How to configure a wireless router

Your wireless router has documentation explaining how to configure it. There are differences between manufacturers. This document explains how to configure a NetGear router. While the concepts are the same the specifics will be different for each router.

Overview

These are the steps you will take to configure your router

1. Connect an Ethernet cable from your router to your computer.
2. Use your internet browser to log on to your router configuration program.
3. Enter a SSID name.
4. Select a security option
5. Enter a passphrase
6. Save and exit
7. Configure your windows laptop computers for your router.

Connect Cable

Connect one end of an Ethernet cable to your computer and the other end to your wireless router. Connect to any of the four computer 'ports' on the router, not the internet port. The internet port is usually colored yellow.

Browse to Router

Open your browser such as Internet Explorer. Browse to the "IP Address" your modem setup instructions tell you to use. For NetGear it is usually 192.168.1.1. Type 192.168.1.1 into the browser address bar where you normally type something like www.google.com and hit the Enter key.
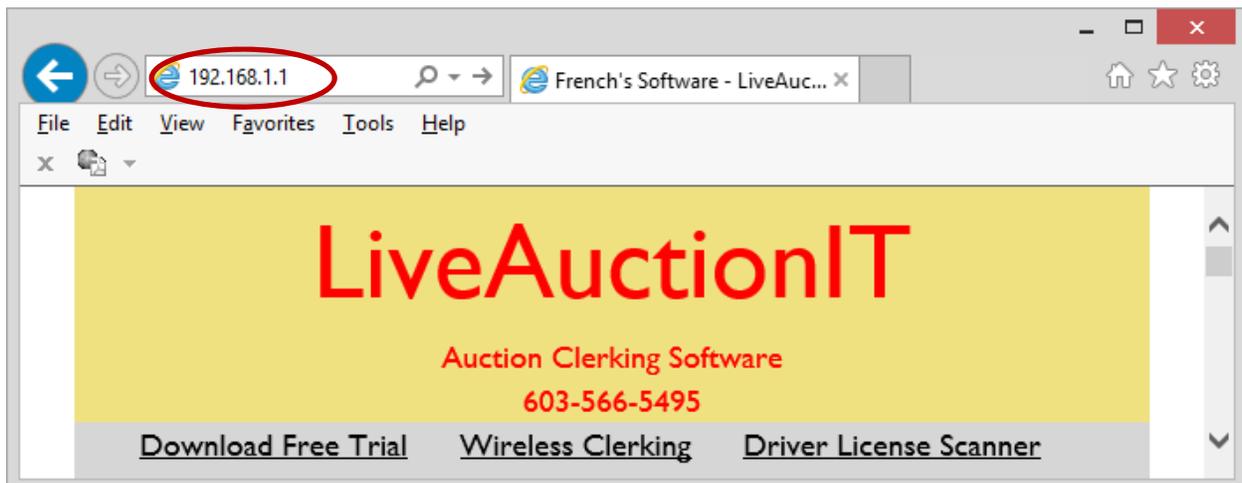
You should then get a logon screen. Type in the default user name and password given in your router setup instructions. (If you have already configured your router previously you may have changed your password in which case enter that one.) The default logon for a NetGear router is User name = admin, Password = admin. This is what you may see using a NetGear router:

After logging on you will now be on a web page that allows you to configure your router.

Configure Wireless Settings

The configuration program lets you configure lots of features of your router but unless you know what you are doing stick with just the wireless settings. NetGear has a link in the left side of the page titled "Wireless Settings". Find that or something similar and click on it. The NetGear page for "Wireless Settings" looks like this:
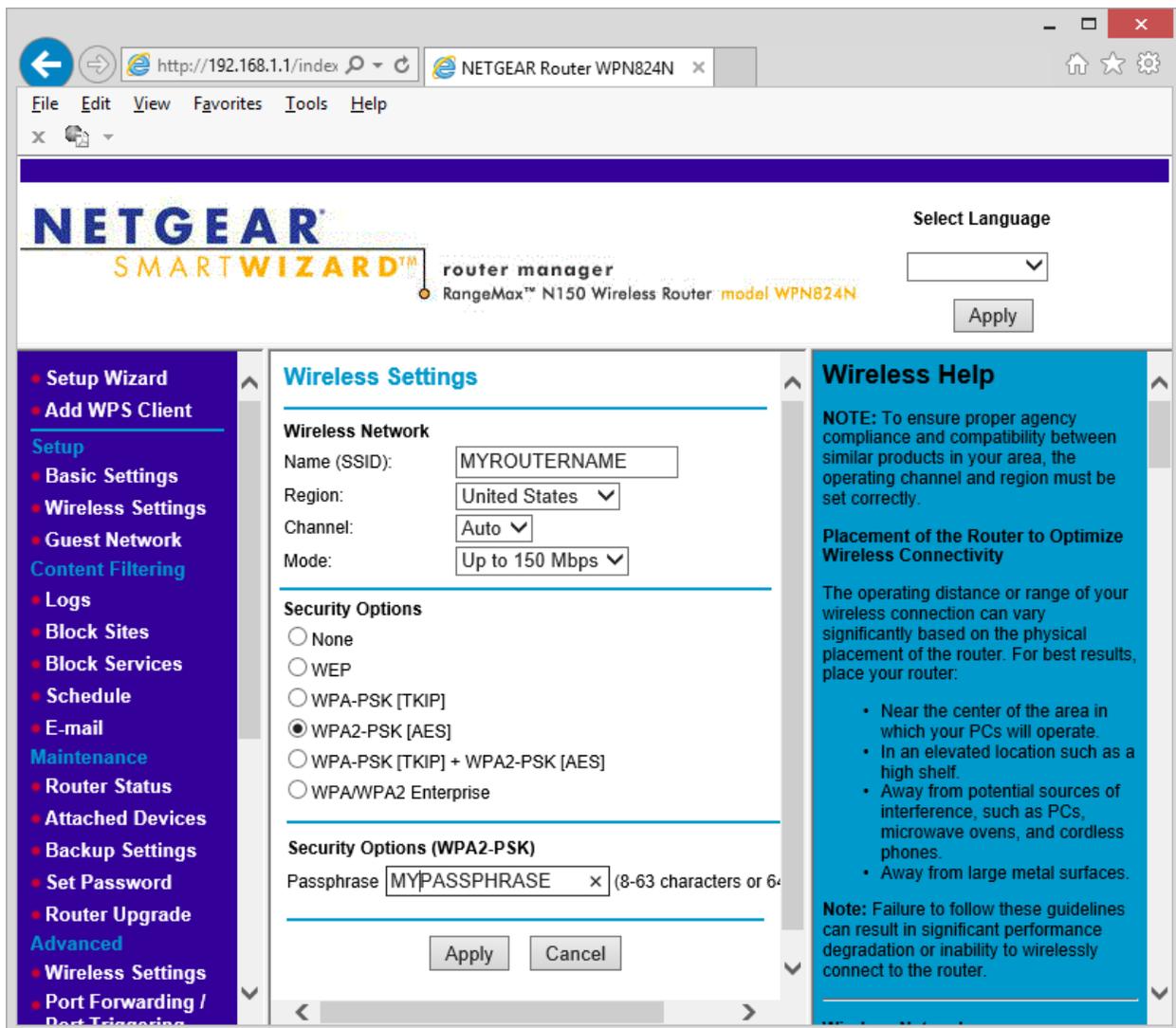
Name (SSID)

This is the name you will see in the Windows Network and Sharing Center. Enter a name that lets you identify and choose this router from Windows such as 'AUCTION'.

Channel

Select 'auto' for channel selection.

Region

Select 'United States' for your region.

Mode

This selects the modem speed. For 'n' model modems if you pick the highest speed you may be shortening the distance the wireless signal will travel. Picking 150Mbps is more than fast enough for this application. The wireless device on your laptop must support

whatever speed you choose also. Older laptops with Windows XP may only support 54Mbps.

Security Options

Your choice is determined partly by the version of Windows on the computers you will be using. You should select 'WPA2-PSK [AES]" unless you know your computers do not support it. If any of your computers use Windows 8 you must select 'WPA2-PSK [AES]". Windows XP and later do support this so it is a safe choice.

Passphrase

The passphrase is a word like a password. Whatever you enter you will also have to enter into your Windows Network Configuration. This is what allows your computers to wirelessly connect to your router and prevents other people from connecting. Whatever you use, write it down so you don't forget it.

Save and exit

Click 'Apply' or 'Save' to save the settings you have chosen. After the router restarts you can disconnect the Ethernet cable.

Configure Windows Networking

From the Windows Control Panel select 'Network and Internet' or right click on the network icon on your Windows task bar and click on 'Open Network and Sharing Center'. You should see the name you just gave your router. Click on the name and then click on 'Wireless Properties'. (The name of the router shown here is 'FRENCHSNG').
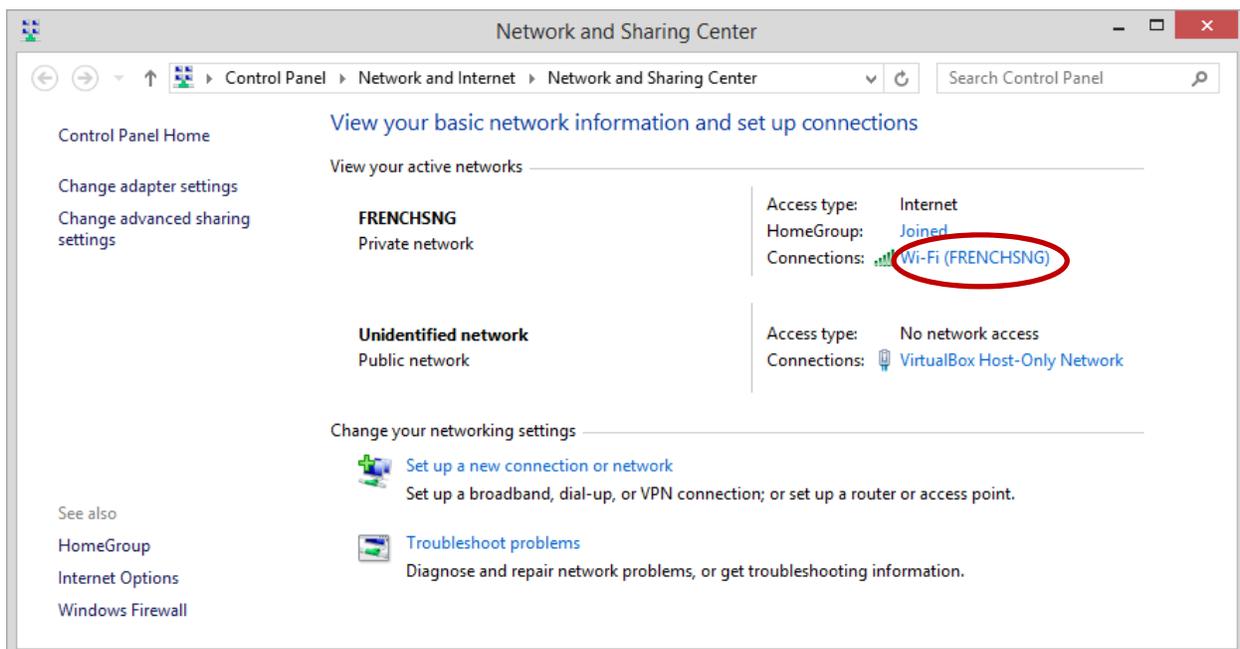
There are different ways to get there other than the Windows Control Panel but you want to open the window shown below.
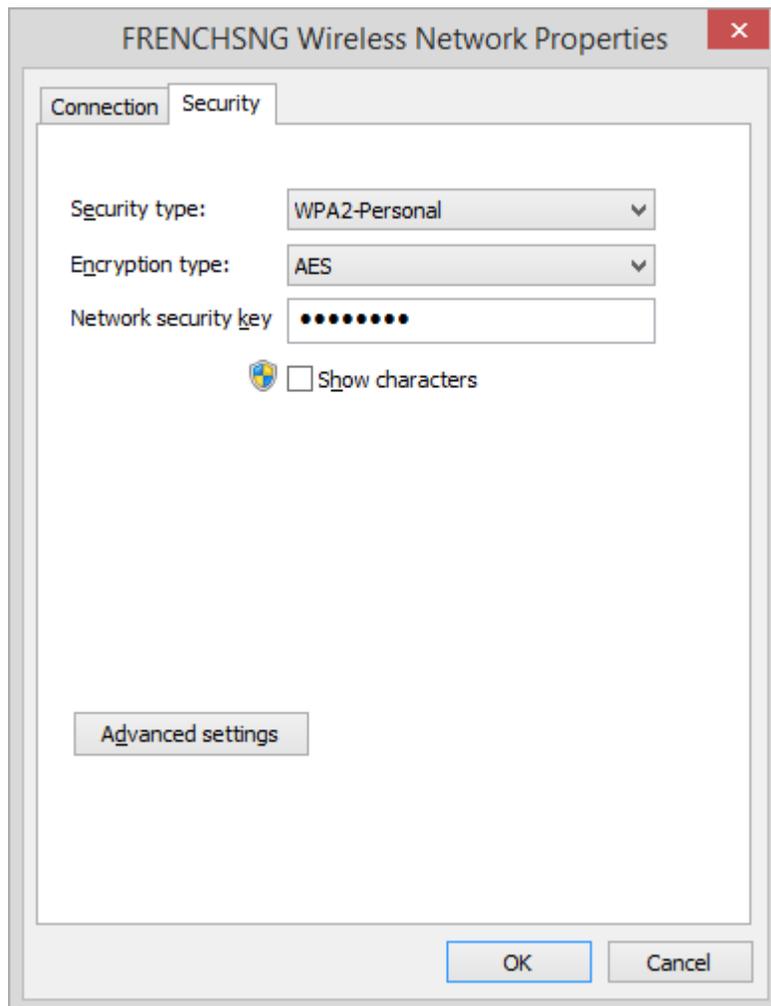

For 'Security Type' select what you configured your modem under 'Security Options' above.

Select the "Encryption Type' you configured in your modem. The example in this document chose AES which is the strongest encryption standard currently used.

The 'Network security key' is whatever value you set as the 'passphrase' in your modem.

Click the 'Connection' tab to show the page below:
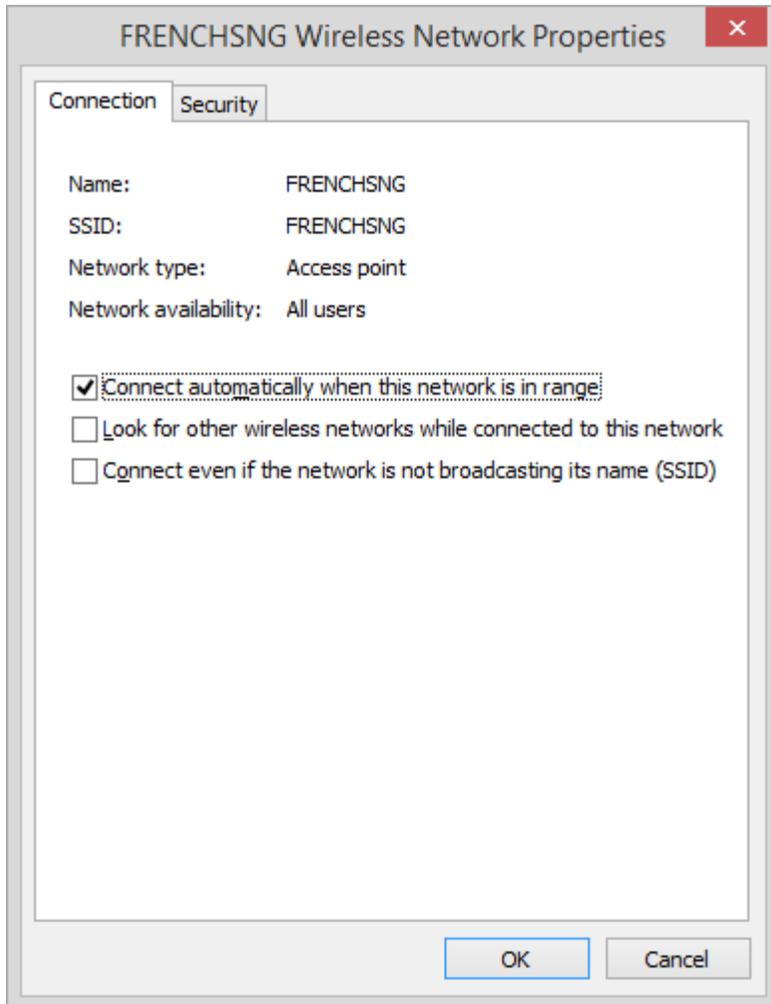
Check 'Connect automatically…' so your computer will automatically connect to your router.

Click 'OK'. To save your settings. Your computer should now connect wirelessly to your router.

Note: You can only connect to one wireless router at a time so if you are already connected to another router you will have to disconnect from that one in order to connect to this one.

Configure Server IP Address

Your router assigns a unique IP Address to your computers when they connect. These addresses are assigned by the router in a 'round robin' fashion and can change every time. You may get the same address the next time you connect or you may not. That is why you need to use GetAddress before the auction to find out what IP Address the router has just assigned.

Some routers like NetGear will let you configure the router to always use the same IP Address for a computer. If you do that you can configure the home page on your user

browsers to browse to that IP Address and not have to use GetAddress to find out what IP Address the router assigned the server this time; it will always be the same. Here is a sample NetGear configuration

1- Logon to the router configuration program.
2- Click on 'LAN Setup'
3- Find the 'device name' of your server; here is it lait-PC.
4- Check the radio button for your server.
5- Click 'Add' to add the computer to the router reservation list.
6- Click 'Apply' to save your changes.

The router will always assign the IP Address shown to that computer.