IT Essentials 5.0

6.8.3.8 Lab - Configure Wireless Router in Windows 7

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 7
- 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:
Passphase 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.
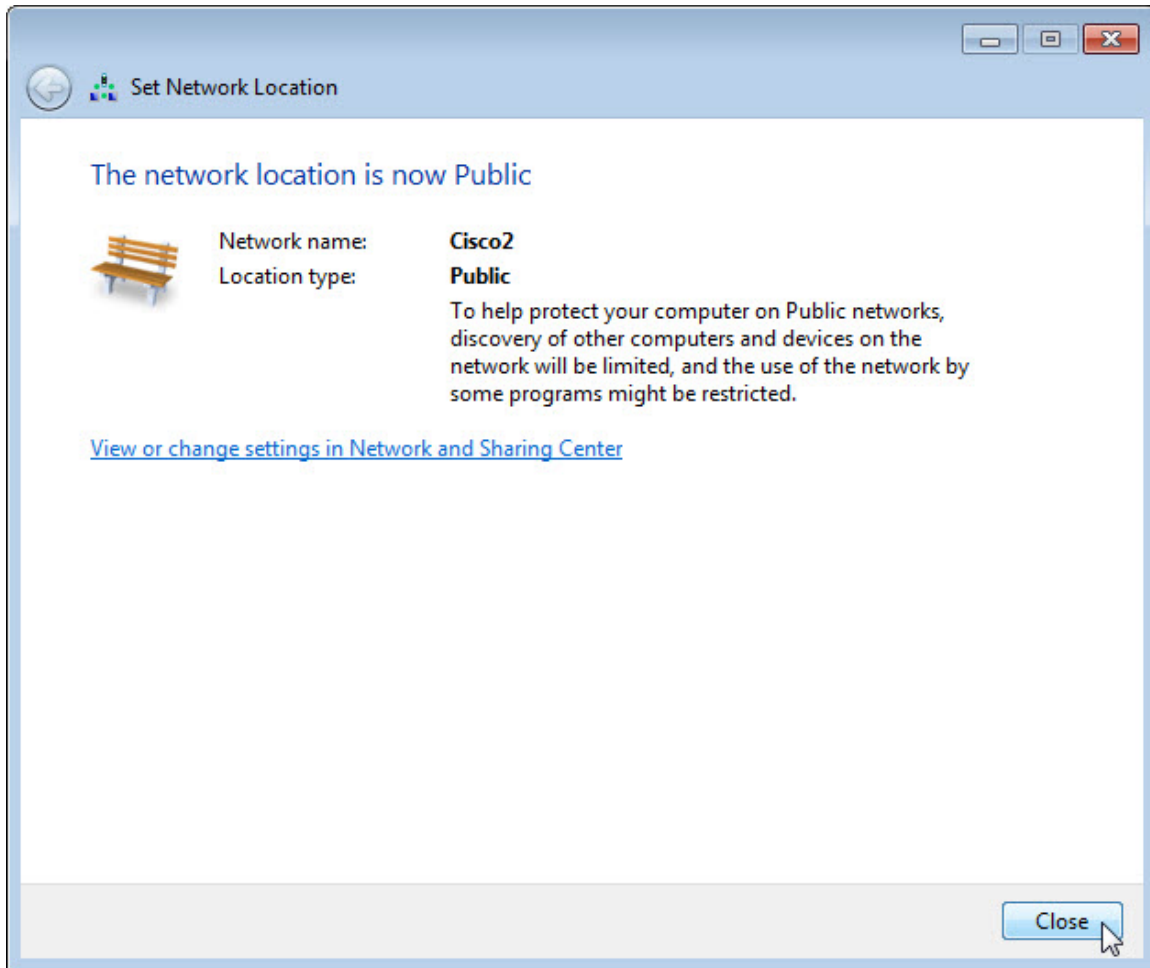
Connect the computer to one of the **Ethernet** ports on the wireless router with an Ethernet patch cable.

Note: If this is the first time connecting to the lab router, complete the following. Follow these instructions to set a network location. This will be explained later in the course.

The "Set Network Location" window opens.
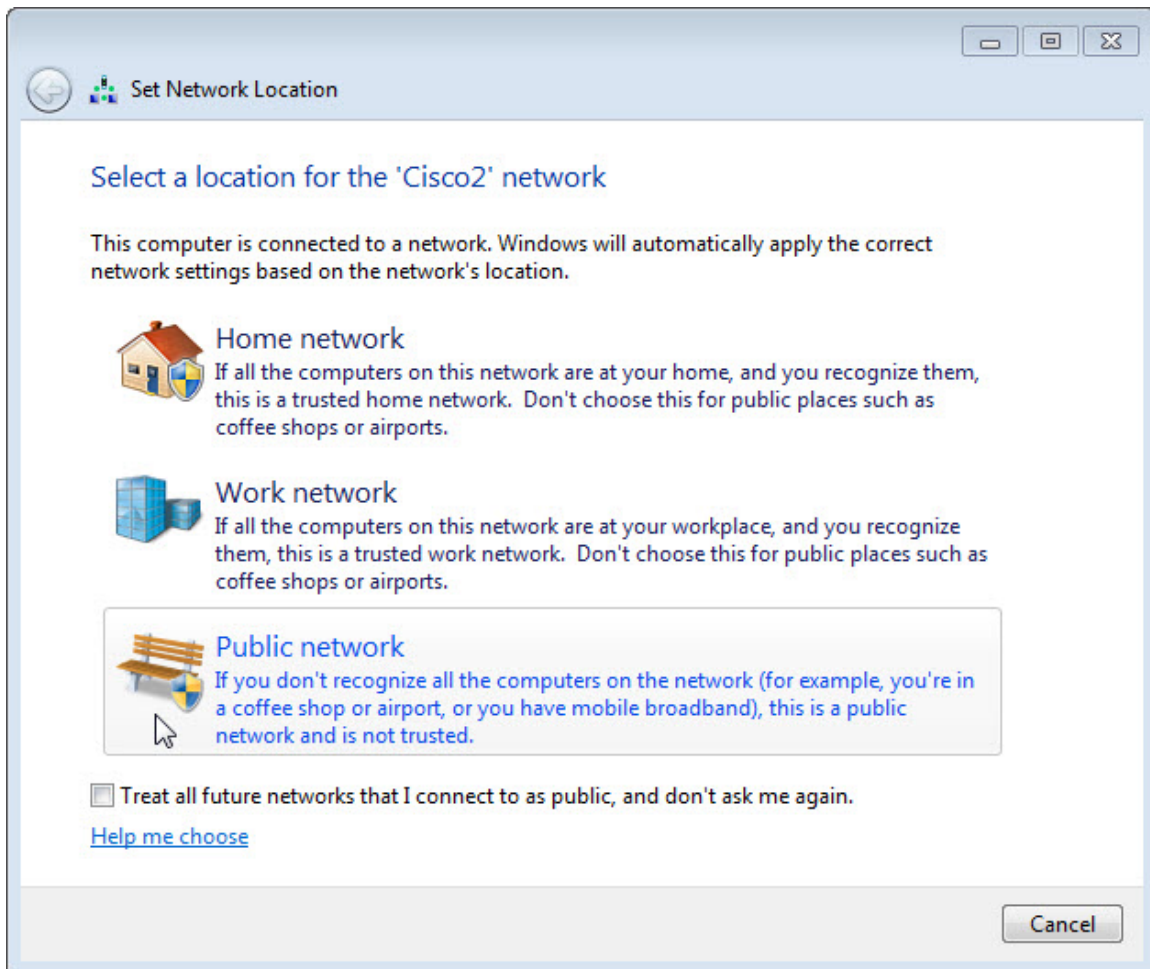
Select **Public network**.

Click **Close** to accept the network location Work.
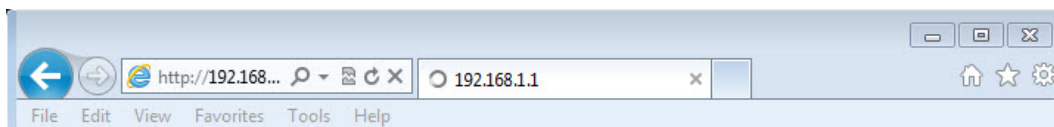
Step 3
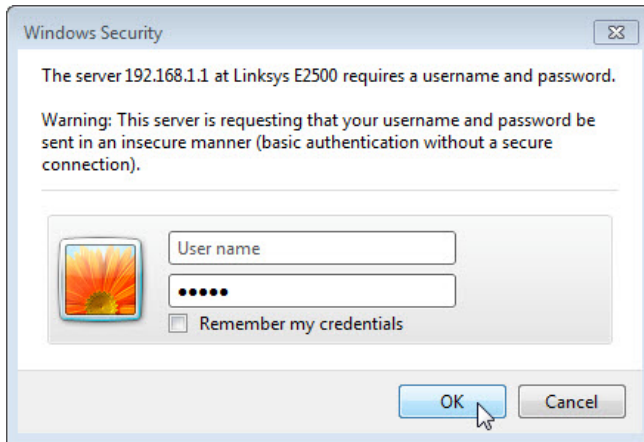
Open the command prompt.

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**.
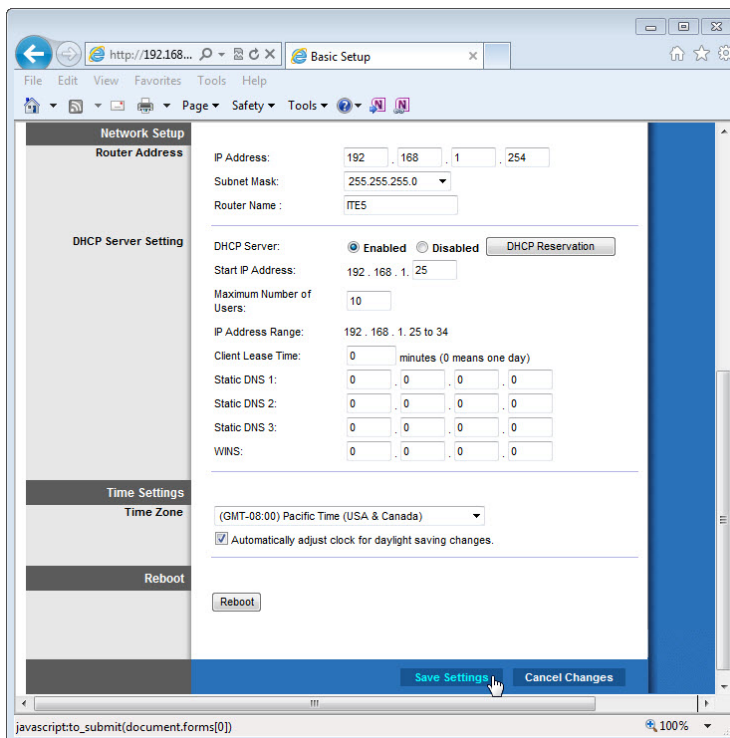

The "Connect to" window appears.

Type the password provided by the instructor in the "Password:" field then click **OK**.
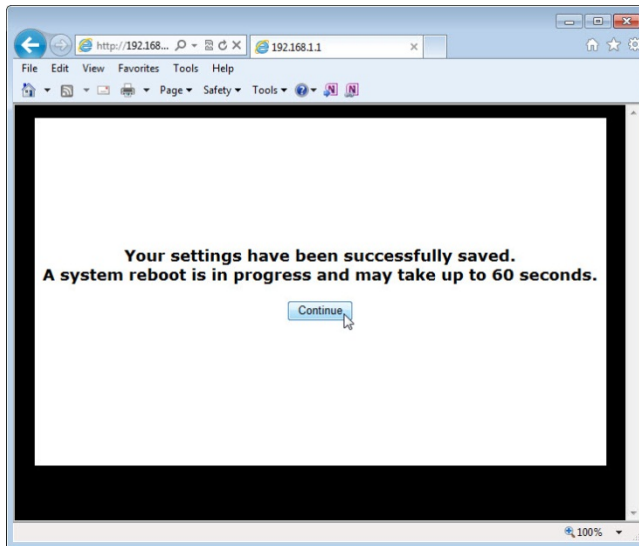
Step 5

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. A system reboot is in progress and may take up to 60 seconds." screen appears.
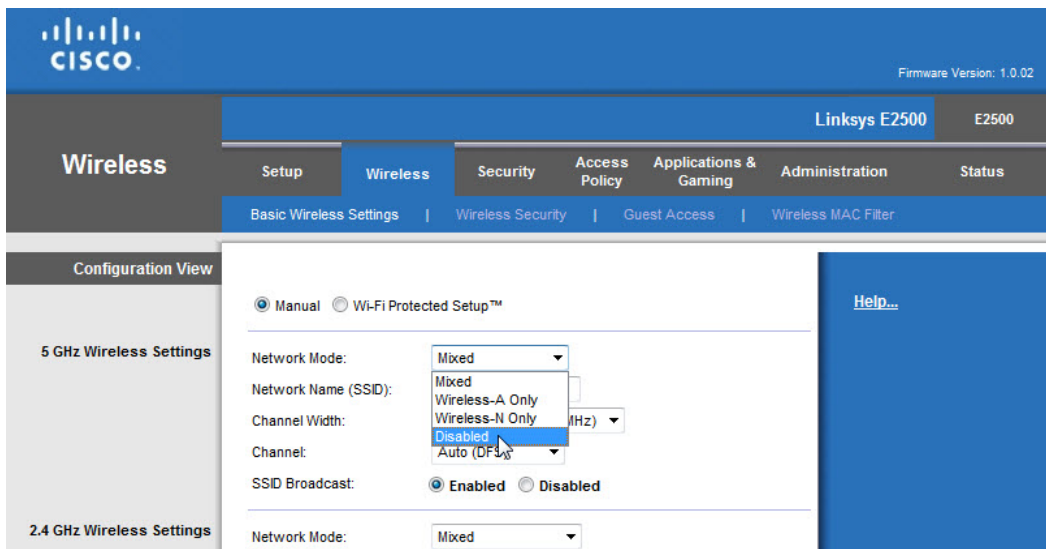
Click **Continue**.

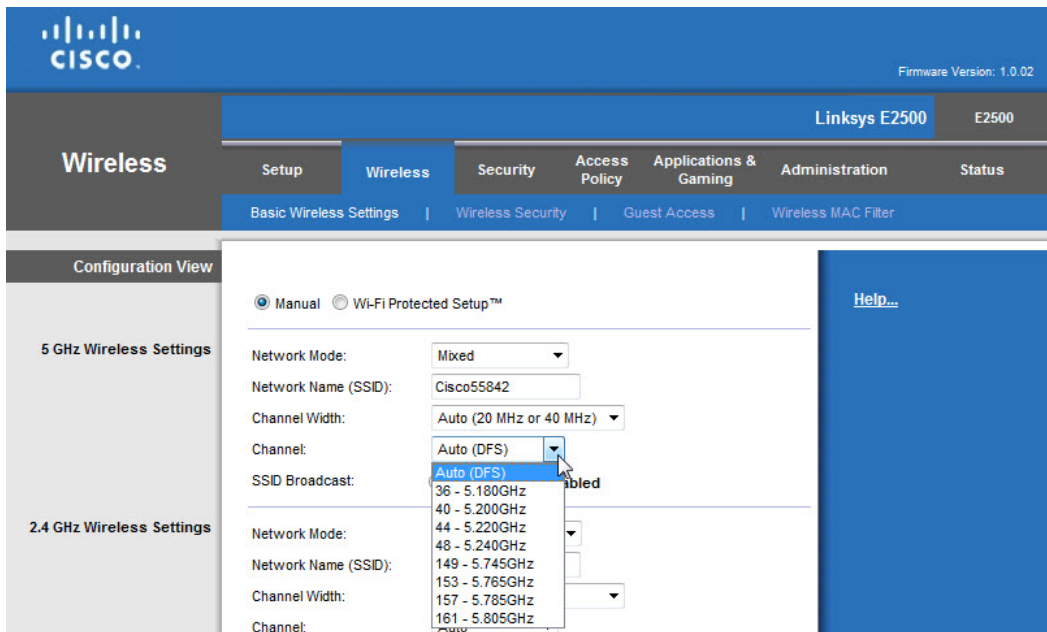After the router reboots, you may need to log back into the router.

Step 6

Click the **Wireless** tab.

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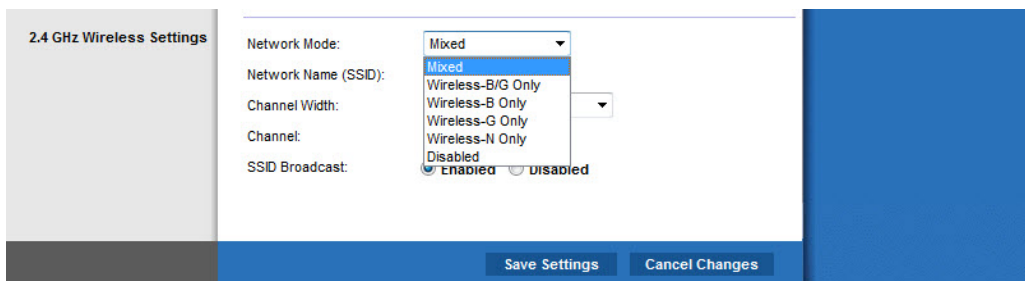

What 802.11 technologies are supported?

Click the **Channel** drop-down menu for the 5 GHz Wireless Settings.
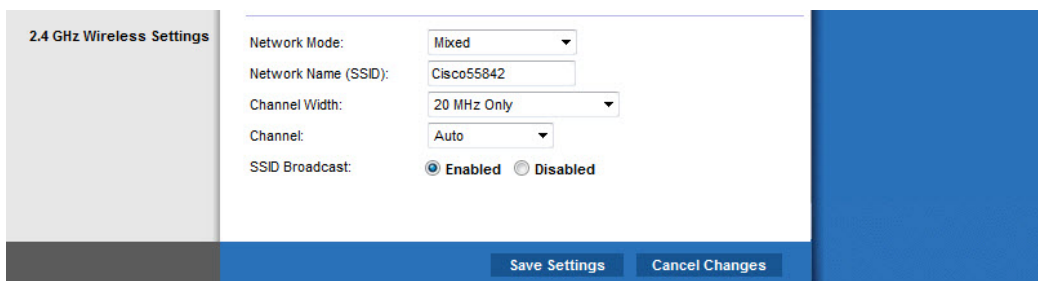
What channels are listed?

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.
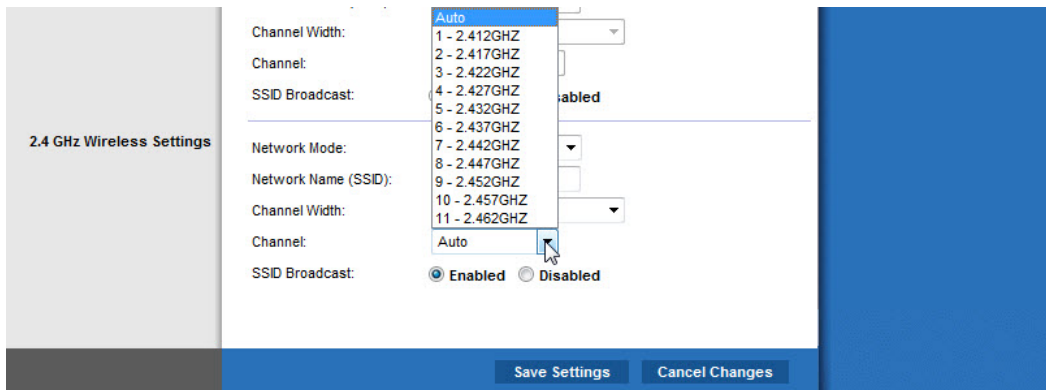

What 802.11 technologies are supported?

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?

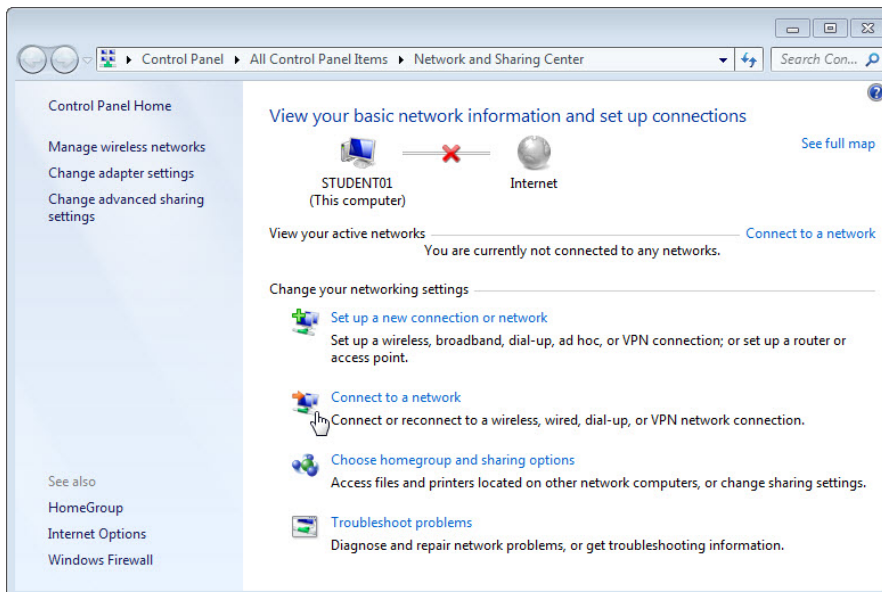Select the Channel number that was provided by the instructor.

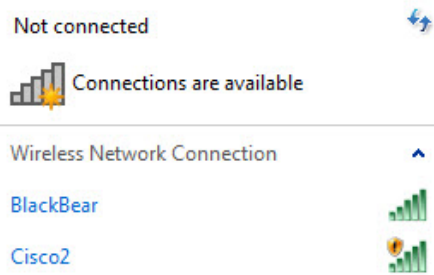Click **Save Settings > Continue** then close the browser.

Step 7

Unplug the Ethernet cable from the computer.

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

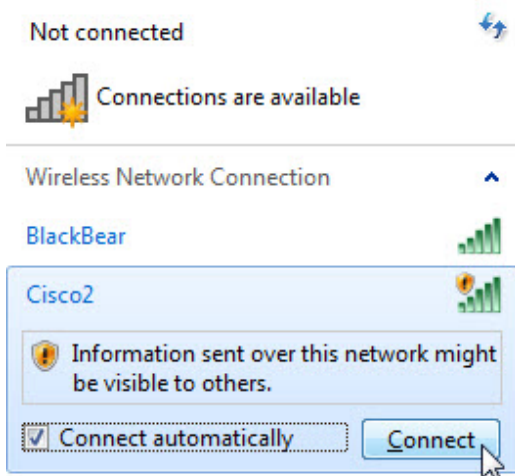Click **Start > Control Panel > Network and Sharing Center > Connect to a network**.

A list of available wireless networks is displayed.

What wireless network(s) are available?

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

When the "Set Network Location" window opens, select **Public network > Close**.

Step 8

Open a browser. Type the IP address of your default gateway in the URL field, and then press **Enter**.
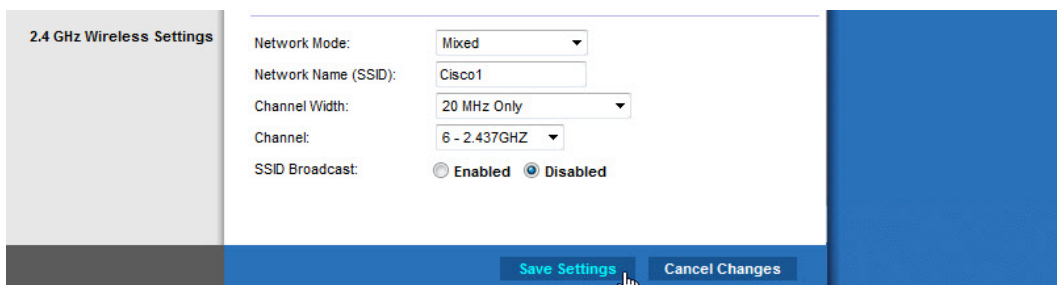
The "Connect to" window appears.
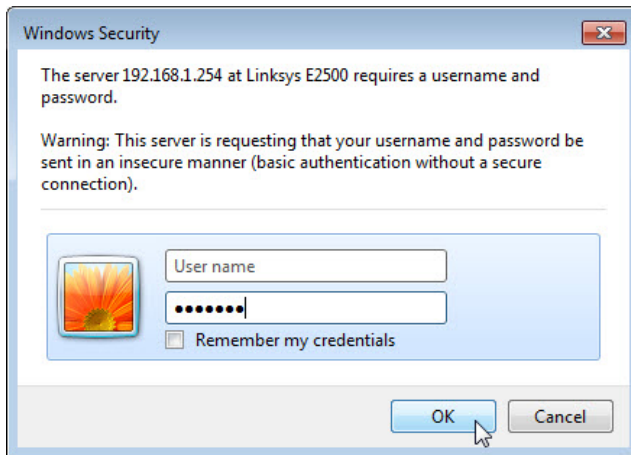
Type the password provided by the instructor in the "Password:" field.

The Setup screen appears.

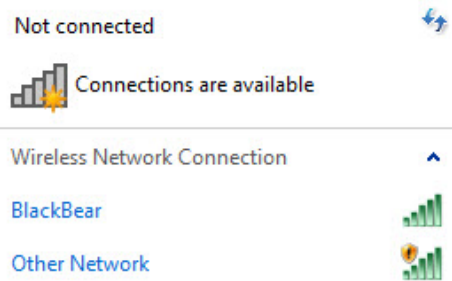Navigate to "Basic Wireless Settings". Select **Disable** for the 2.4 GHz SSID broadcast.

Click **Save Settings > Continue**.

Why would you disable SSID broadcast?

Close all opened Windows: Network and Sharing Center, browser, command prompt, etc.
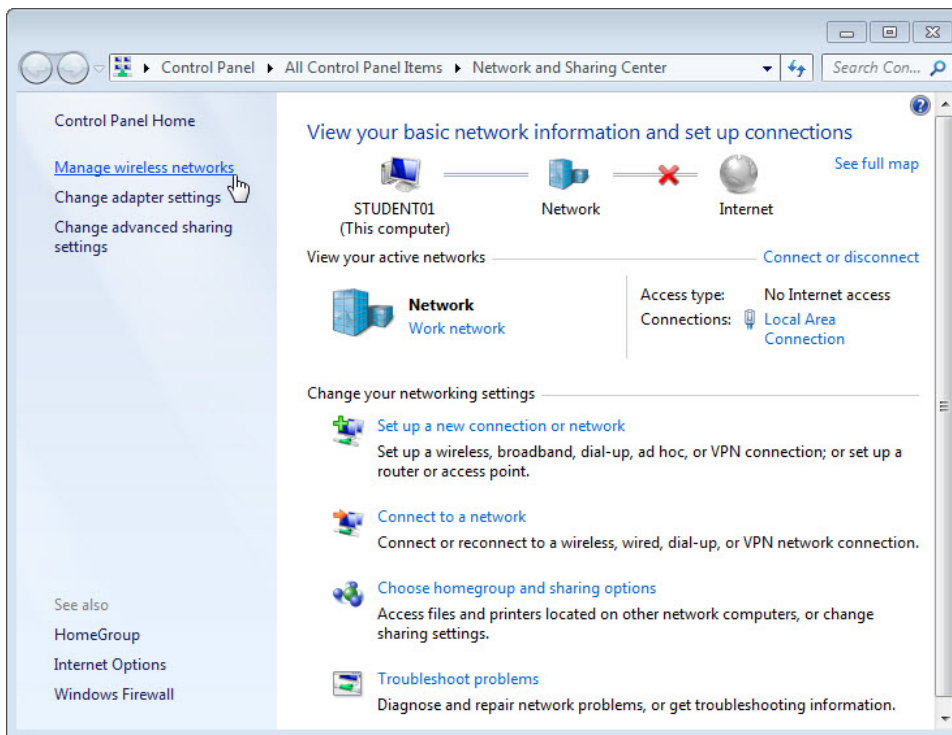
View wireless networks associated with the wireless adapter configured to the computer.
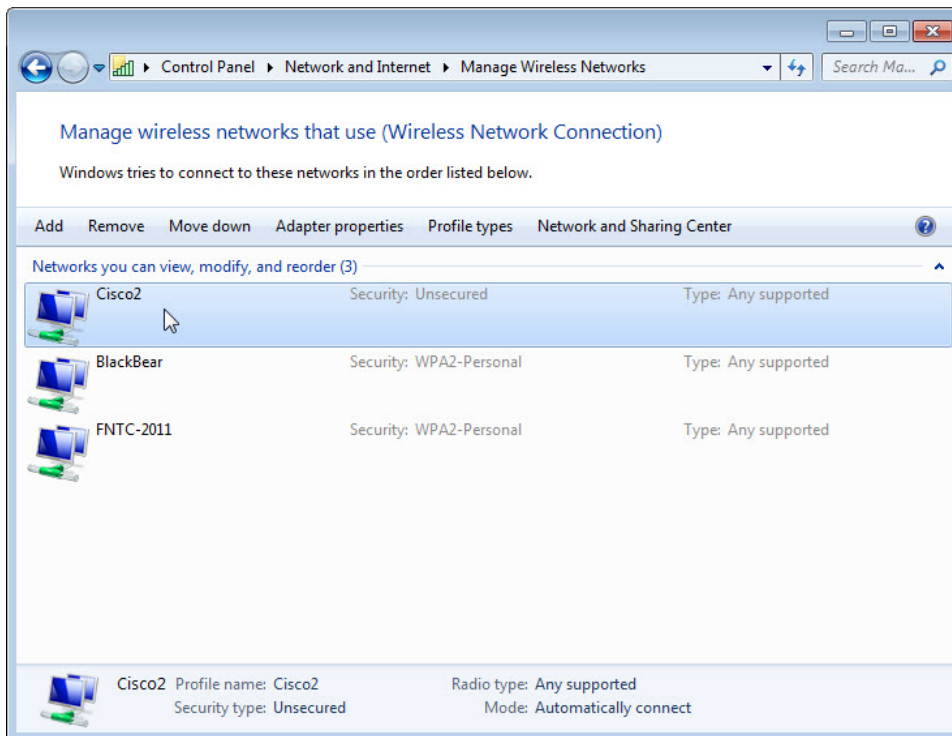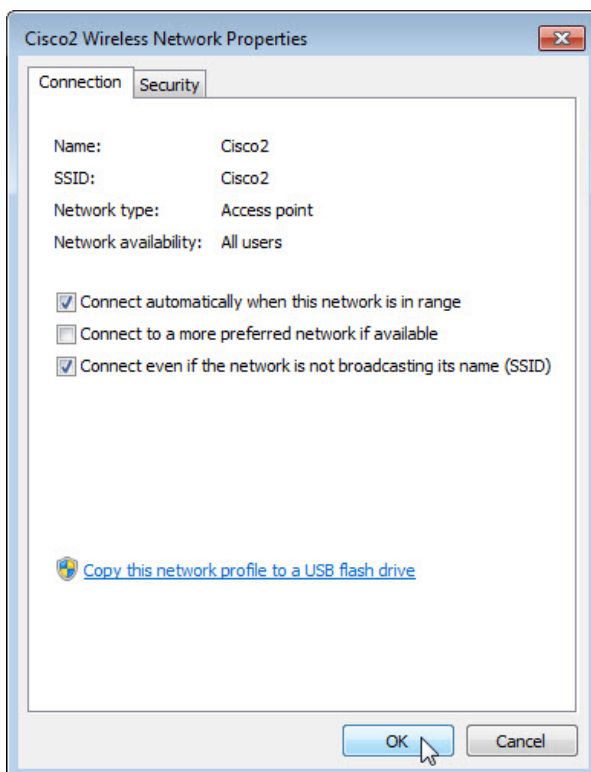
What wireless network(s) are available?

Click **Open Network and Sharing Center**.

When the "Network and Sharing Center" window opens, click **Manage wireless networks**.
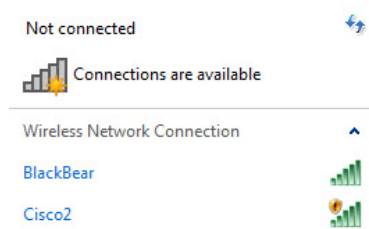
When the "Manage Wireless Networks" window opens, double click **Cisco#,** where # is the number assigned to you.

Select the check box **Connect even if the network in not broadcasting its name (SSID)**, then click **OK**.

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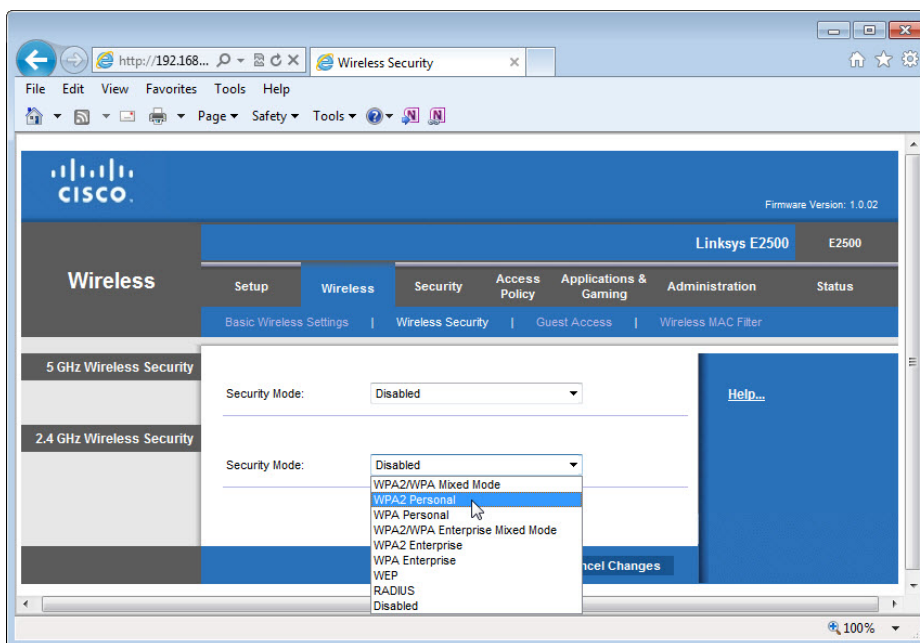

What wireless network(s) are available?
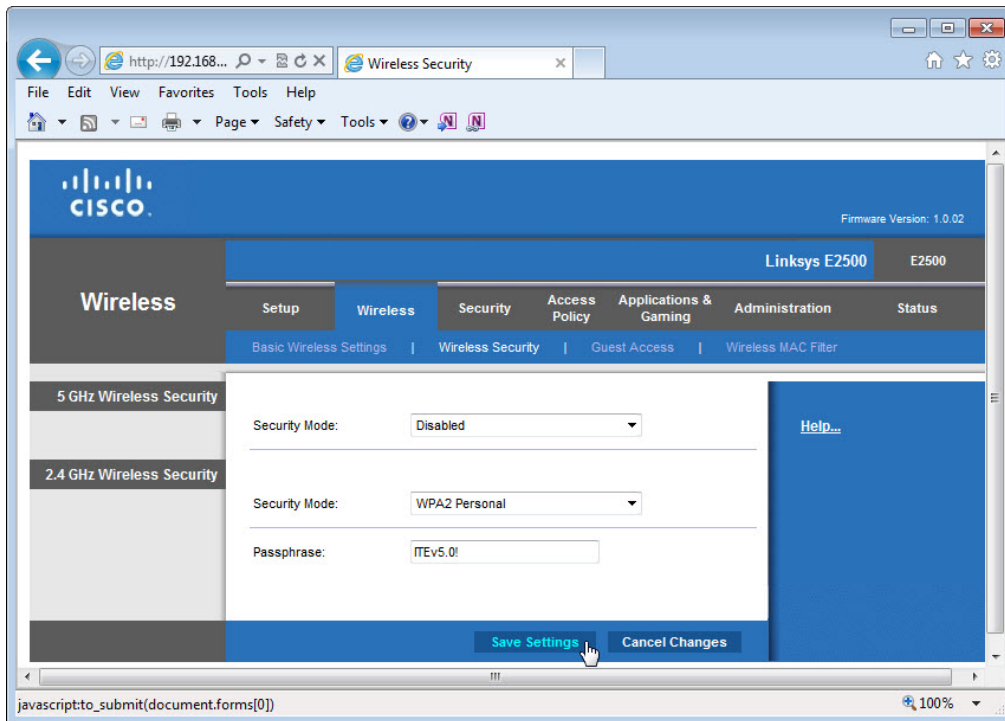
Step 9

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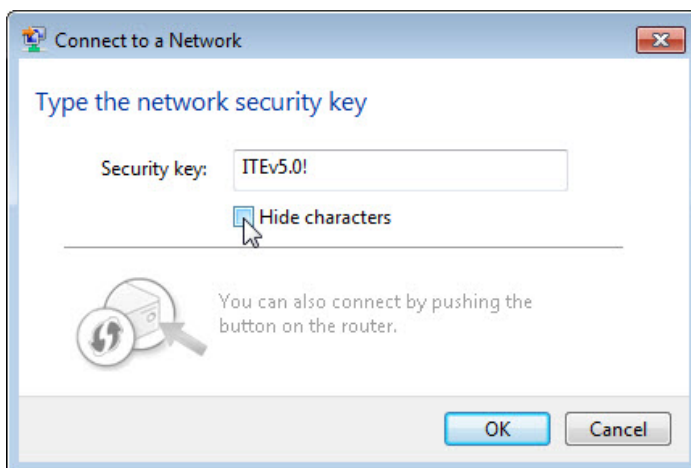
Type **ITEv5.0!** for the Passphrase and click **Save Settings > Continue**.

Step 10

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

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

When the "Connect to a Network" window opens, type **ITEv5.0!** for the "Security key" then click **OK**.

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.