Configuring Your Network Connections

The following section will guide you in **configuring the wired and wireless networks** on your laptop for connectivity throughout the campus. After registering your laptop, the manual will also show you how to connect to the Law School’s shared network resources, such as shared folders and printers.

The following screenshot illustrates an **Ethernet (or patch) cable** which has been installed in the appropriate port of a laptop (the location of Ethernet ports will vary with every computer).

The patch cable looks similar to a phone cable (see below), but larger and wider. **Do not insert a phone cable into an Ethernet port** or you may cause unintentional damage to your machine.

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**Part 1: Confirming That Your Connections Are Enabled**

1. **Click Start.**

2. **In the Start Search field, type: ncpa.cpl**

3. **Press the Enter key.**

4. **You are now in the Network Connections screen.**

5. **You will normally have, at least, two connections available: a Local Area Connection and a Wireless Network Connection.**

   **Others may appear, such as Bluetooth connections, WAN connections, VPN connections, etc. You may ignore these for the purposes of this manual.**
6. Take a moment to look at the first screenshot, to the right. If either your Local Area Connection or Wireless Network Connection is disabled, **enable** them now.

7. To **enable** a connection, simply **right-click** the connection’s icon and **left-click** **Enable**.

8. Since we have not yet registered your laptop, both the Local Area Connection and Wireless Network Connection icons may appear with a red ‘X’ or with a yellow triangle with an exclamation mark inside (!). This is fine for now. Just be sure that both connections have been enabled for the time being.

9. Leave the **Network Connection** window open.

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**Part 2: Configuring the Local Area Connection (Ethernet or Wired)**

1. **Right-click** the Local Area Connection.

2. **Left-click** **Properties**.

3. The **UAC** dialog box may appear. Press **Continue**.

4. First, click once on **Internet Protocol Version 6**, and then click on the **Properties** button, below.

5. The **Properties** window will appear. Be sure that your computer is set to:
   - Obtain an IPv6 address automatically
   - Obtain DNS server address automatically

6. Press **OK** to proceed.

7. Repeat these steps for Internet Protocol Version 4, making sure that it is set to obtain an IPv4 and DNS server address automatically.

8. When you are finished, press **OK** until you return to the **Network Connections** window. Leave it open.
Part 3: Configuring the Wireless Network Connection

1. You should still have the Network Connections window open. If not, bring it back up (step 1 to 3 on page 7).

2. Right-click the Wireless Network Connection icon and then left-click on Properties.

3. The UAC dialog box may appear. Press Continue.

4. Repeat steps 4 to 6, on page 8, to ensure that you are obtaining your IPv4 and IPv6 addresses automatically, as well as, obtaining the DNS server address automatically.

5. Press OK, after you have completed these steps.

6. Once you return to the Network Connections window, close the window and return to the Desktop.

Part 4: Adding Wireless Networks

1. Left-click the icon, once. It is located on the lower-right corner of your screen, by the clock. The Network icon may appear like or .

2. Click Network and Sharing Center.
3. In the Network and Sharing Center window, look to the upper-left portion of the window where the blue Tasks bar is located.

4. Click Manage wireless networks.

5. Click the green Add button.

6. Click on Manually create a network profile

7. Network Name: Columbia University – Law

   Note: There should be a space before and after the hyphen (-).

8. Security Type: No authentication (Open)

9. Check the box for Start this connection automatically.

10. Click Next.
11. You should get a window saying that you have
Successfully added Columbia University – Law. Press Close to proceed.

12. When you return to the Manage Wireless Networks screen, click the green Add button, again. This time, enter the following information:

Network Name: Columbia University

Security Type: No authentication (Open)

Check the box for Start this connection automatically.

Click Next and then Close.

13. When you return to the Manage Wireless Networks screen, you will see all your recently added connections on the list. Arrange the connections so that:

Columbia University – Law is at the top

Columbia University is below

To do so, highlight a connection by clicking it once and then click the Move up or Move down buttons to arrange them accordingly.

14. Close the window when you are finished.

Your computer may now try to automatically detect and connect to one of the networks you have just added (most likely, Columbia University – Law, if you are in Jerome Greene). Since you have not yet registered, this will fail and a bubble message may appear (by the clock on the lower-right corner of your screen) saying that you have Limited or no connectivity to the wireless network. Ignore this for now.
Part 5: Gathering Information

1. **Left-click the** icon, once, on the lower-right corner of your screen, by the clock. (Your icon might also look like this or, like this. Left-click it no matter what it looks like.)

2. **Click** Network and Sharing Center.

There will normally be **two connections** for you to view: one for your **Local Area Connection** (also known as Ethernet or wired) connection, and one for your **Wireless** connection. (see the circled portion of the screenshot).

First, let’s find the **MAC** (or Physical) address of your **Local Area Connection** connection. If you do not see this connection, you may need to plug in an Ethernet (patch cable) into your laptop’s Ethernet port. If you do not have a patch cable, continue to **Step 7**. You can register your **Local Area Connection** at any time.

3. **Click the View Status link to the right of your Local Area Connection** (NOTE: it does not matter if the number you see at the end – in this case ‘3’ - is different from the one in this screenshot).

4. **Click the Details button near the middle of the Status window.**

5. **Find the Physical Address and write it down** (a space for this has been provided below on page 13, Step 10).

6. **Press Close. Press OK to close the Local Area Connection Status window.**
Now we will locate the MAC address for your **Wireless Network Connection**.

7. **With the** Network and Sharing Center window still open, **click the View status link for your Wireless Network Connection.**

8. **Again, click the Details button.**

9. **Find the Physical Address for your wireless connection and write it below, in Step 10.**

10. **Enter the Physical Address(es) here:**

    __ __--__ __--__ __--__ __--__ __--__ __

    LOCAL AREA CONNECTION

    __ __--__ __--__ __--__ __--__ __--__ __

    WIRELESS NETWORK CONNECTION

11. **Write down the name of your laptop’s manufacturer** (eg. Dell, Lenovo, Toshiba, etc.)

    ___________________________

12. **Write down the model of your laptop** (eg. Inspiron 1501, Thinkpad T60, Satellite Pro, etc.). This information can usually be found on some portion of the screen, above your keyboard, or underneath the machine.

    ___________________________

13. **Close all open windows.**
You will need to find a computer with an **active connection to the Internet** to continue.

**Configuring DURING the Laptop Configuration Session**

If you configuring your laptop during the **Orientation Session**, please proceed to the **back of the classroom** where you will find computers for this purpose. You will need your **Columbia Law School login and password to sign into Lawnet** and proceed with the Registration.

**Configuring AFTER the Laptop Configuration Session**

Login to one of the computers in the Law School labs to proceed.
Part 6: Registering Your Computer in Lawnet

1. Go to the following website. www.law.columbia.edu/lawnet

2. Click on the “Sign In” button on the far right hand side of the web page. On the following page, Enter your Law School User Name and password, and then click Login.

3. Click on the “My Services” tab to expand the dropdown menu. A menu will appear, and you should select “Register Ethernet Card” from the “Information Technology” heading.

4. You will need to refer to page 13 for the information being requested.

   Card Address: This is the Physical Address you recorded in Step 10, on page 13. Enter the 12 characters WITHOUT the dashes.

   Operating System: Select Windows Vista, as well as your specific version (e.g. Home, Business, Ultimate, etc.)

   Workstation Manufacturer: Enter the information for Step 11, on page 13.

   Workstation Model: Enter the information for Step 12, on page 13.

When you have entered all the required information, click Register.

5. You will see this confirmation screen if successful.

6. Click View Current Registration

7. Check to make sure that the Card Address you just entered matches your Physical Address. If you have made a mistake, check the box next to the Card Address and press Delete. Repeat step 4, on this page and correctly enter your information.
8. If you have a second Physical Address you need to register, click Register New Card.

9. Repeat Step 4, on page 15, entering the second Physical Address on page 13. Aside from the Physical Address, everything else is the same.

10. Once all your Physical Addresses have been registered, click the Sign Out button and proceed to the next page.

- Please wait for **5 to 10 minutes** for the Registration to complete on the server.
- After 10 minutes, **Restart** your laptop.
- The network icon might have changed to , from either or . Don’t worry if it does not. We will configure your wireless connection in a few moments.

**Quick Key of Network Icons**

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Network Icon 1](image1) | **No connection is currently available**  
(wireless networks may be available, but the icon must be clicked to find out) |
| ![Network Icon 2](image2) | **You have “Limited or no connectivity.”**  
Your wireless and/or wired connections are attempting to find a way to the Internet, but it may not be done. Your laptop may have also found a wireless network, but has does not have the proper configuration (password or key) to get to the Internet. This is what normally appears before you register in Lawnet. |
| ![Network Icon 3](image3) | **You have connectivity to the Internet**  
This indicates that you have full access to the Internet and that there are no problems on the connection. |