



This document is meant to serve as a resource for you as you configure your laptop or PC to connect to the Internet in your residence room. An assumption is made that you already have a network card installed in your computer before you begin using this document.

**1** – Network card, cable, and drivers installed (hardware setup)

**2** – TCP/IP component using DHCP (software setup)

**3** – Troubleshooting common errors

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# 1

- **NETWORK CABLE** - Plug your network cable into the wall jack to which you wish to connect (in residence rooms this is the lower connector – below the phone jack; in breakout rooms the top left jack in a 4 port wall plug is the live one). Plug the other end of the cable into the back of your computer. Most modern network cards have green or orange lights on the network cards to let you know if they are plugged in and functioning correctly. Turn your computer on and try to access the Internet... if you are in... **great!!! Stop here!**

If you are not able to access the Internet... read on.

- **NETWORK CARD** – Follow this procedure to see if your network card is properly installed and recognized in Windows:
  - Click **Start->Settings->Control Panel**
  - Double-click the **System** icon
  - Click on the **Hardware** tab
  - Then click the **Device Manager** button
  - The device manager lists all the hardware components that Windows recognizes in your computer. All devices are listed in their respective categories.
  - If your Device Manager screen looks like Figure 1 , then Windows has properly recognized your network card and installed the driver for that device. You can move on to step **2**.

- If you see a yellow exclamation point or red ✘ over your network card, this means that there is a driver error or conflict with your network card. Double-click the icon to see a description of the problem. You may have to follow the troubleshooting instructions that came with your network card to resolve the issue.
- If you do not see the Network category, this means that Windows does not recognize any networking devices in your computer. Follow the troubleshooting instructions that came with your network card to resolve the issue.

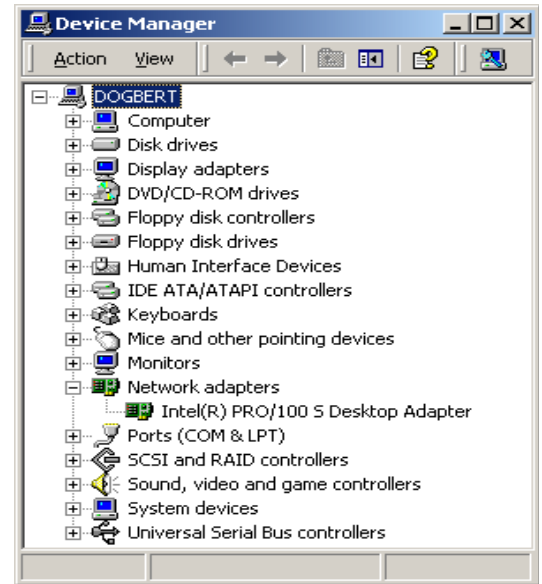


Figure 1

## 2

- **TCP/IP and DHCP** – In order for your computer to communicate over the Internet it needs to have the Internet language, or protocol, installed and set up correctly. All computers that communicate over the Internet use the TCP/IP protocol. The Royal Roads network uses DHCP for IP address allocation (most networks use DHCP). Follow this procedure to check your TCP/IP settings:
  - Click **Start->Settings->Control Panel**
  - Double-click the **Network and Dial-up connections** icon
  - Right click on **Local Area Connection** and select **Properties**
  - If you do not see the **Internet Protocol (TCP/IP)** protocol listed in the network components list, you need to install it.
    - Click the **Install...** button, and select **Protocol** and click on the **Add** button
    - Select **Internet Protocol TCP/IP** and click the **OK** button
  - Select the **Internet Protocol TCP/IP** from the components list and click the **Properties** button.
  - On the **General** tab make sure the **Obtain an IP address Automatically**, and **Obtain DNS server Address Automatically** are selected. If not select them. Then click on the **OK** button.
  - Click **OK** to close the Local Area Connection Properties window. If you are prompted to reboot your computer, do so now.

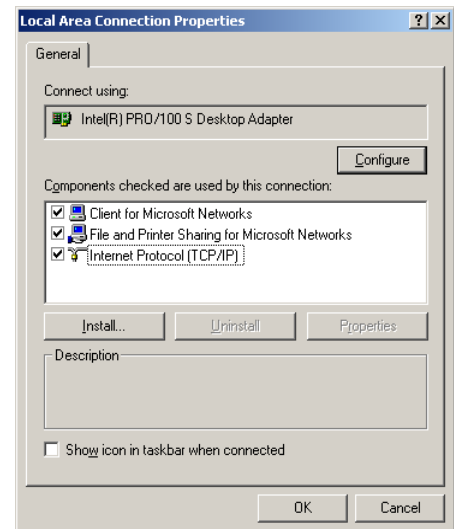


Figure 2

If you followed the previous steps, you should now have TCP/IP installed using DHCP (obtain an IP address automatically). After your computer reboots, test your connection using the following steps.

- **TESTING YOUR CONNECTION**

- Click the **Start** button and select **Run...**
- Type **cmd** into the Run box and click **OK**
- You should see a black window that looks like a



```
Connection-specific DNS Suffix . : #
IP Address . . . . . : 207.23.98.212
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 207.23.98.62
```

- DOS window. At the prompt type **ipconfig** and press **Enter**.
- Look in the IP address line of the window – if the IP address starts with 207.23. then your computer has successfully communicated with our server. Congratulations it works! You are finished!
- If the IP address is all zeros or does not start with 207.23. then type **ipconfig /release** and press **Enter**.
- Then type **ipconfig /renew** and press **Enter**. If an address starting with 207.23. does not appear within a few seconds then there is something wrong with the setup, or the cable. Check that the cable is firmly plugged in to your computer, as well as into the wall.

**Figure 3**

# 3

- **I HAVE DONE EVERYTHING IN STEPS 1 AND 2 BUT IT STILL DOESN'T WORK!**

- Look at your network card – are the lights lighting up? A flickering light is a good thing – the flickering represents traffic on the network. If the lights do not change when you unplug and re-plug in your cable, try a different network port (try a network port from the computer lab). If that does not help, try a different network cable.
- If all else fails, select the network card from the Device Manager and click the remove button. After you reboot your computer, you will have to re-install your network card and the TCP/IP settings. **\*\*Before you remove your network card settings**, make sure you have the network driver disk that came with your network card. If you do not have the original driver disk you can download one from your network card manufacturer website from a computer in the lab. You will need to know the **exact** make and model of your network card.

- **WHAT IF I HAVE A 207.23 IP ADDRESS, BUT MY WEB BROWSER DOES NOT WORK.**
  - Some web browsers are set up to use a proxy server to access web pages. If you are using Internet Explorer:
    - Click the **Tools** menu and select **Internet Options...**
    - Click the **Connections** tab
    - Depending on which version of browser you are using the proxy settings will be in different places on the Connections tab. For IE 5.5 or newer, click the **LAN** settings button.
    - Make sure that the checkmark next to **Use a proxy server** is unchecked.

For other great tips and information, please visit our website at <http://helpdesk.royalroads.ca>

If you have feedback or comments, we would like to hear from you.  
Please e-mail [BetterHelpDesk@RoyalRoads.ca](mailto:BetterHelpDesk@RoyalRoads.ca)

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