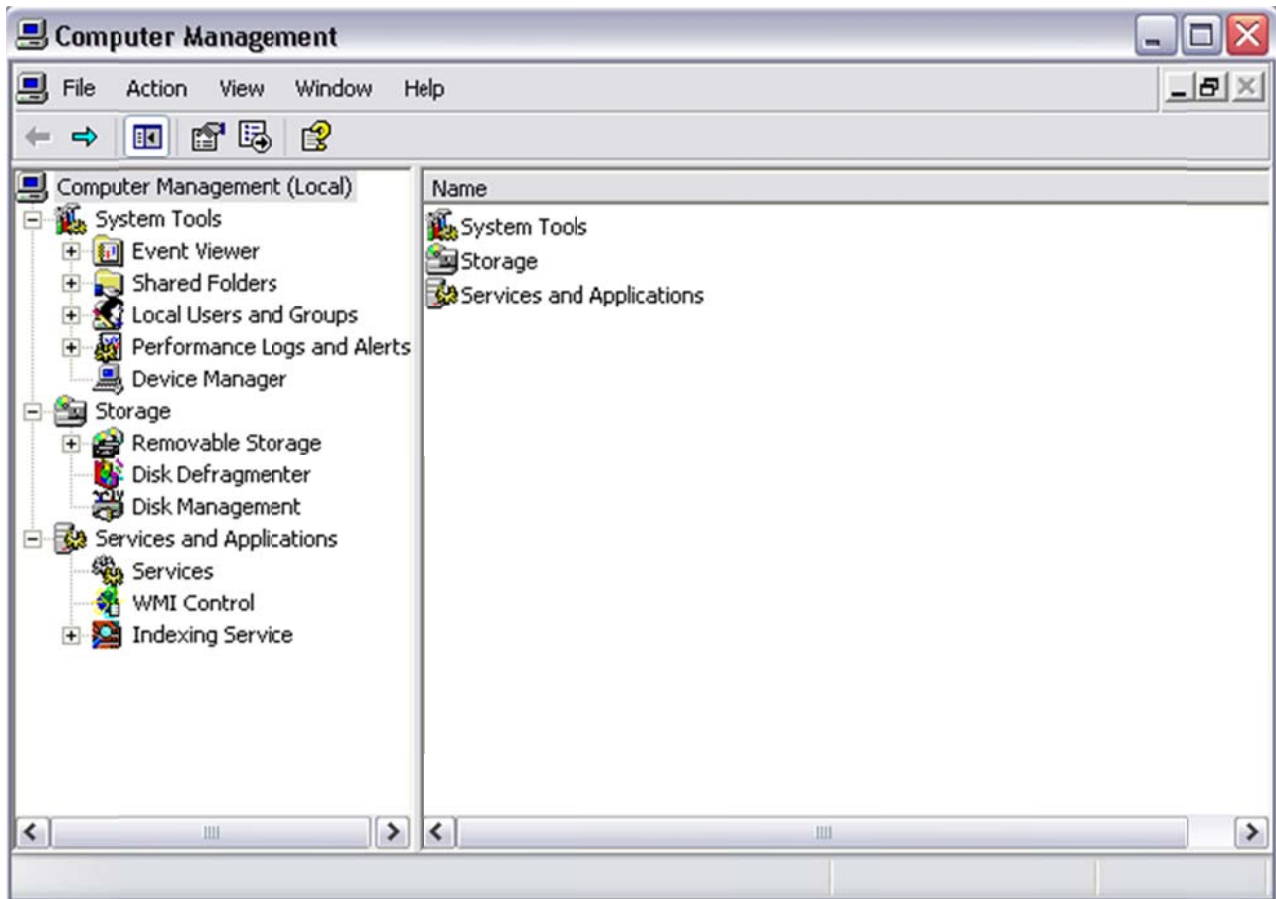
Step 12: Expand Services and Applications

The Computer Management window should appear. Click the **plus (+)** symbol in front of **Services and Applications**.



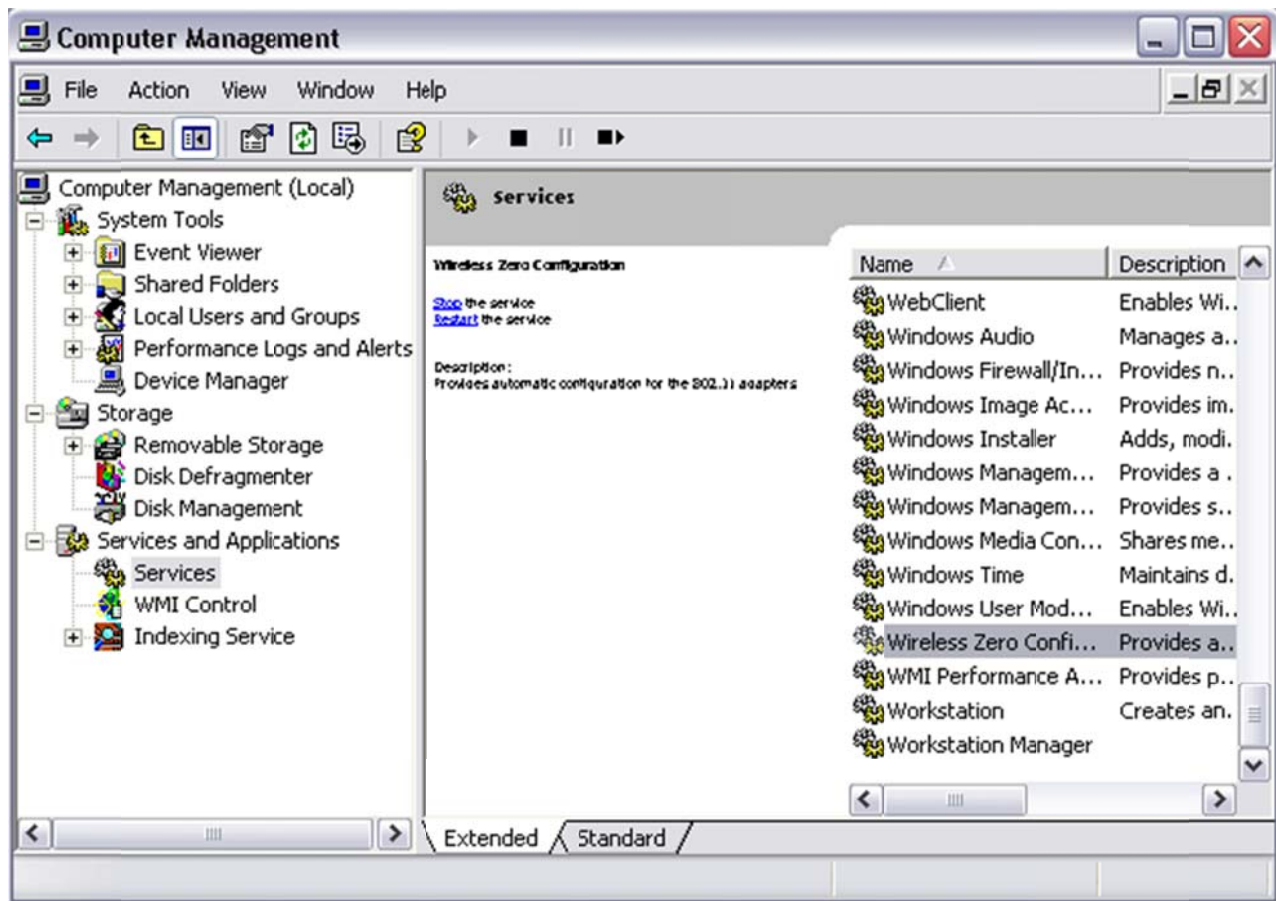
Step 13: View the Services List

Click on **Services**, which should appear below Services and Applications on the left pane of the window.



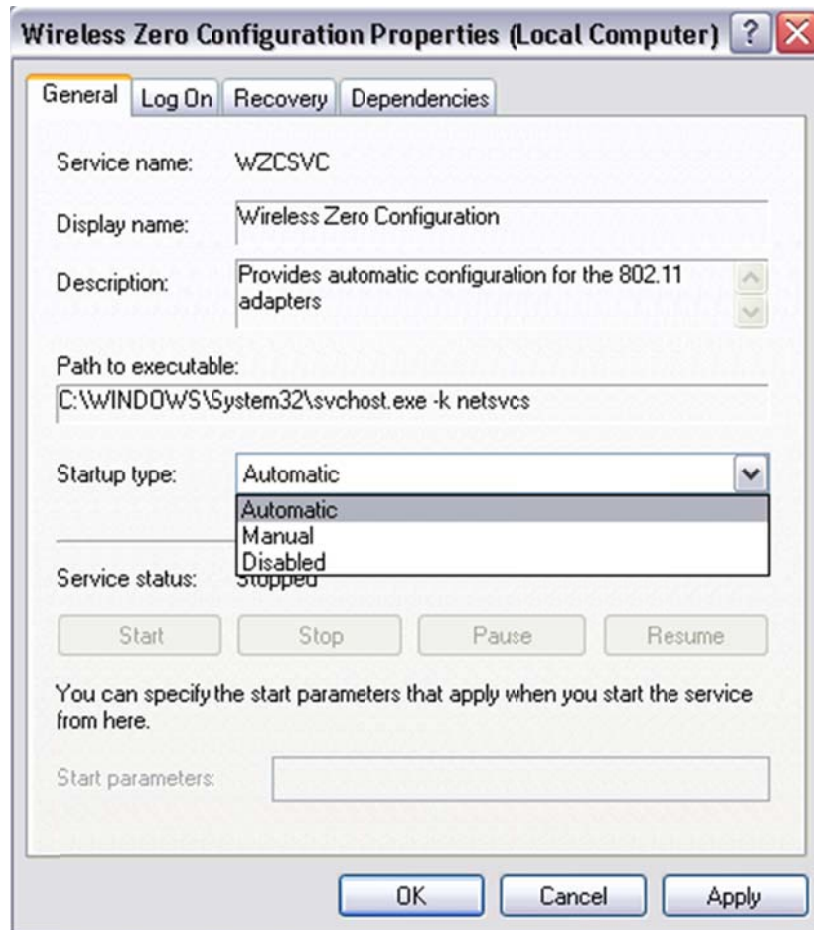
Step 14: Bring up the Wireless Zero Configuration Properties Window

In the right pane of the window, scroll down until you see **Wireless Zero Configuration**. Double-click it.



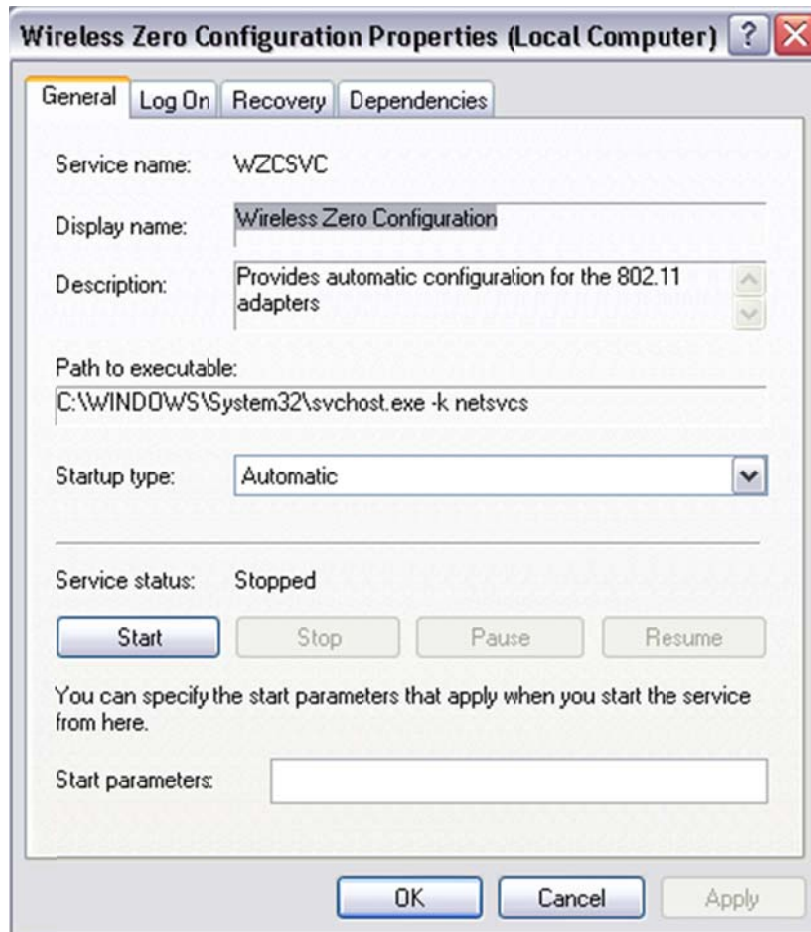
Step 15: Set the Startup Type to Automatic

The Wireless Zero Configuration Properties window should appear. Set the **Startup type:** field to **Automatic**. Then, click **Apply**. If the startup type is already set to automatic, skip these steps and proceed to step 16.



Step 16: Start Wireless Zero Configuration

Click the **Start** button. Then click **OK**. This should return you to the Computer Management window. Close the Computer Management window by clicking the **X** in the **top right corner**.

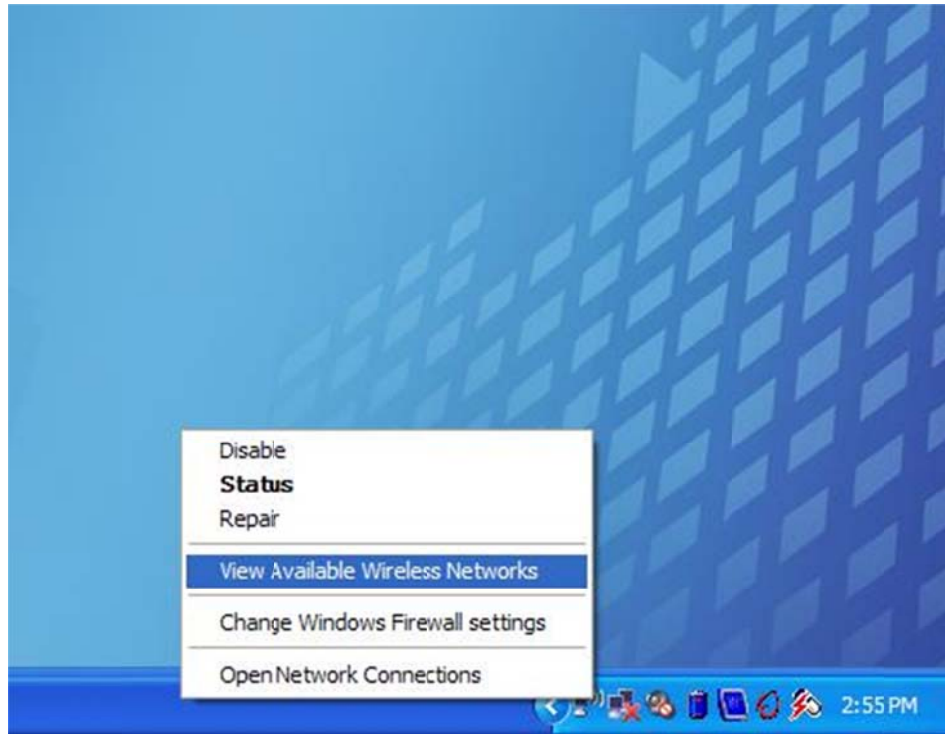


Step 17: View Available Wireless Connections

You should see the following icon in your task tray at the bottom right hand corner of your screen:

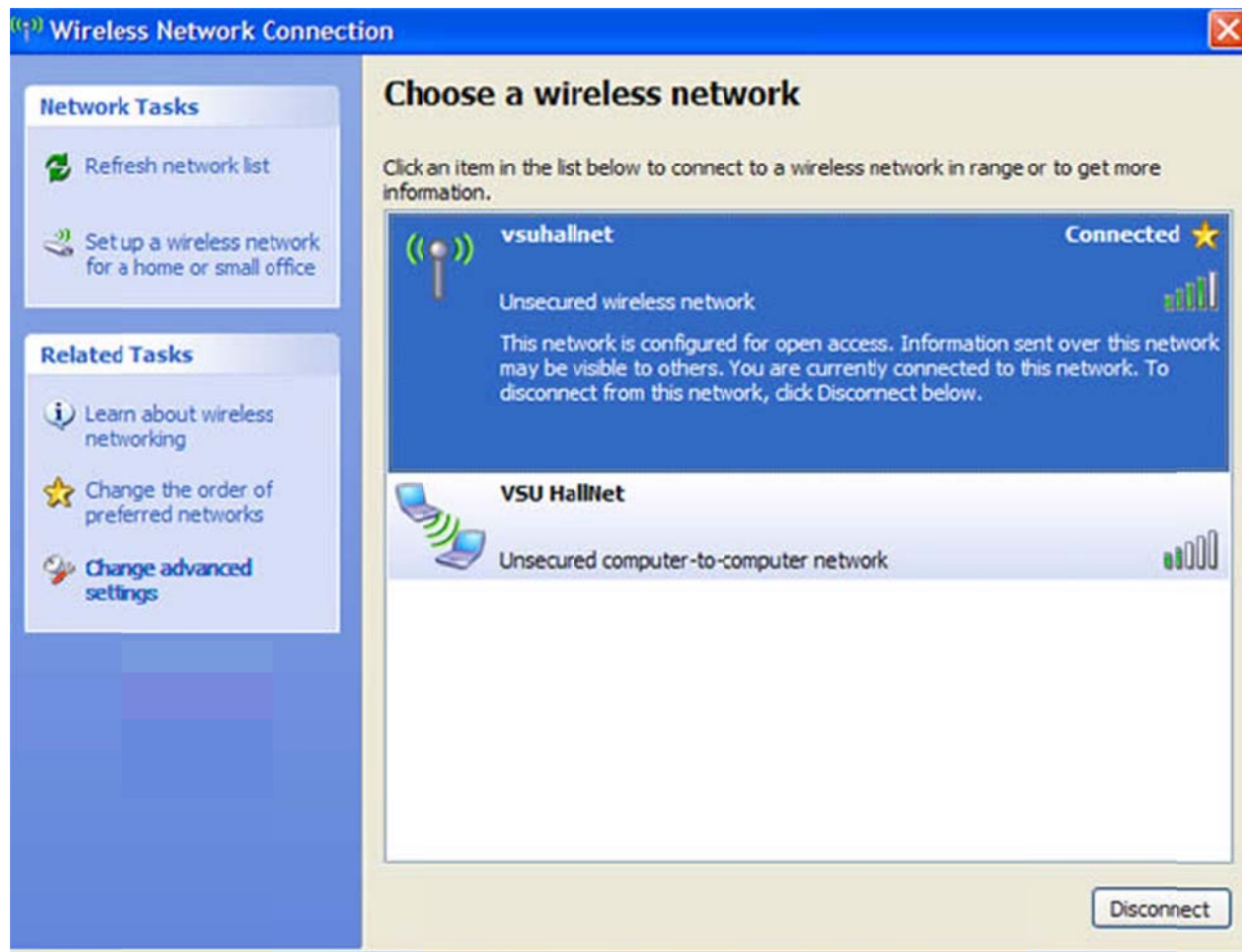


Right-click on it. A pop-up menu should appear. Click **View Available Wireless Networks**.



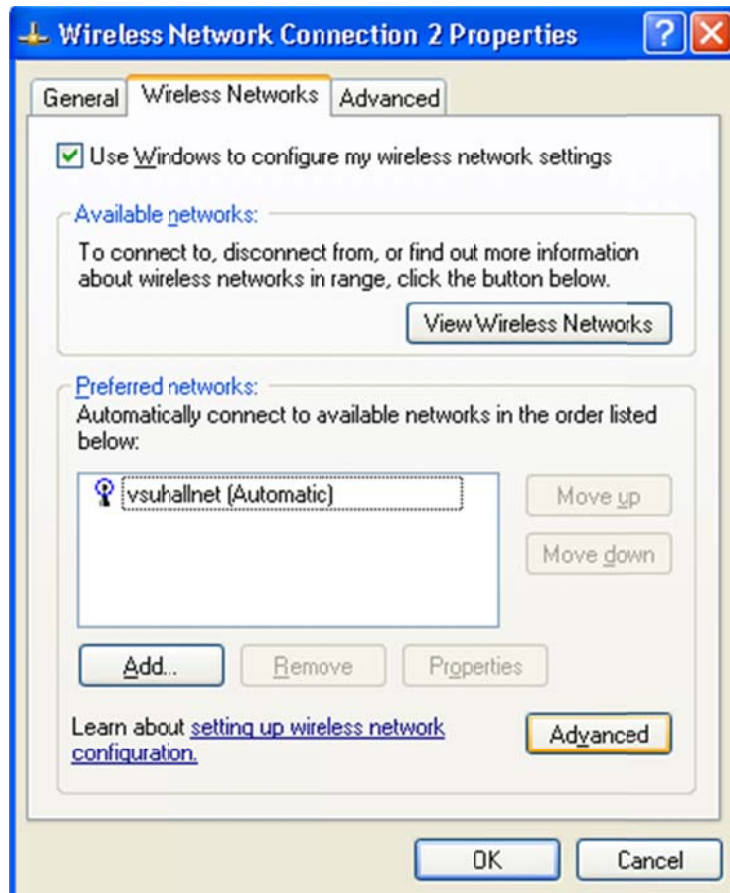
Step 18: Bring up the Wireless Networks Tab

Click **Change the order of preferred networks**.



Step 19: Allow Windows to Configure Wireless Network Settings

Make sure the checkbox in front of **Use Windows to configure my wireless network settings** is checked. Then, click the **Advanced** button.



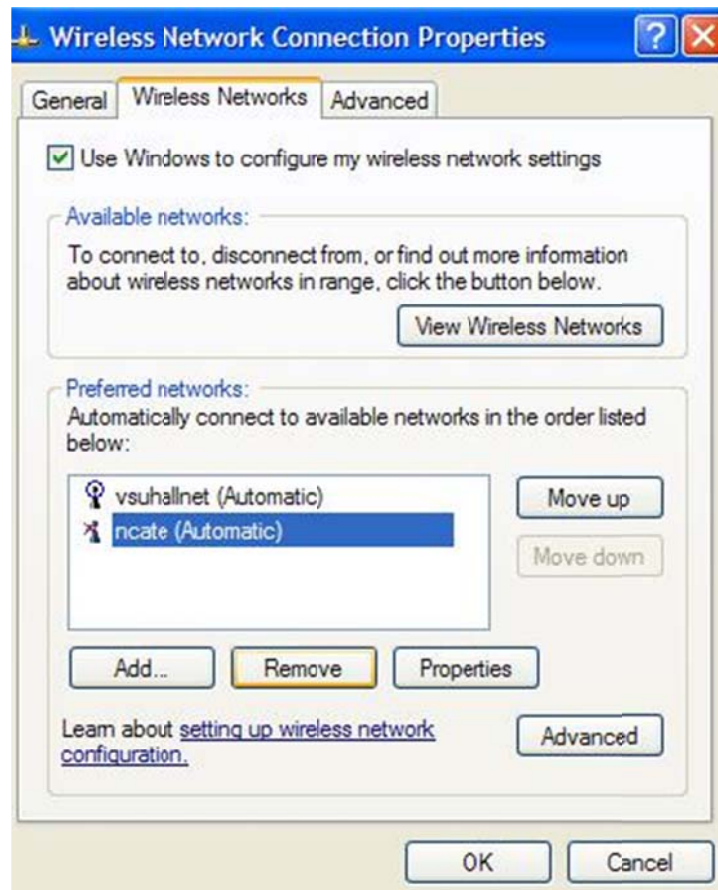
Step 20: Set the Wireless to Connect Only to Access Points

An Advanced window will appear. Make sure the radio button in front of **Access point (infrastructure) networks only** is marked. Make sure the checkbox in front of **Automatically connect to non-preferred networks** is not marked. Click the **Close** button.



Step 21: Remove Preferred Networks

You will be returned to the Wireless Network Connection Properties window. Click on any network found in the Preferred networks list. Then, click the **Remove** button. Repeat this process until no networks are listed in the Preferred networks list. Once the list is empty, click the **OK** button.



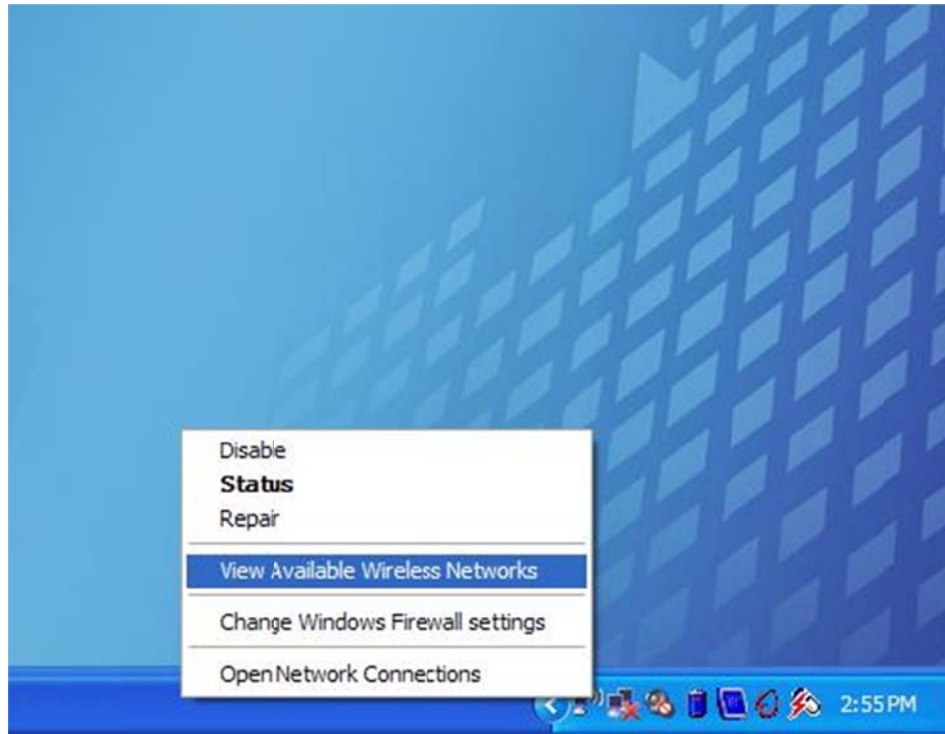
WIRELESS NETWORK CONFIGURATION AND TROUBLESHOOTING

Step 22: Returning to View Available Wireless Networks

Once again, right-click on the wireless icon in your task tray at the bottom right hand corner of your screen:

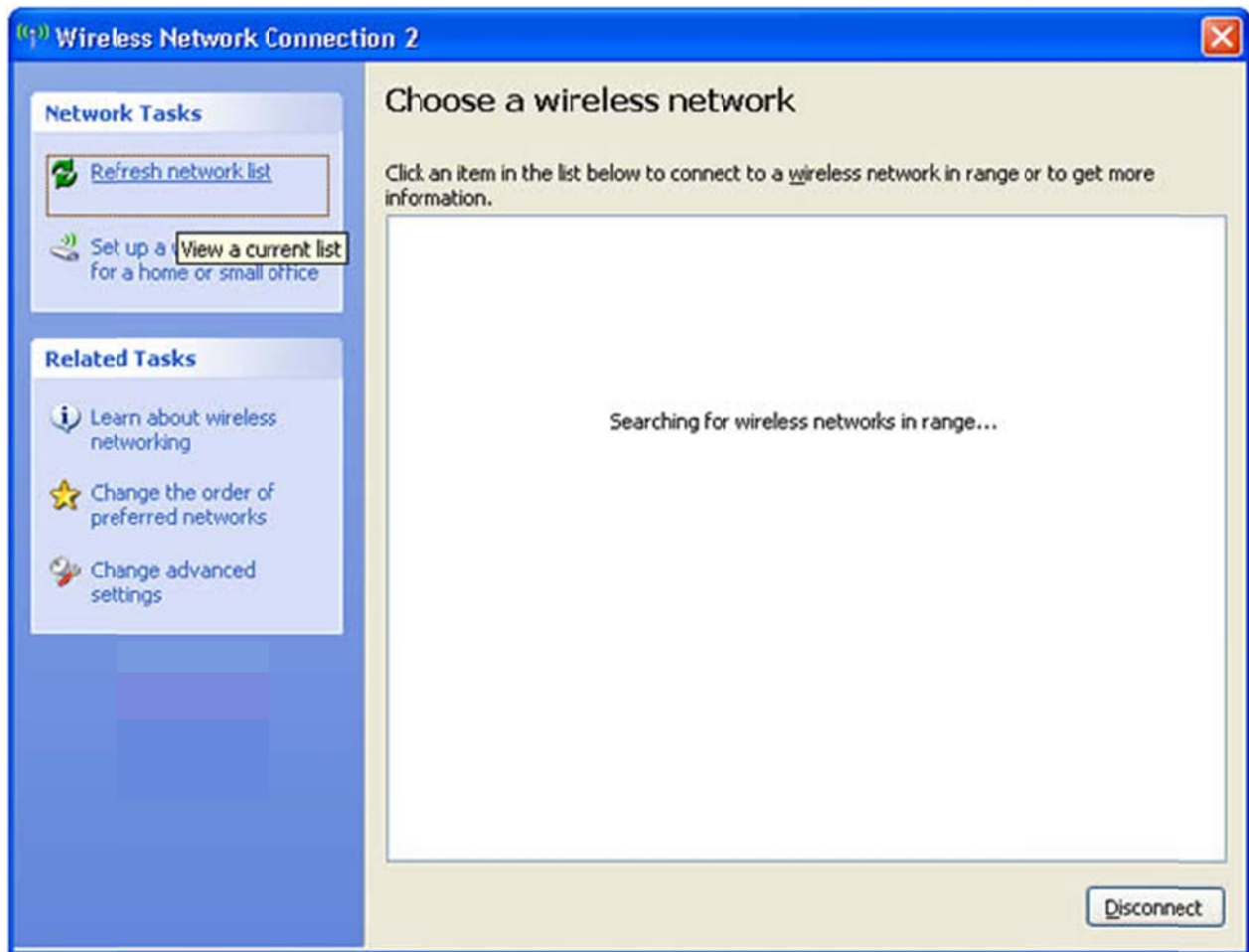


A pop-up menu should appear. Click **View Available Wireless Networks**.



Step 23: Refresh the Network List

Click **Refresh network list**. Give the wireless device some time to search for wireless networks.



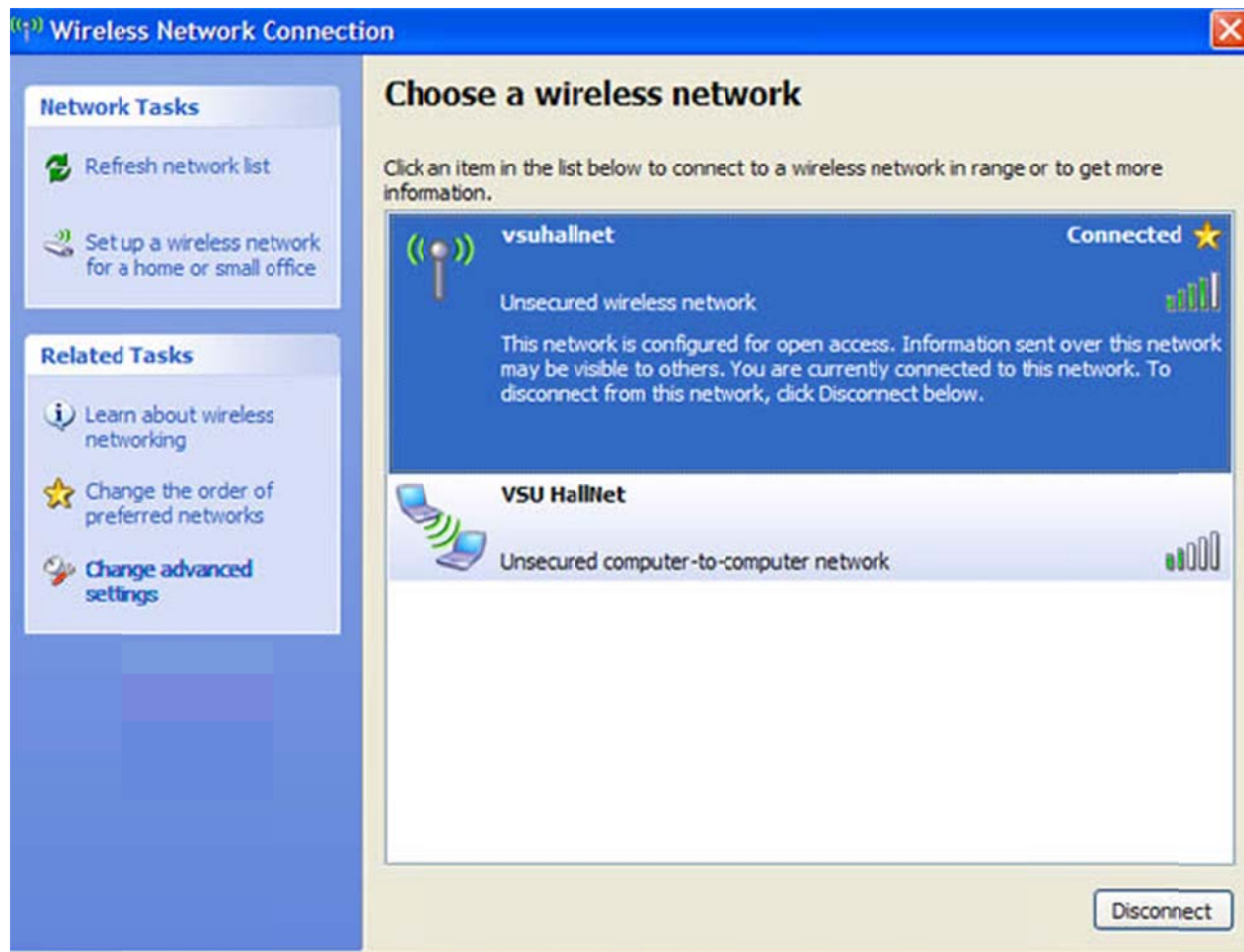
Step 24: Connecting to vsuhallnet

The window may show more than one wireless network. Click on the **vsuhallnet** with the following icon in front of it. Then, click the **Connect** button.



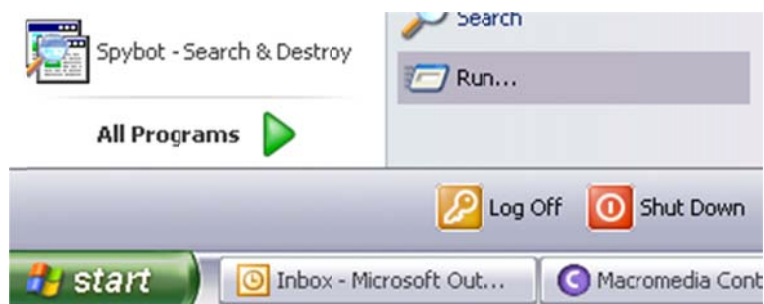
Note: Valdosta State University's wireless network is named vsuhallnet with **all lower-case letters and no spaces or symbols and will always have the icon shown above** . Any other network is not owned or run by Valdosta State University. **You DO NOT want to connect to them.**

If these steps are performed correctly, you should see the vsuhallnet network with the word **Connected** to the right of it. Also, the **Connect** button will change into a **Disconnect** button. At this point, attempt to access the internet. You should be redirected to the Hallnet login website. If not, proceed to the next step.

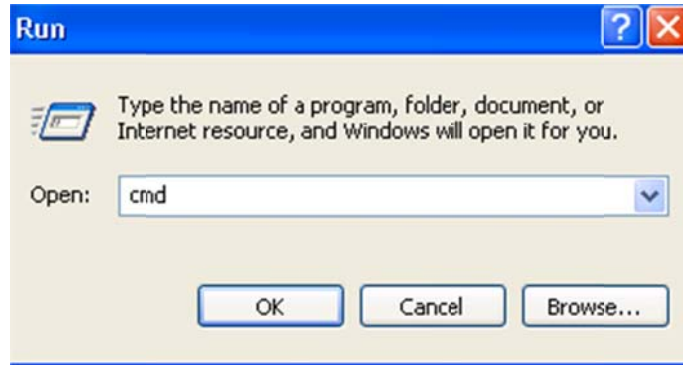


Step 25: Bring up the Run Window

Click **Start**. Then click **Run**.



In the **Open** field of the prompt that appears, type **cmd**. Then, click the **OK** button.



Step 26: Check your IP Address

A Command Prompt window will appear. Type **ipconfig** and press the **Enter** key on the keyboard. Look at the section for your Local Area Connection.

The **IP Address** listed should be between the ranges of **168.18.177.1 – 168.18.183.254**.

The **Subnet Mask** should be: **255.255.248.0**

The **Gateway** should be: **168.18.176.3**

Note: If the IP Address is correct, try to access the internet. Your web browser should redirect you to the Hallnet login website. If it does not or you do not get a correct IP Address, continue these steps.

```
C:\WINDOWS\system32\cmd.exe
Windows IP Configuration

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
Ethernet adapter Local Area Connection 4:

    Connection-specific DNS Suffix  . : valdosta.edu
    IP Address . . . . . : 168.18.162.139
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : 168.18.160.1
Ethernet adapter Wireless Network Connection 3:

    Connection-specific DNS Suffix  . : valdosta.edu
    IP Address . . . . . : 168.18.182.153
    Subnet Mask . . . . . : 255.255.248.0
    Default Gateway . . . . . : 168.18.176.3
```

Step 27: Release Your IP Address

Type **ipconfig/release** and press the **Enter** key on the keyboard. Your IP Address should now display as **0.0.0.0** as shown in the image below.

```
Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\>ipconfig/release

Windows IP Configuration

Ethernet adapter Wireless Network Connection 2:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 

C:\>
```

Step 28: Renew your IP Address

Type **ipconfig/renew** and press the **Enter** key on the keyboard. The IP Address listed there should begin with **10.0**. For example, in the image below, the IP Address is **10.0.14.146**. If the IP Address is correct, try to access the internet. Your web browser should redirect you to the Hallnet login website.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\>ipconfig/renew

Windows IP Configuration

Ethernet adapter Wireless Network Connection 2:

    Connection-specific DNS Suffix  . : valdosta.edu
    IP Address . . . . . : 10.0.14.146
    Subnet Mask . . . . . : 255.255.128.0
    Default Gateway . . . . . : 10.0.0.1

C:\>
```

If you have problems when trying these instructions, or if you have other question concerning the wired network, please contact the Information Technology Helpdesk at 229-245-4357 or send an e-mail to helpdesk@valdosta.edu.