

Windows XP: Ethernet

Type: Troubleshooting

Lewis & Clark College

Software: Windows XP

Connection: Ethernet

Overview

Is your network software not working properly? Many network connectivity problems are caused by something as simple as an unplugged cable and can be remedied without expert assistance. This helpsheet contains tips and instructions to help get your network connection back up and running quickly if you are connecting via Ethernet and have a computer running Windows XP Professional or Home version.

This helpsheet does not discuss general system problems such as applications that won't start, crash with error messages or force you to restart your machine. If you are experiencing these types of problems, consult your manuals and call the IT Help Desk at x7225 for assistance. This helpsheet will take you through the general network troubleshooting topics listed below.

- [Restart Computer](#)
 - [Check For General Network Outage](#)
 - [Is It A Network Or Software Problem?](#)
 - [Check Cables](#)
 - [Check Network Software Settings](#)
 - [Check Network Hardware Settings](#)
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Before you spend time troubleshooting your connections and network settings, try **RESTARTING YOUR COMPUTER.**

Sometimes a system error can cause a computer to lose or "forget" a network connection. This can also happen when your computer goes to sleep or a notebook computer does an auto shut-down due to low battery power. In this case, restarting your computer will force the machine to attempt to reconnect to the network. Keep in mind that many laptop computers do not fully power down unless you depress the power key for at least 5 seconds.

1. **Restart** your computer.
 2. From the **Start** menu (lower-left corner of the screen), select **Control Panel**.
 3. Windows XP Home: Double-click on **Network and Dial Up Connections**.
Windows XP Professional: Double-click on **Network Connections**.
 4. Double-click on **Local Area Connection**.
Windows XP automatically detects and displays installed network cards. If you do not see a Local Area Connection icon, skip to the [Network Hardware Settings](#) section of this document.
 5. Check to see if you need to enable your connection by clicking the **Enable** button in the lower left corner. Once your connection is enabled, this button will toggle to Disable.
 6. Windows XP Professional: Click **properties**.
 7. Click on the **Support** tab to check your Internet settings. If your connection is working properly, you will have an assigned IP address that begins with 149.175.
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Before you spend time troubleshooting your connections and network settings, check for a **NETWORK OUTAGE.**

Ask if others, especially people you know have a working network connection, are having problems accessing the network. If other students on your floor are unable to connect, your building may be experiencing a network failure. **If you suspect a network outage, please call the IT Help Desk at x7225.**

Determine whether you have a network problem or a problem with your software application.

Determine if your problem is specific to an application, by opening up another Internet application, such as Internet

Explorer or Mulberry, to see if it can connect to the network. If your connectivity issue is related to the program only, call the IT Help Desk or see our [Software Troubleshooting](#) Helpsheet.

Double-check your cables

- **Check Your Ethernet Cable**

Insert cables into the connector until you feel a slight click. Check both the connection to your computer as well as to the wall jack. Finally, make sure you are using a data jack, not a phone jack. If you discover a loose connection, restart your computer.

- **Check PCMCIA Card**

If you use a PCMCIA ethernet card, make sure it is firmly plugged into the PC Card slot on your notebook computer.

- **Check Transceiver**

If you use an Ethernet transceiver to connect to the network, check to make sure it is firmly plugged in your USB or other port on your computer.

- **Check For A Faulty Ethernet Cable**

Make sure you don't have a bad Ethernet cable by testing your cable on a computer you know can connect to the network. If your cable is faulty, you can get a replacement cable from the Residence Hall Technician or the IT Help Desk in the Watzek Library.

- **Check To Make Sure Your Ethernet Data Jack Works**

If possible, try connecting your computer to another Ethernet jack that you know works. Alternatively, ask a roommate or friend with a laptop they've successfully connected to the network to see if they can connect from your Ethernet jack.

If you determine your Ethernet jack is faulty, contact the IT Help Desk (x7225). Keep in mind it may take several working days to repair faulty wiring.

Check your network software settings

1. From the **Start** menu (lower-left corner of the screen), select **Control Panel**.
2. Windows XP Home: Double-click on **Network and Dial Up Connections**.
Windows XP Professional: Double-click on **Network Connections**.
3. Double-click on **Local Area Connection**.
 - Windows XP automatically detects and displays installed network cards. If you do not see a Local Area Connection icon, skip to the [Network Hardware Settings](#) section of this document.
 - Windows XP Home: If your status is 'connected' skip to [step 12](#).
Windows XP Professional: If your status is 'connected', click **properties** before moving on to [step 12](#).
4. Check to see if you need to enable your connection by clicking the **Enable** button in the lower left corner. Once your connection is enabled, this button will toggle to Disable.
5. Windows XP Professional: Click **properties**.
6. Under **Connect Using**, you should see the brand name and model number of your Ethernet card. If your Ethernet card is missing, skip to the [Network Hardware Settings](#) section of this document.
7. Under **This connection uses the following items** you should see:
 - **Client for Microsoft Networks** (remove if you do not want to share or access shared files with other Windows computers on the PIO-NET network).
 - **Internet Protocol (TCP/IP)**
 - If any other items appear (especially AOL and Dial-up adapters), un-check the box next to the item.
8. If the TCP/IP network protocol is not installed, you will need to add it, otherwise, skip to [step 12](#).
9. To add the TCP/IP protocol, click **Install** to open the Select Network Component Type box.
10. Select **Protocol** and click **Add**. This will open the Select Network Protocol box.
11. Select **TCP/IP** from the list of available protocols. Click **OK** to exit the Network Control Panel and install the TCP/IP protocol. Say **Yes** when prompted to restart your computer.
If TCP/IP is not an available protocol, contact the IT Help Desk (x7225) for assistance.
12. Check your TCP/IP properties by selecting the **TCP/IP Protocol** and clicking on **Properties**.
 - Select **Obtain an IP address automatically**.

- Select **Obtain DNS server address automatically**.
 - Click **OK**
13. Click **OK** to save your Local Access Settings and return to the Status window.
 14. Click on the **Support** tab to check your Internet settings. If your connection is working properly, you will have an assigned IP address that begins with 149.175.
 15. If you do not have an address in this range, click the **Repair** button.
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Check your network hardware settings

1. Click with the **RIGHT** mouse button on the **My Computer** icon and select **Properties**. (If My Computer does not appear on your desktop, it appears in the top right section of your Start Menu.)
2. Click on the **Hardware** Tab.
3. Click on the **Device Manager** button.
4. View devices by type. Expand the list of network adapters by clicking on the + sign by the Network Adapter listing.
5. If no Ethernet cards are listed, you may have a faulty Ethernet card. Consult your system documentation to make sure you have an Ethernet card. You may also need to contact your computer manufacturer for further troubleshooting assistance. If you are not sure how to proceed, contact the IT Help Desk (x7225) for advice.
6. Double-click on your Ethernet card to view properties.
7. Check the **device status** area in the middle of the properties window to see if your network card is working properly.
8. If your card is not working properly, you will need to remove and then re-add it. **LOCATE THE DRIVERS FOR YOUR MODEM BEFORE YOU ATTEMPT THIS**. Drivers are typically found on the diskettes or CD-Roms that came with your modem or computer. You can also download modem drivers from most manufacturer's web sites.
9. Click **OK** to return to the Device Manager tab.
10. Note the name and model number of your Ethernet card and then click **remove**.
11. Click **OK** to exit the Device Manager. Click **OK** to exit System Properties.
12. **Restart** your computer.
13. On restart, Windows will detect your Ethernet card and launch the **Add New Hardware** wizard. Follow the prompts to add your network card. If Windows does not detect your card and launch the wizard, contact the IT Help Desk (x7225) for assistance running the Add New Hardware wizard manually.

Disable Other Network Connections

1. From the **Start** menu (lower-left corner of the screen), select **Control Panel**.
2. Windows XP Home: Double-click on **Network and Dial Up Connections**.
Windows XP Professional: Double-click on **Network Connections**.
3. Double-click on **Local Area Connection**.
4. If you have more than one connection method listed, such as a Wireless Network Connection, it may be interfering with your Ethernet connection. To disable a connection, double-click on the connection icon. Click on the **Disable** button.

If you have any questions or need further assistance, please contact the IT Help Desk at x7225 or visit us in the Watzek Library. You can also send questions by e-mail to consult@lclark.edu.
