

IT Essentials 5.0

6.8.3.10 Lab - Configure Wireless Router in Windows XP

Introduction

Print and complete this lab.

In this lab, you will configure and test the wireless settings on the Linksys E2500.

Recommended Equipment

- A computer with Windows XP
- A Wireless NIC installed
- An Ethernet NIC installed
- Linksys E2500 Wireless Router
- Ethernet patch cable

Note: All wireless settings in this lab are for a 2.4 GHz wireless connection. Follow the same steps for setting up a 5 GHz wireless connection or when setting up both 2.4 GHz and 5 GHz connections.

Step 1

Ask the instructor for the following information that is used during the lab.

Router Address Information:

IP address _____

Subnet mask _____

Router name _____

DHCP Server Setting Information:

Start IP address _____

Maximum number of users _____

Static DNS 1 (optional) _____

SSID Values:

New SSID _____

Channel number:

Channel _____

Router Access:

Router Password _____

Wireless Security:

Passphrase key _____

Important: Only use configurations assigned by the instructor.

Step 2

Plug in the power of the wireless router. Boot the computer and log in as an administrator.

Connect the computer to one of the **Ethernet** ports on the wireless router with an Ethernet patch cable.

Step 3

Open the command prompt.

Type **ipconfig /renew**.

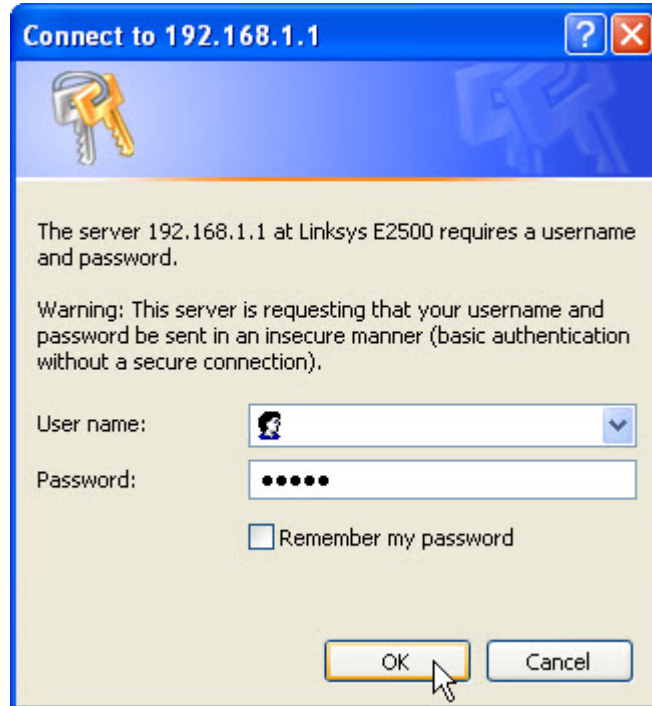
What is the default gateway for the computer?

Step 4

Open a browser. Type the IP address of your default gateway in the URL field, and then press **Enter**.



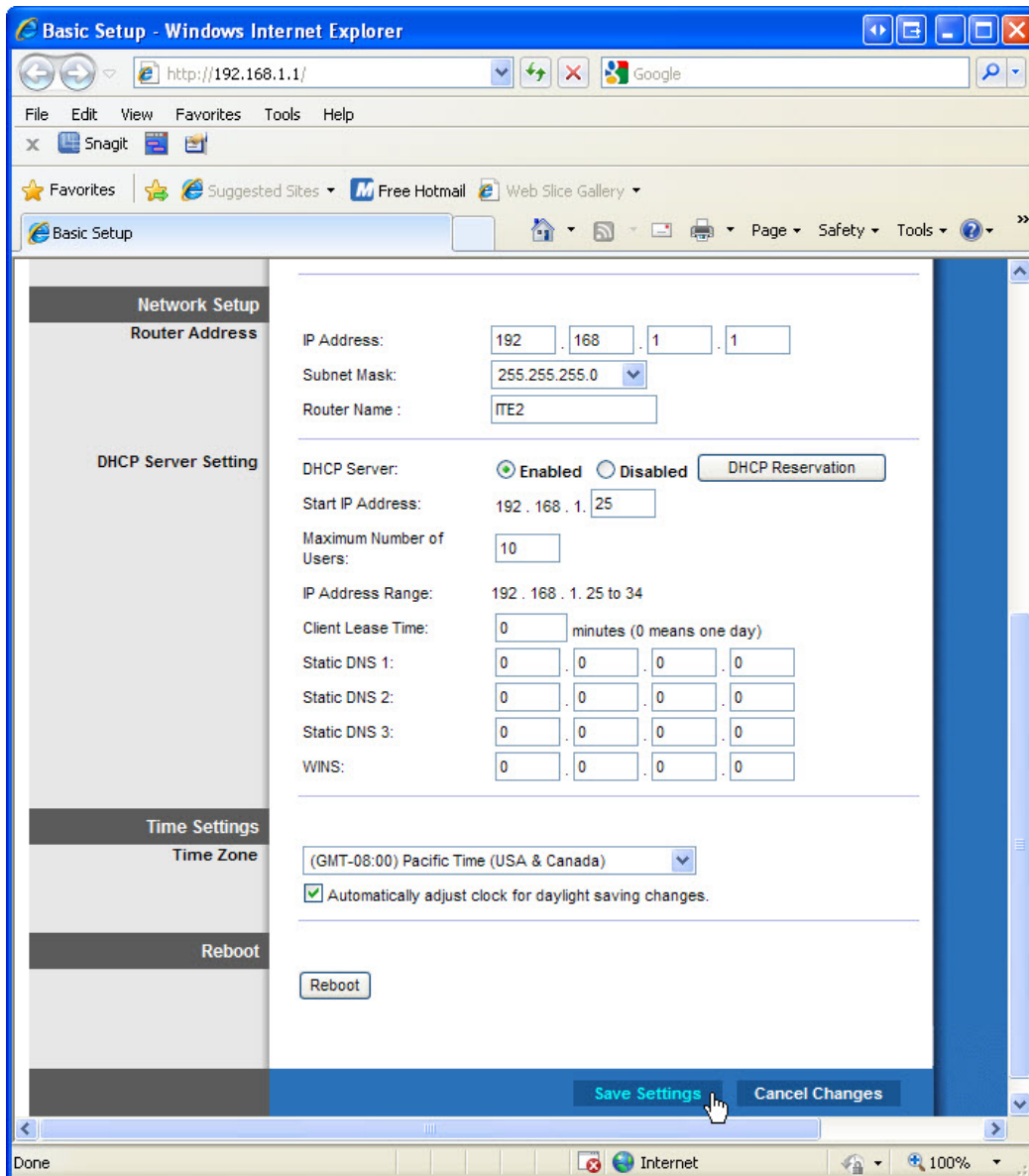
The "Connect to" window appears.



Type the password provided by the instructor in the "Password:" field then click **OK**.

Step 5

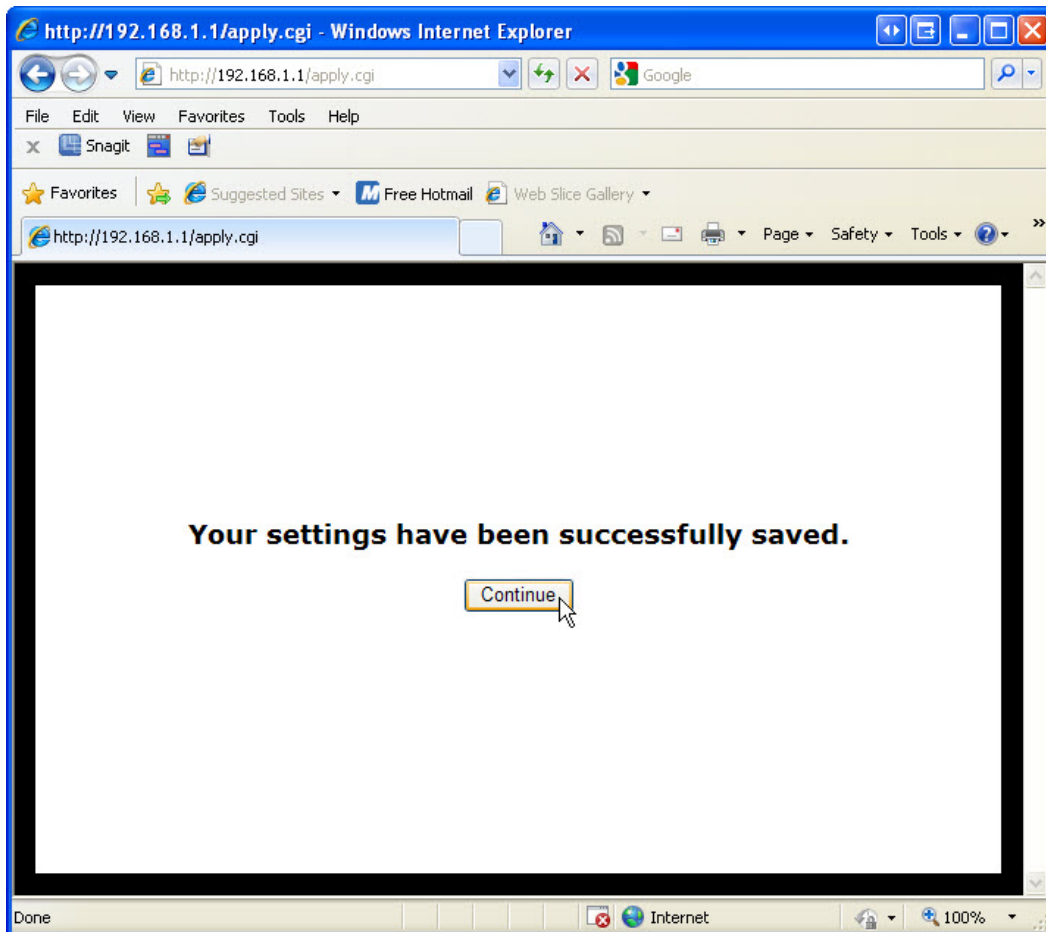
The Setup screen appears.



Enter the following “Router Address” and “DHCP Server Setting” information provided by the instructor (step 1): IP Address, Subnet Mask, Router Name, Start IP Address, and Maximum Number of Users.

Click **Save Settings**.

The “Your settings have been successfully saved.” screen appears.



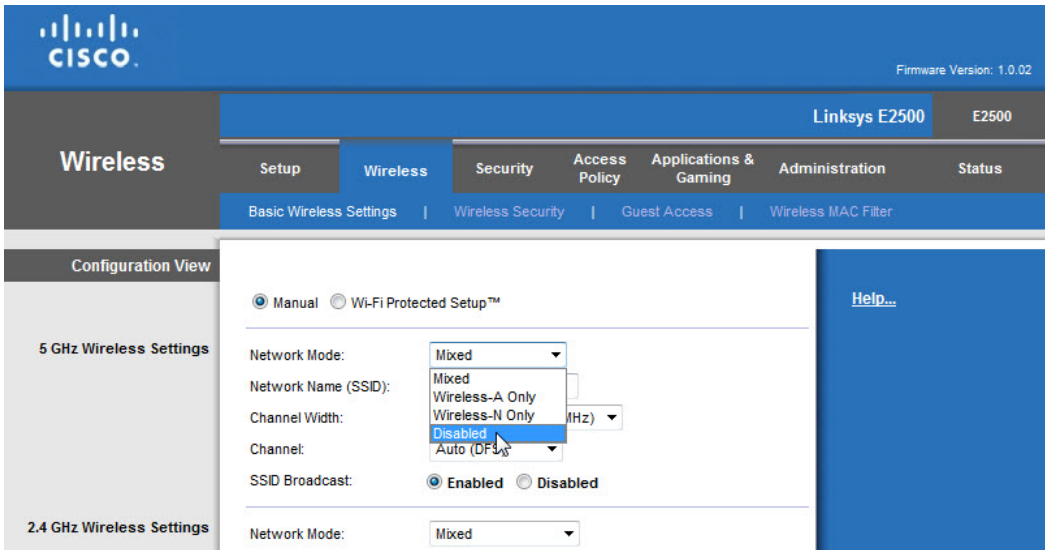
Click **Continue**.

After the router reboots, you may need to log back into the router.

Step 6

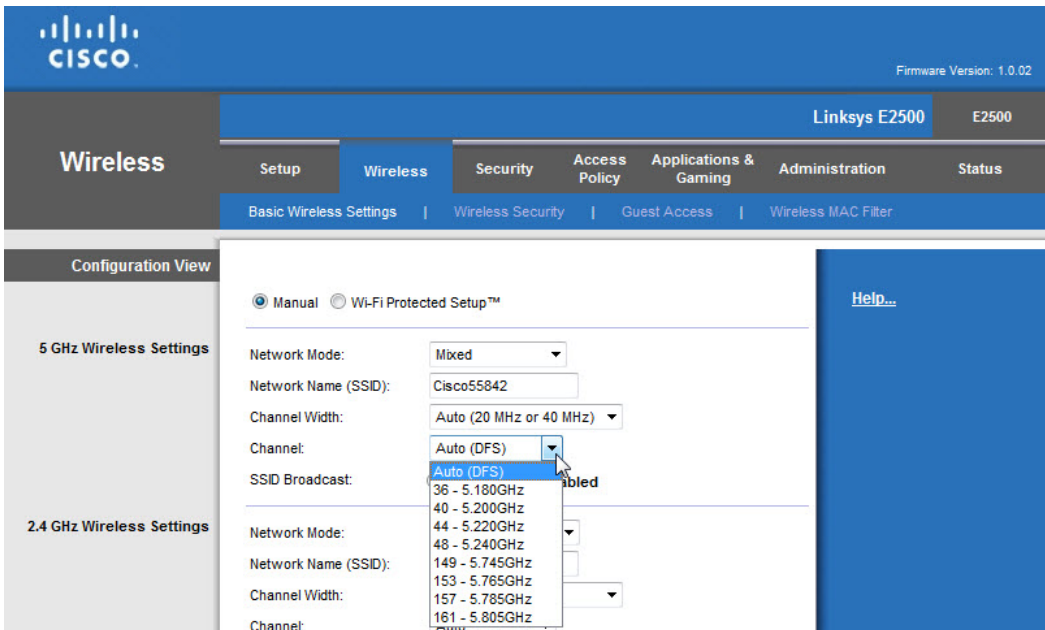
Click the **Wireless** tab.

Click the **Network Mode** drop-down menu for the 5 GHz Wireless Settings.



What 802.11 technologies are supported?

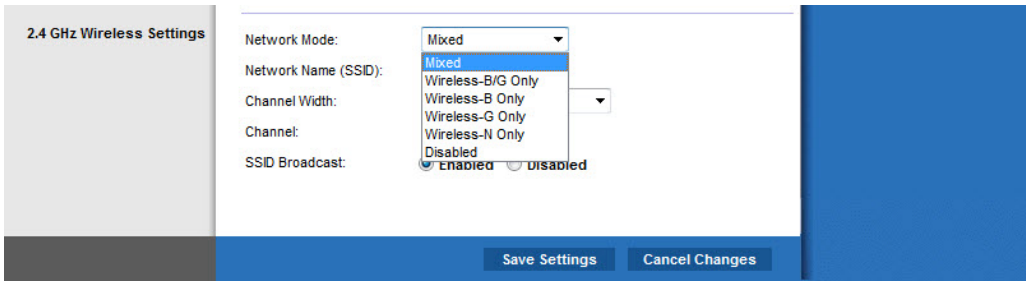
Click the **Channel** drop-down menu for the 5 GHz Wireless Settings.



What channels are listed?

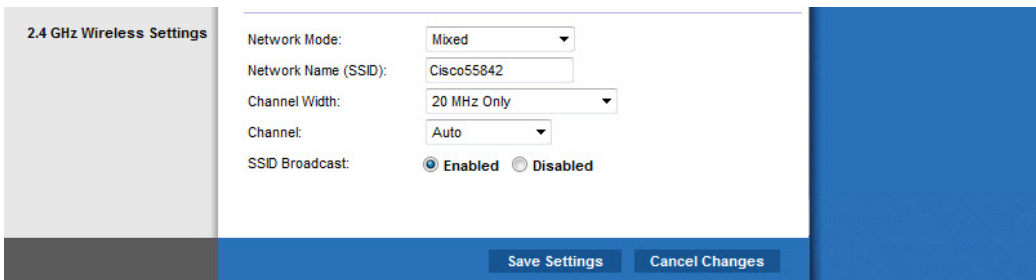
Disable Network Mode the for 5 GHz Wireless settings, unless informed otherwise by the instructor.

Click the **Network Mode** drop-down menu for the 2.4GHz Wireless Settings.



What 802.11 technologies are supported?

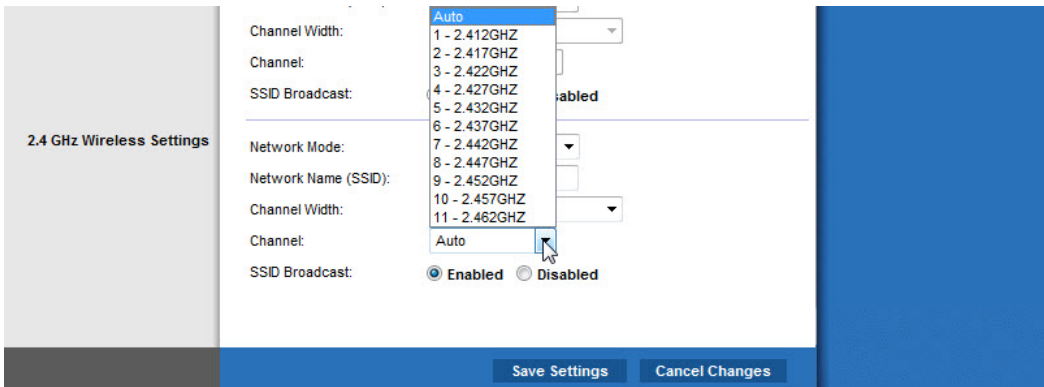
Choose **Mixed** in the “Network Mode:” drop-down box.



What is the default SSID for the wireless router?

Type **cisco#** in the “Network Name (SSID):” field, where # is the number assigned by the instructor.

Click the **Channel** drop-down menu for the 2.4GHz Wireless Settings.



What channels are listed?

Select the Channel number that was provided by the instructor.

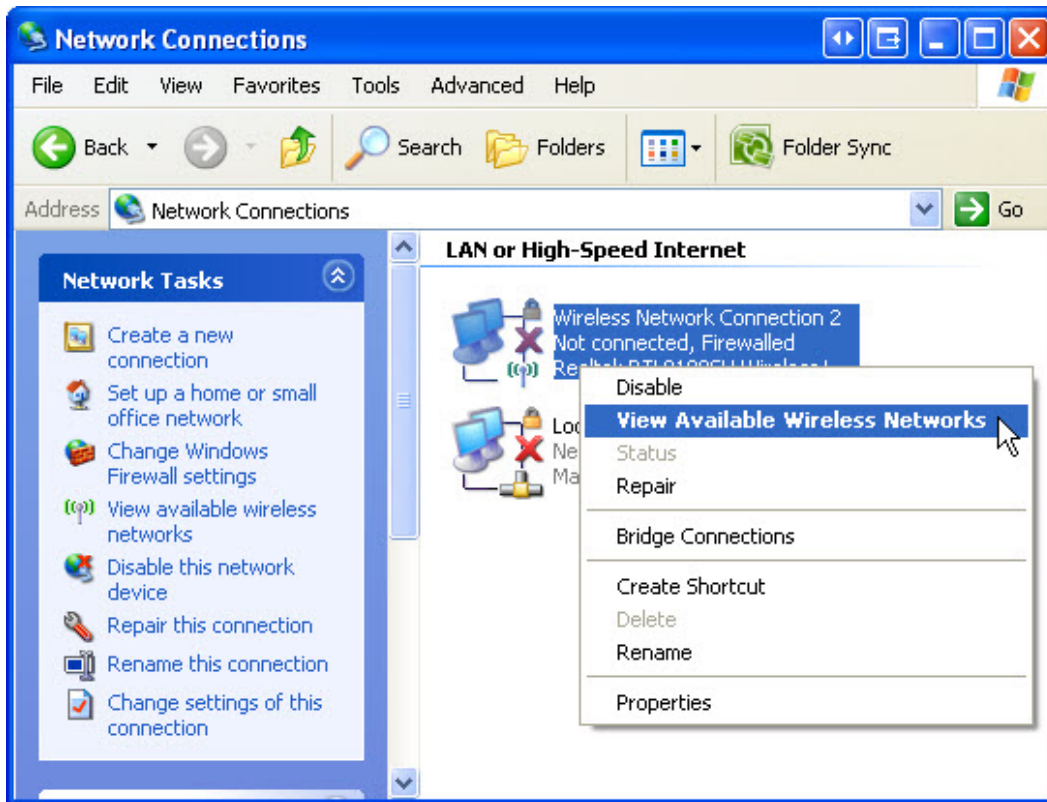
Click **Save Settings > Continue** then close the browser.

Step 7

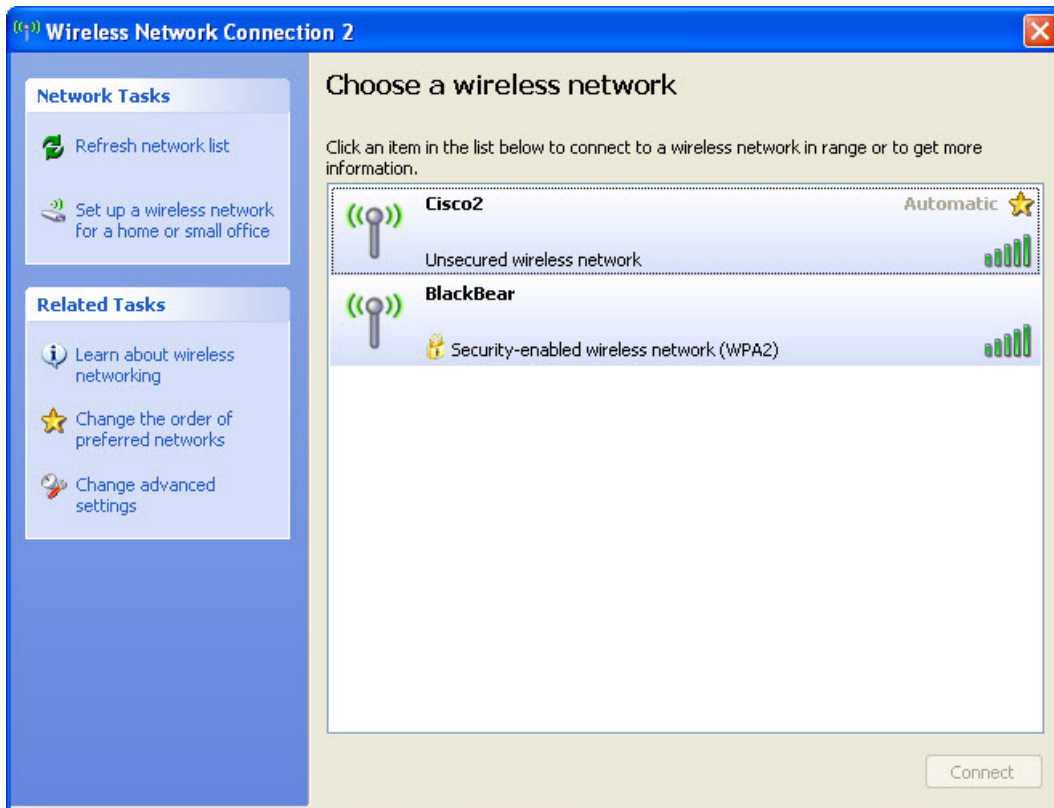
Unplug the Ethernet cable from the computer.

View wireless networks associated with the wireless adapter configured for the computer.

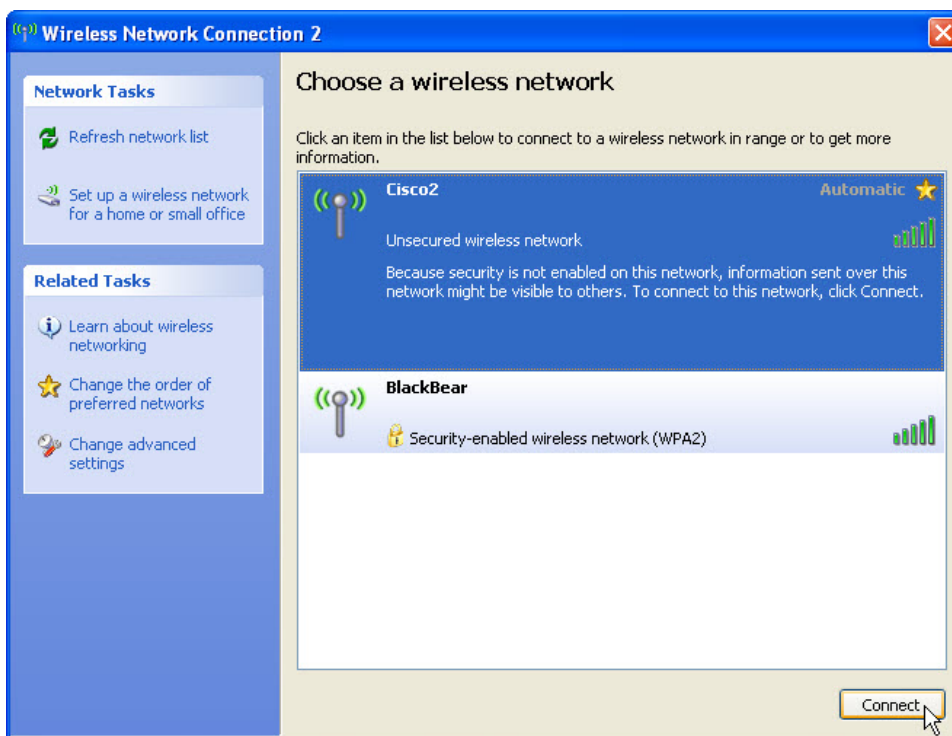
Click **Start > Control Panel > Network Connections** > right-click the wireless adapter and select **View Available Wireless Networks**.



A list of available wireless networks is displayed.



What wireless network(s) are available?

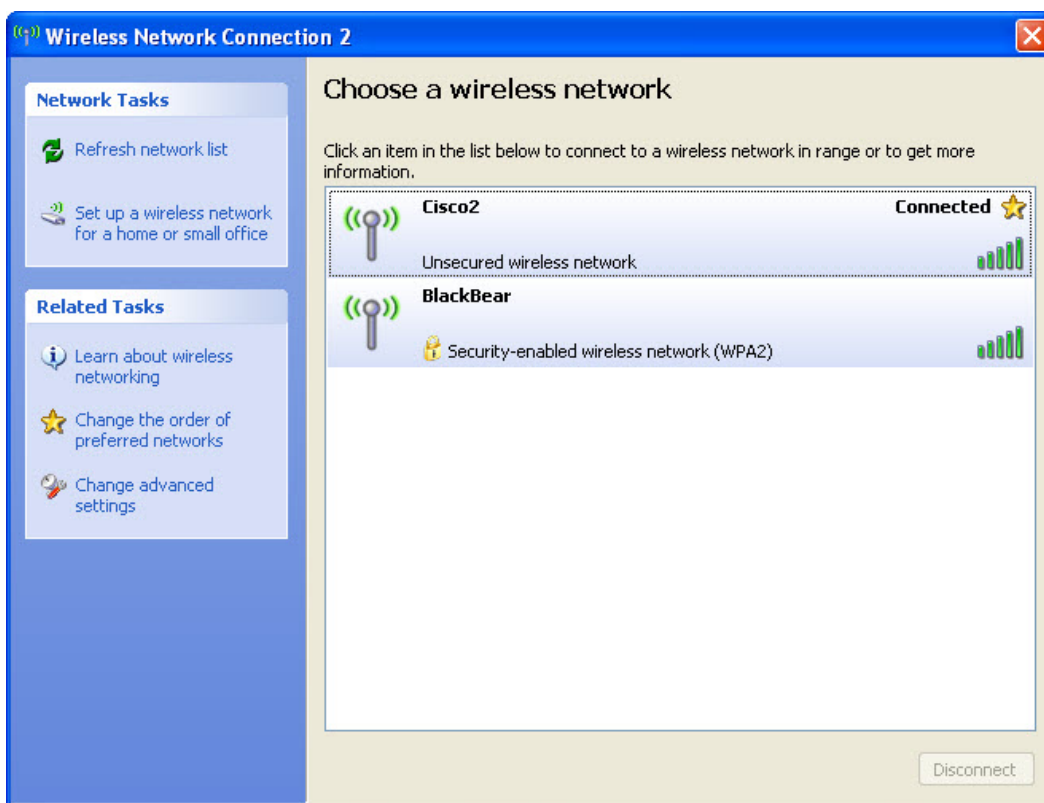


Choose **cisco#**, where # is the number assigned by the instructor, and then click the **Connect** button.

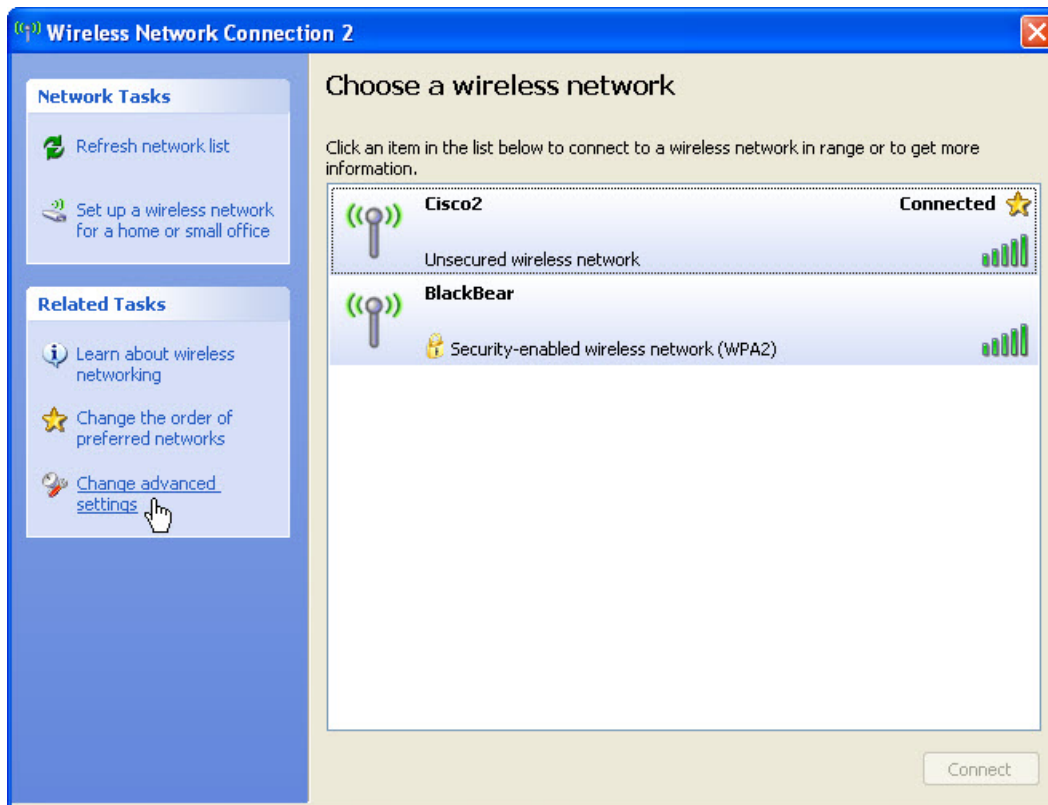
The “Please wait while Windows connects to ‘Cisco#’ network” screen appears.



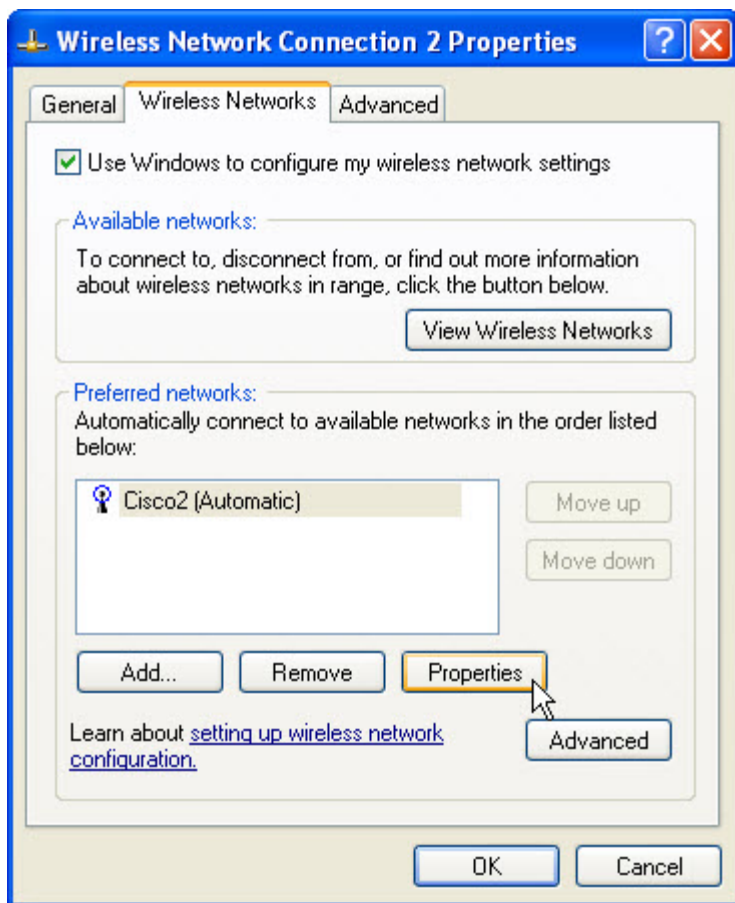
The “Choose a wireless network” opens and shows you are connected to Cisco#.



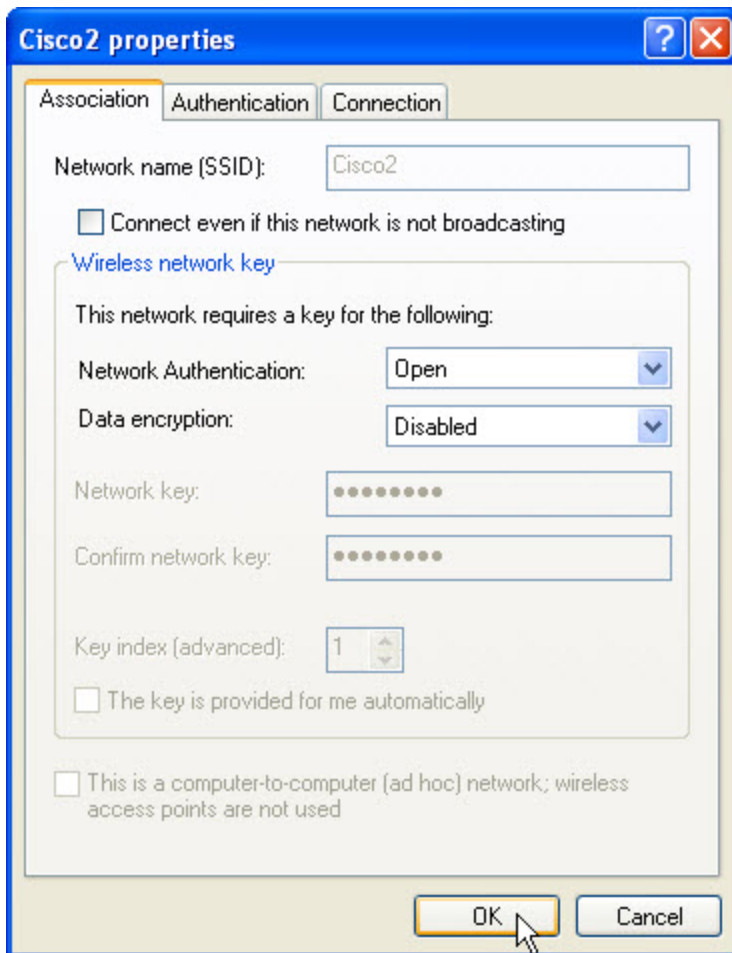
Click **Change advanced settings**.



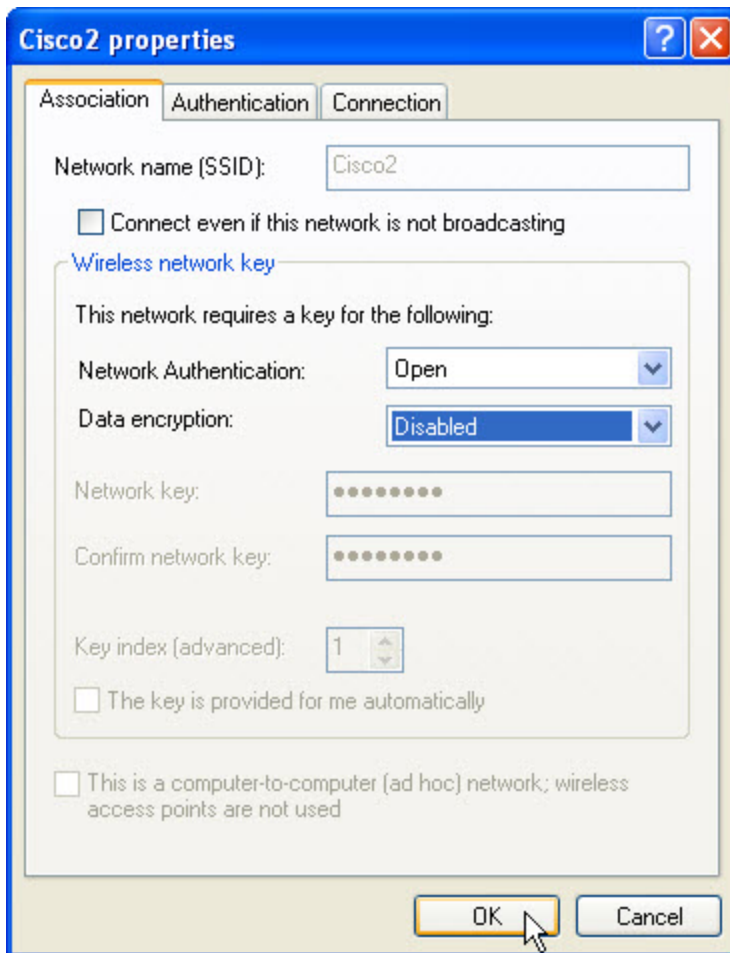
The "Wireless Network Connection Properties" window opens.



Click **Wireless Networks** tab > **Cisco# (Automatic)** > **Properties**.



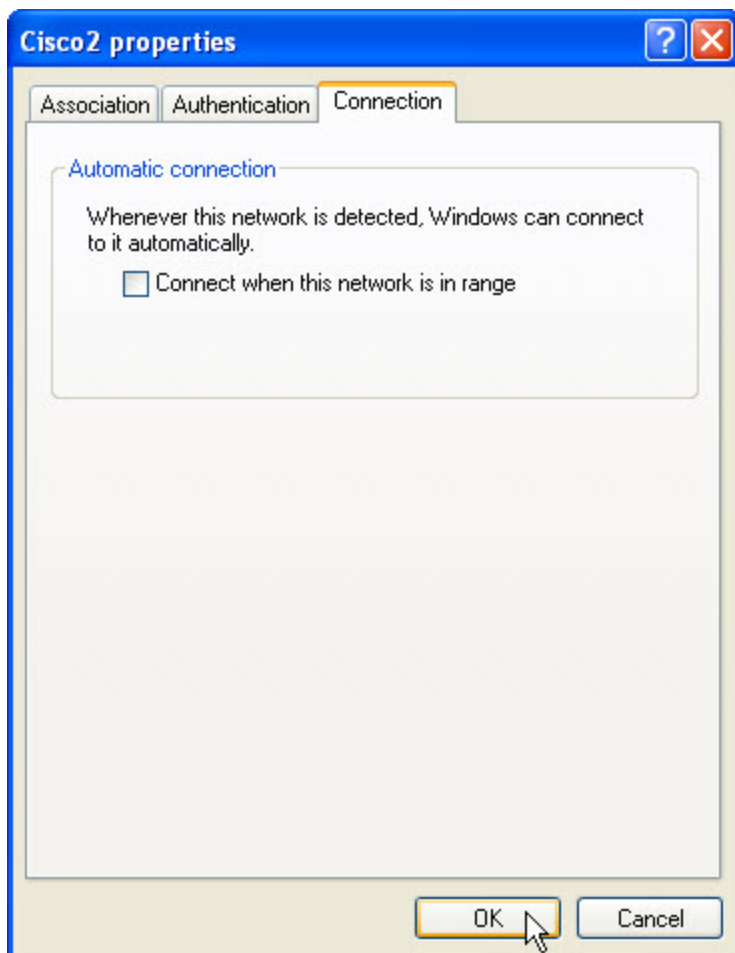
When "Cisco# properties" window opens, un-check the box **Connect even if this network is not broadcasting** > **OK**.



When the warning message appears, click **Continue Anyway**.



Select **Connection** tab > un-check the box **Connect when this network is in range** > **OK**.



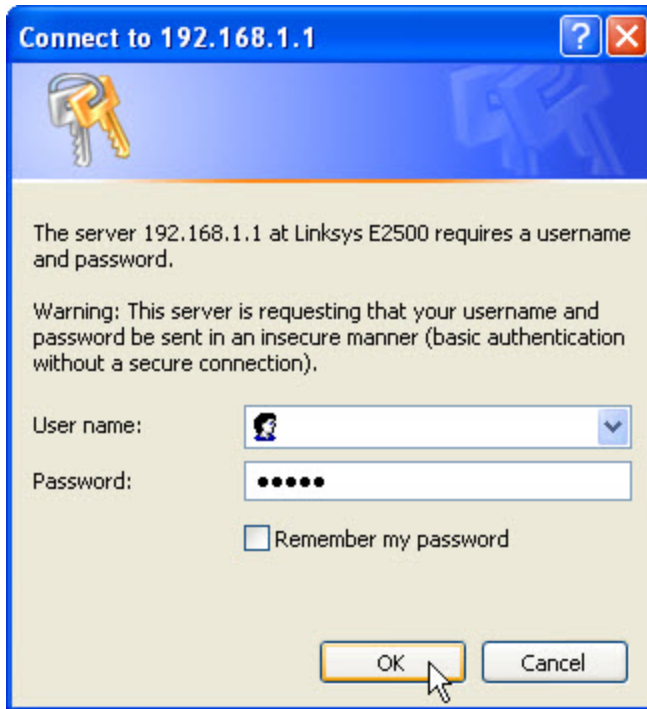
When the warning message appears, click **Continue Anyway**.

Click **OK** to close the "Wireless Network Connection Properties" window.

Step 8

Open a browser. Type the IP address of your default gateway in the URL field, and then press **Enter**.

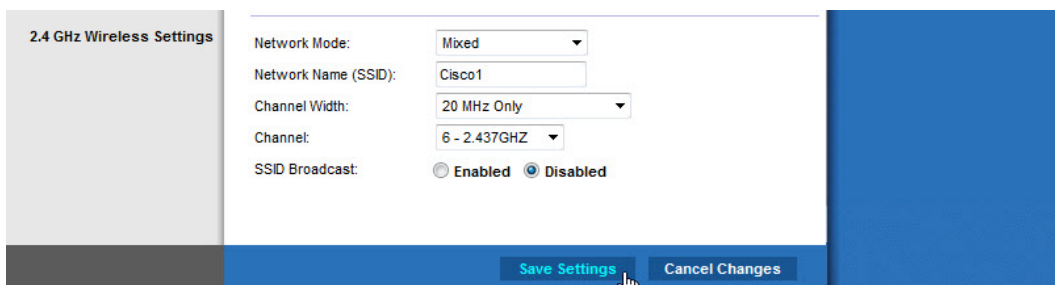
The "Connect to" window appears.



Type the password provided by the instructor in the “Password:” field.

The Setup screen appears.

Navigate to “Basic Wireless Settings”. Select **Disable** for the 2.4 GHz SSID broadcast.



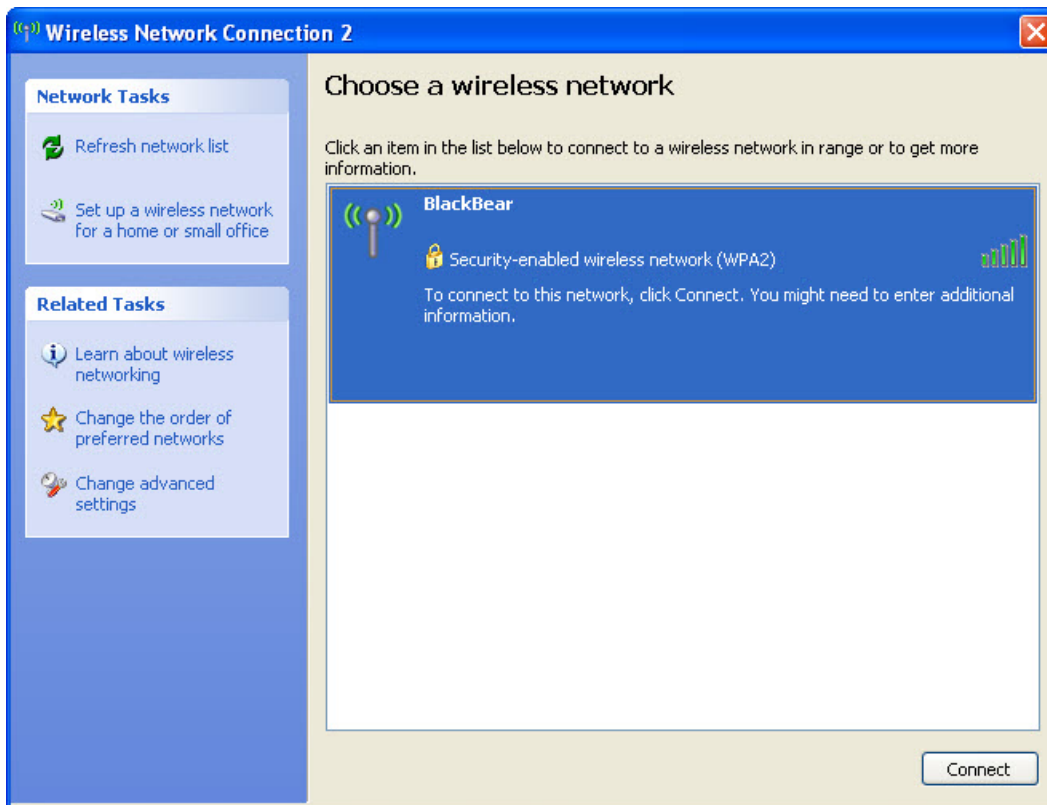
Click **Save Settings > Continue**.

Why would you disable SSID broadcast?

View wireless networks associated with the wireless adapter configured to the computer.

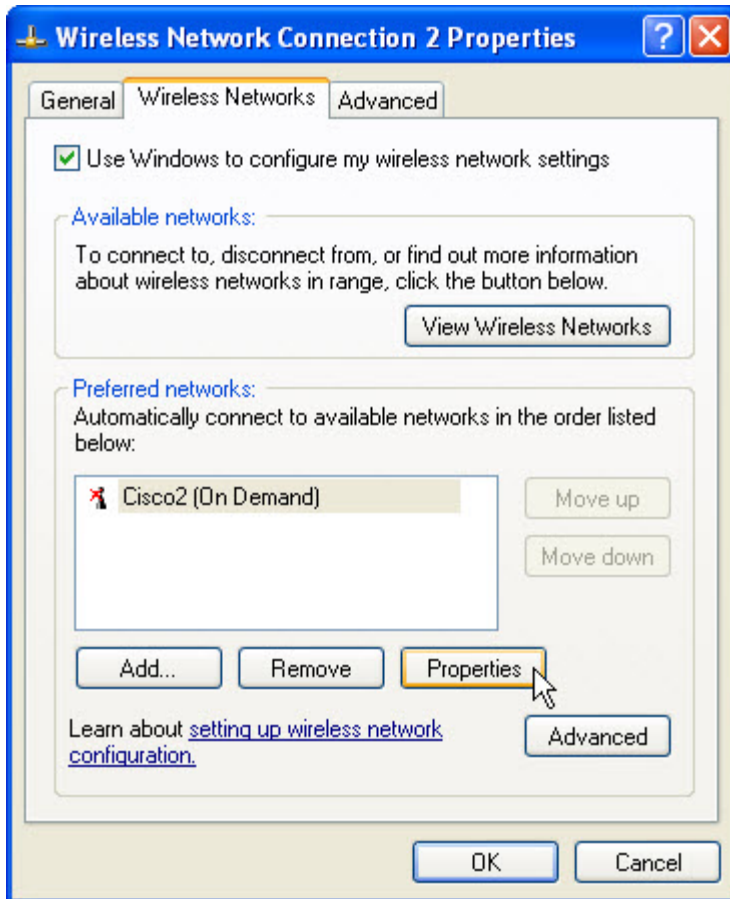
Click **Start > Control Panel > Network Connections >** right-click the wireless adapter and select **View Available Wireless Networks**.

Note: You may need to refresh the list every 30 seconds until the Cisco# connection is no longer listed.



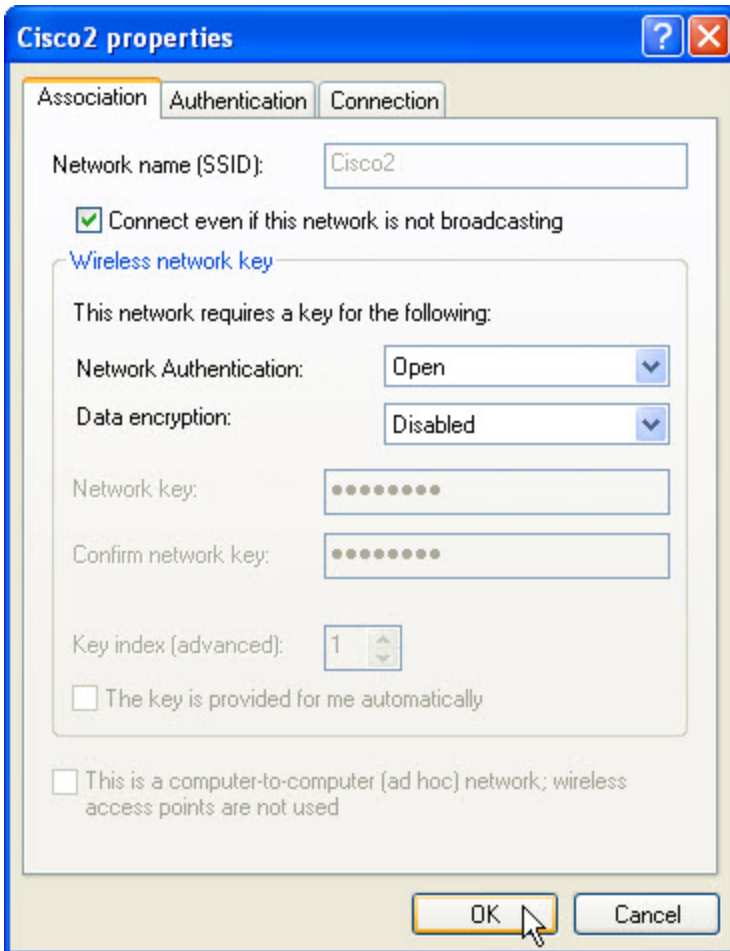
What wireless network(s) are available?

Click **Start > Control Panel > Network Connections > right-click the wireless adapter > Properties > View Networks** tab > select **Cisco# (On Demand) > Properties**.

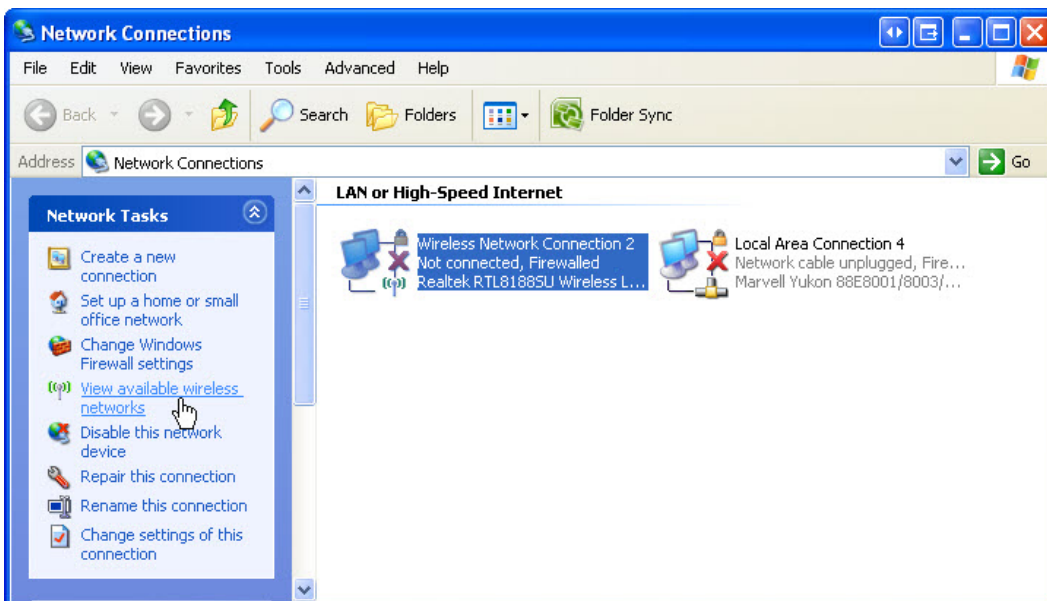


When the "Cisco# properties" window opens, place a check mark in the box next to **Connect even if this network is not broadcasting** > **OK**.

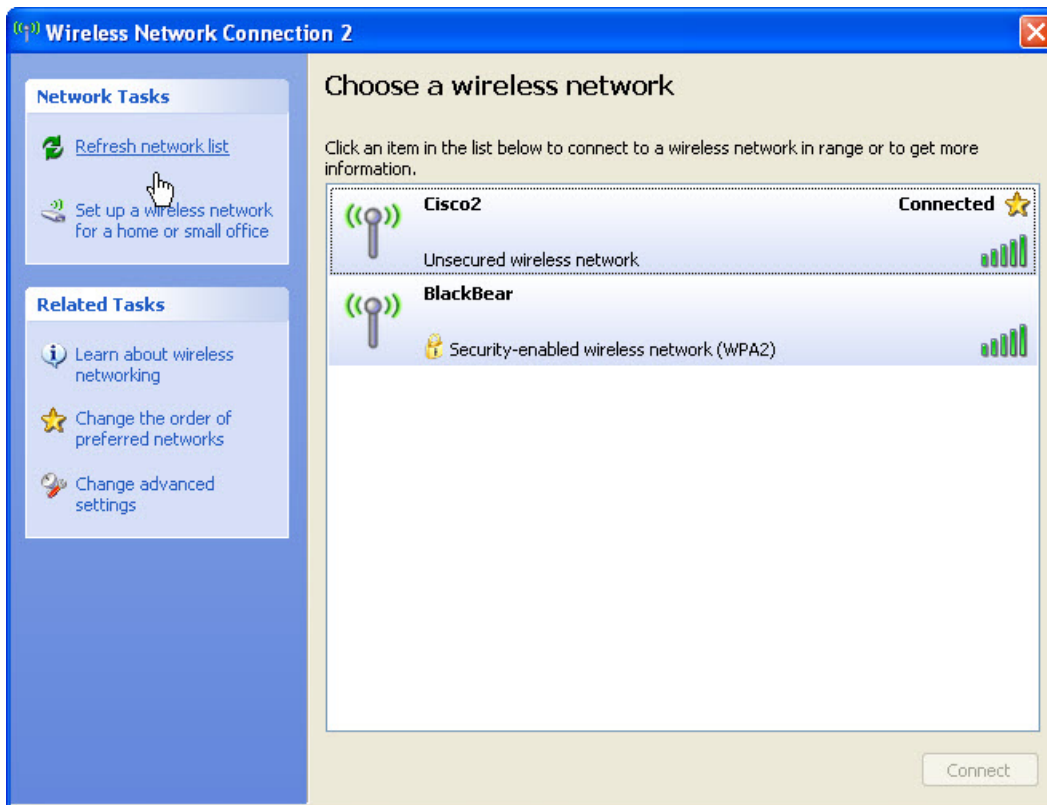
Select **Connection** tab > place a check mark in the box next to **Connect when this network is in range** > **OK** > **OK**.



When the “Network Connections” window opens, click **View available wireless networks**.



Press **Refresh network list** until Cisco# appears in the list.



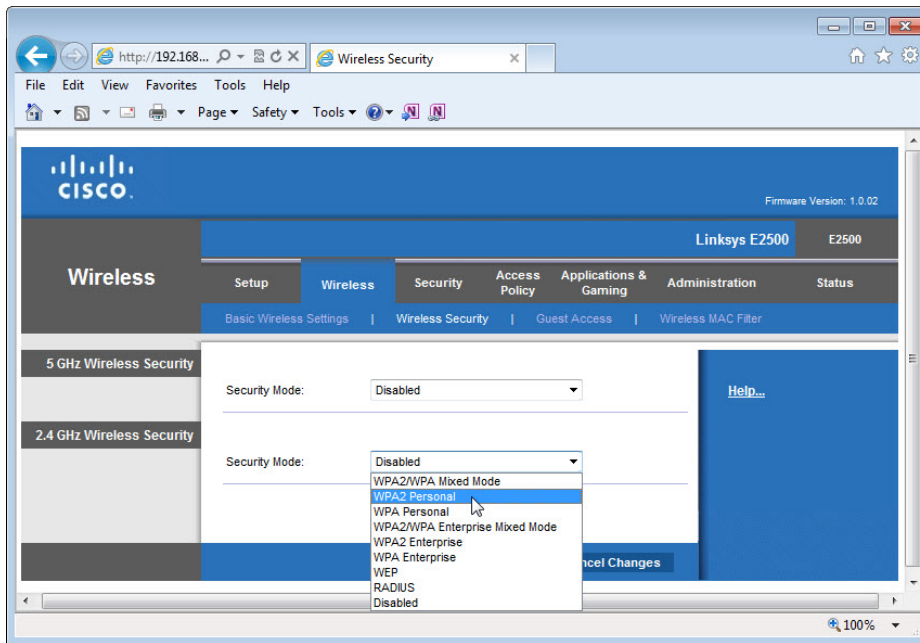
What wireless network(s) are available?

Step 9

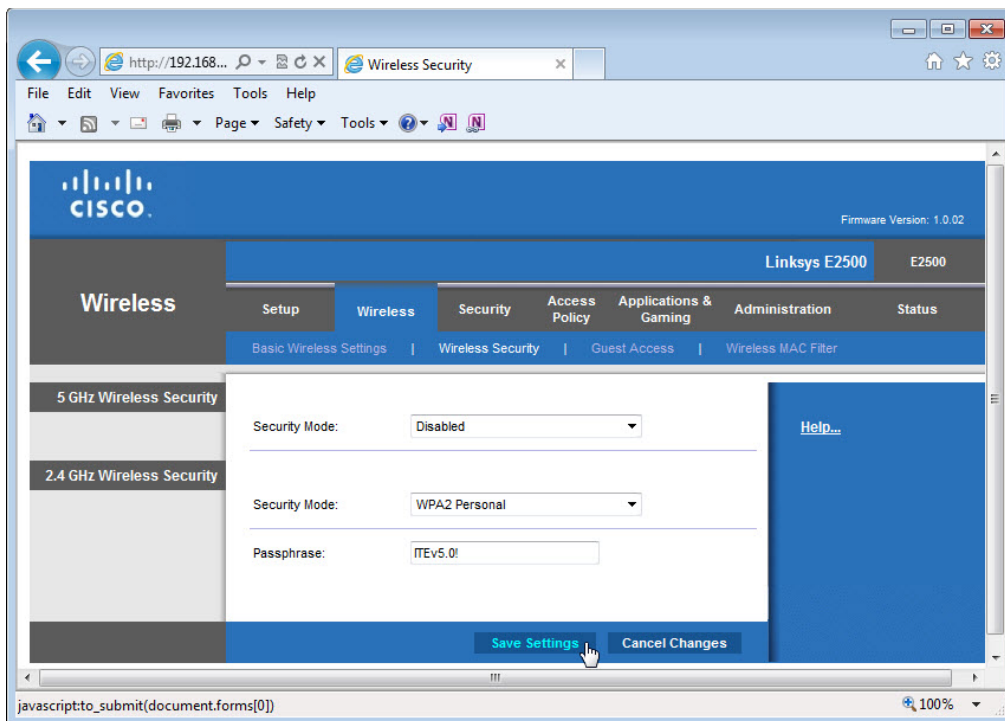
Connect to **cisco#**, where # is the number assigned by the instructor and log into the router.

Use a browser to logon to the router.

Click the **Wireless** tab and then select **Wireless Security**.



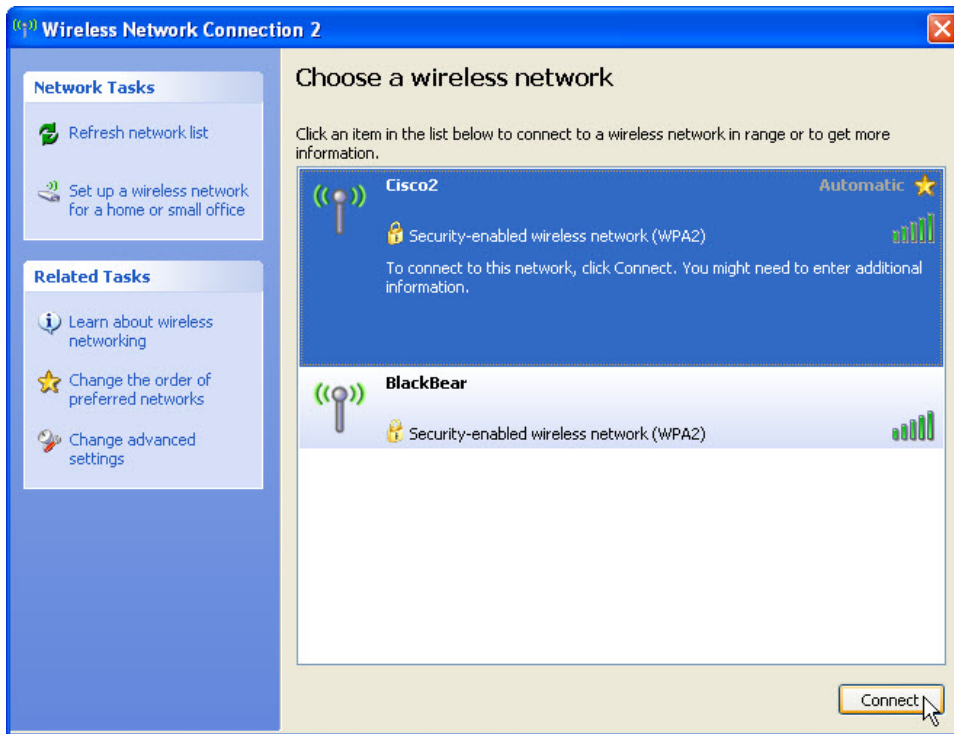
In the Security Mode drop-down box, for the “2.4GHz Wireless Security”, select **WPA2 Personal**.



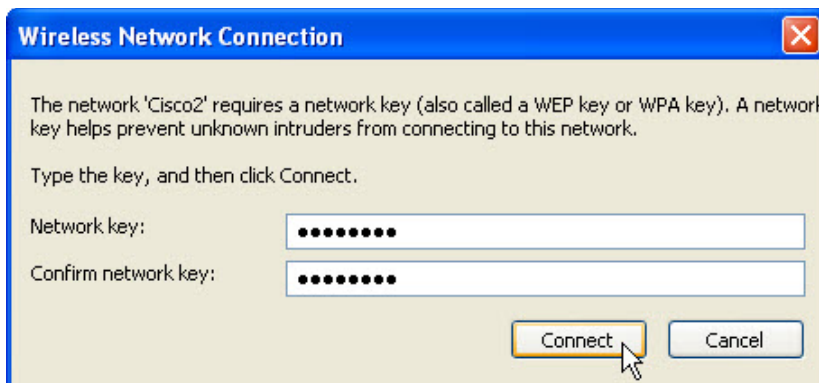
Type **ITEv5.0!** for the Passphrase and click **Save Settings > Continue**.

Step 10

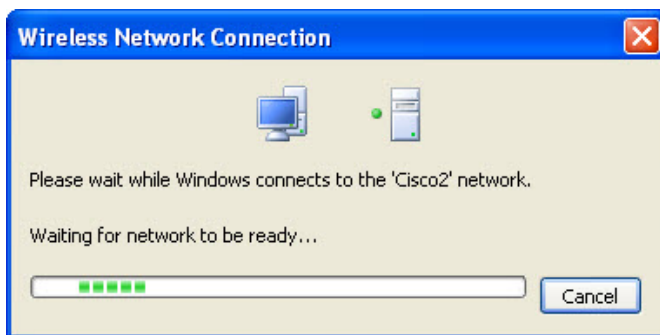
View wireless networks associated with the wireless adapter configured to the computer.



Choose **cisco#**, where # is the number assigned by the instructor, and then click the **Connect** button.



When the security screen appears, type **ITEv5.0!** for the “Network key”, confirm the key and then click **Connect**.



The “Please wait while Windows connects to the “Cisco#” network.” screen appears.

When the screen closes, use a browser to logon to the router

If you cannot access the GUI of the router, contact the instructor.

Step 11

Return configurations to the following settings, unless stated otherwise by the instructor.

Connect the computer to one of the **Ethernet** ports on the wireless router with an Ethernet patch cable.

Router Address Information:

IP address _____ 192.168.1.1 _____

Subnet mask _____ 255.255.255.0 _____

Router name _____ Linksys _____

DHCP Server Setting Information:

Start IP address _____ 192.168.1.100 _____

Maximum number of users _____ 50 _____

Static DNS 1 (optional) _____ blank _____

SSID Values:

Network Name (SSID) _____ Linksys _____

SSID Broadcast _____ Disabled _____

Channel number:

Channel _____ Auto _____

Router Access:

Router Password _____ admin _____

Wireless Security:

Security Mode _____ Disable _____

Close the browser and logoff the computer.