

## Wireless Connectivity at the Library

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#### Requirements:

- A Laptop or Notebook PC with a Wireless Card
- Knowledge of the specifics of your Laptop or Notebook
- Knowledge of the specifics of your wireless card
- Knowledge of basic networking skills

The Charlotte County Library System has installed a Public Wireless Network that can be accessed from within any Library Branch. This network is IEEE 802.11b/g compatible and uses industry standard networking protocols. Any wireless laptop can usually access this network just by powering up your laptop within the Library.

Most wireless cards will detect the SSID broadcasts of the network when you start your laptop computer and might ask if you want to connect to the "Public" network.

Some wireless cards will automatically configure themselves to connect to the "Public" network.

If your wireless card does not recognize the broadcasts from our wireless antenna, you may have to manually configure it to connect to an SSID named "Public".

**SPECIAL NOTE :** Library staff are NOT permitted to touch, adjust, or configure your equipment. This is your responsibility and the Library will not be responsible for setting up or adjusting your equipment.

#### Making the Connection

Wireless Enabled notebooks and laptops can send and receive data indoors and out – anywhere within the range of a wireless LAN hotspot. There are actually two steps to making a connection. The first is to have your notebook or laptop "talk" to the hotspot, which means that the hardware and hotspot must recognize each other. This should happen automatically as long as your wireless hardware is turned on. On most notebook or laptop models, you will see some sort of signal icon on the bottom right hand corner of your screen or a lit indicator on the notebook or laptop itself, which will give you feedback for "On" and signal strength (a red screen means your radio is Off; a green screen indicates it is On).



You can also see the quality of the signal by clicking on the radio icon (may vary by system):

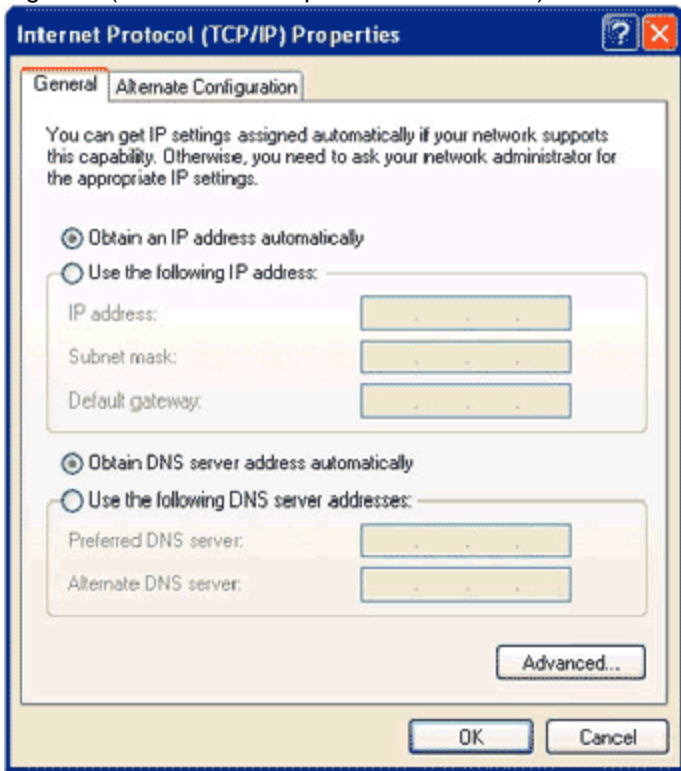


#### Troubleshooting Tips

Some settings occasionally need to be changed before a wireless connection to the Web is possible. The following tips can help simplify your connection to a public hotspot.

- **IP settings.** If your laptop is configured for a static IP address, it must be configured at a public hotspot to accept a dynamically assigned IP address. This will be different for Windows XP\* and Windows 2000\*. For Windows XP\*, double-click on "Network Connections," right-click on the icon for the wireless device that is installed on your laptop, then select "Properties." (Note: If an IP address is assigned, make a note of the address so you can reset it later.) Select "Internet Protocol (TCP/IP)," then click on "Properties." Ensure you've selected "Obtain an IP address automatically." (See Figure 3.)

Figure 3 (This is an example of Windows XP\*)



- **Browser homepage.** Your browser homepage may be configured to an internal Intranet site. At public hotspots, you must browse to an external site in order to be on the Internet.
- **Signal detection.** If you can't detect a signal but you know there is supposed to be a wireless network in your vicinity, check to make sure the wireless radio is turned on. Double-click on the wireless network icon on the toolbar at the bottom of your screen. Now check the signal strength and quality. Do this by checking the Wireless Network Status. Click on this icon and choose the "status" tab. Click the button marked "scan" to check for a wireless network manually. This box will also provide information on link quality and signal strength. Our 802.11b/g access points have a range of about 200 feet.

#### Advanced Tips

- **Proxy settings.** Your network connection may be configured to work through your corporate proxy server. If that's the case, the proxy settings must be disabled during the hotspot connection, then re-enabled for Web surfing after connecting to your corporate network via the VPN application. Finally, the proxy settings must be disabled for logging off the public hotspot, and then re-enabled when you are back at the office. You can do this by going to "Tools" in your browser and selecting "Internet Options," then "Connections," then "LAN Settings." Under "Proxy Server," choose "Automatically Detect Settings" and then be sure to deselect "Use automatic configuration script." (Contact your corporate IT department if you have additional questions.)
- **Preamble setting.** In rare cases, you may need to adjust your preamble setting. From your wireless network connections icon, click on "Properties," then go to "Configure" at the top right. Select the "Advanced" tab, then select "Preamble Mode" under "Properties." Under "Value" on the right, select "Auto Tx Preamble." Some wireless cards do not do a good job of auto-detecting the preamble setting. If setting the preamble to "auto" doesn't work, try specifying a preamble length. If you do not know the preamble length being used at the site, first try "long", since this is most common, then "short" if that doesn't work.