

Building A Home Network

What is a Home Network?

A home network is a collection of two or more home computers connected together through a wired or wireless connection.

Why should I network my computers together?

There are many advantages to building a home network. It allows you to share files between computers, and lets you share resources like printers, scanners or Internet connections.

Is it hard to network computers together?

Networking computers WAS difficult in the past, but today's home routers or gateways make it a snap. Often, it's as easy as connecting the computers to the router and restarting them.

What do I need to build a home network?

That depends on the kind of home network you want to build. This document will help you set up a wired network using a Internet Connection Sharing. You will need at least two computers, and a network hub, which you will need to purchase from a third-party retailer.

Building A Wired Home Network

There are three different ways that you can build a wired network to share your Rogers Yahoo! Hi-Speed Internet connection:

Using a Home Router

Using a home router or gateway is the fastest and easiest way to share your Internet connection. A home router acts as a DHCP server, meaning it receives an Internet address from your modem and then automatically assigns Internet addresses to all of the computers connected to it.

If you wish to set up your home network in this manner, please see the **Building a Home Network Using a Home Router/Gateway** document.

Using Windows XP or Windows Vista Internet Connection Sharing

Windows XP and Windows Vista both offer Internet Connection Sharing, which allows you to share your Internet connection among two or more computers in your home.

This is the configuration described in this document. If you wish to set up your home network using one of the other methods described, please see the appropriate document as noted.

Using a Hub and Multiple IP Addresses

A hub lets you physically connect many computers, but does not provide the logic required to assign each computer an IP address. Rogers Yahoo! offers additional IP addresses for a small monthly fee, and when combined with a hub, this is a viable home networking option if you do not wish to purchase a router (please note that this option is not available for Ultra-Lite customers).

If you wish to set up your home network in this manner, please see the **Building a Home Network Using Multiple IP Addresses** document.

Building A Wired Network Using Internet Connection Sharing

Introduction

With this type of network, one of your computers will act as a server. This computer will connect directly to your modem and share its Internet connection with your other computers.

Setup Time	A half-hour to two hours depending on the number of computers you are connecting and whether or not you need to install Ethernet cards
Advantages	Does not require a separate router which are generally more expensive than network hubs
Disadvantages	The Server computer must be running for the other computers to have Internet access. The server computer requires two Ethernet ports, and you will need a network hub which is not provided by Rogers Yahoo!

Additional Requirements

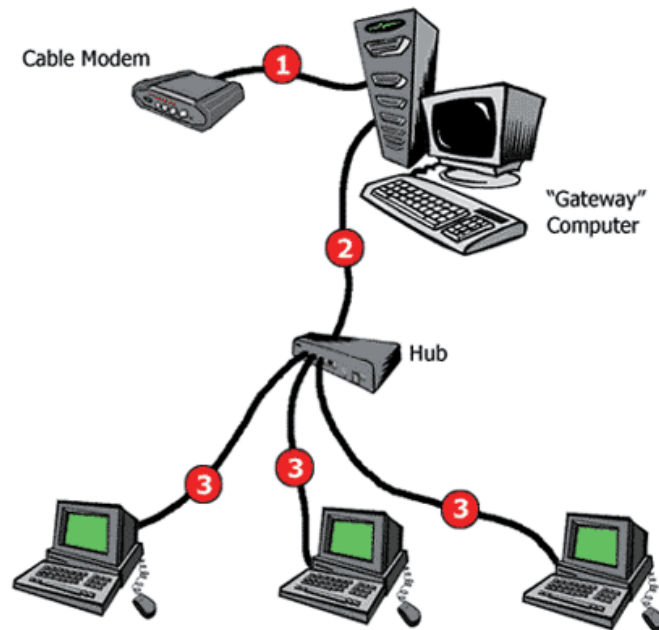
- The server computer must have two Ethernet ports. This may require the installation of a Network Interface Card (NIC) or a USB-Ethernet adapter.
- A network hub to share the signal from your modem with all of your other computers.

BEFORE YOU BEGIN:

1. Shut down all of your computers.
2. Unplug the modem power cable from the wall socket, and the Ethernet cable from both the modem and the computer.

Physical Connections

1. Connect the server computer to the modem using an Ethernet cable.
2. Connect the server computer to the network hub using an Ethernet cable.
3. Connect each of the other computers to the network hub using Ethernet cables.
4. Plug the modem power cable back into a wall socket and wait until it is online.
5. Once your modem is online, plug in and power on the network hub (if required), and then power on your computers.

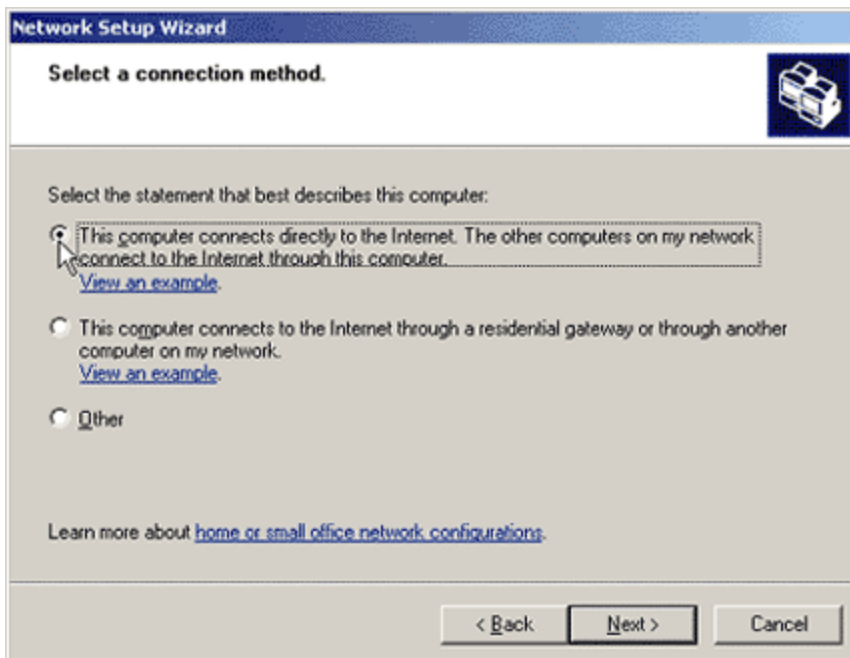


Server Setup - Windows XP

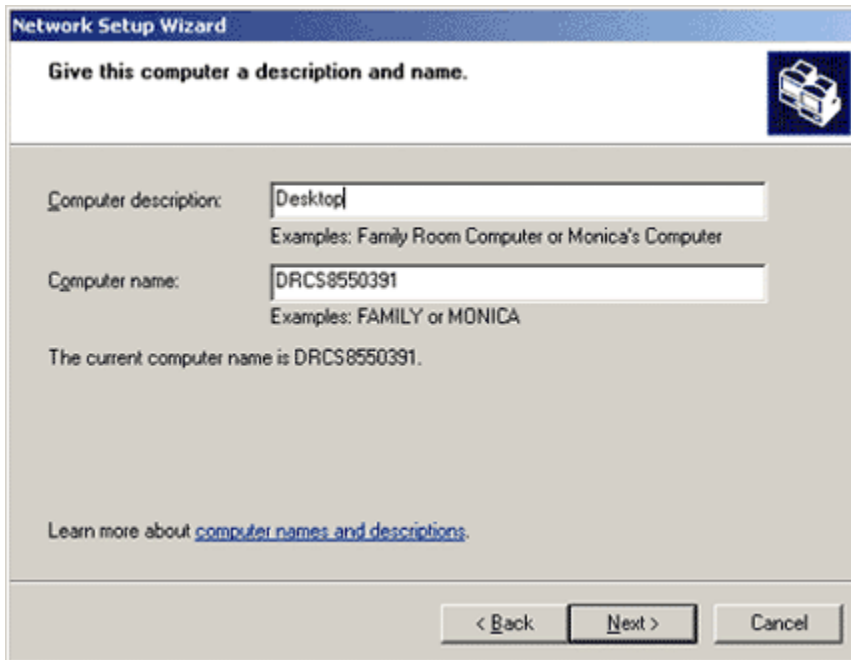
1. Click **Start**, and then **My Network Places** - the *Network Connection* window appears.
2. Under *Network Tasks*, click **Setup a home or small office network** - *The Network Setup Wizard* appears.



3. Click **Next**, and then **Next** again. The *Select a connection method* screen appears.
4. Select **This computer connects directly to the Internet and other computers connect to this computer** and click **Next**.

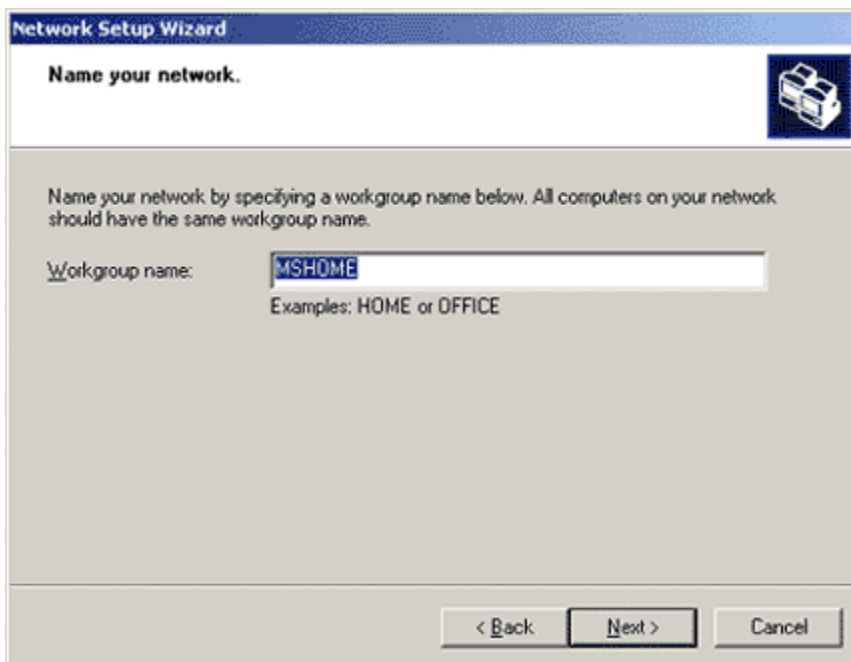


5. Enter a computer description and computer name. The computer description will be how your computer appears in *My Network Places* or *Network Neighborhood* on other computers that are connected to the network. The computer name must be unique on the network.



The screenshot shows the 'Network Setup Wizard' window with the title 'Give this computer a description and name.' The window contains two text input fields. The first is labeled 'Computer description:' and contains the text 'Desktop'. Below it are examples: 'Examples: Family Room Computer or Monica's Computer'. The second is labeled 'Computer name:' and contains the text 'DRCS8550391'. Below it are examples: 'Examples: FAMILY or MONICA'. A line of text states 'The current computer name is DRCS8550391.' At the bottom, there is a link that says 'Learn more about [computer names and descriptions](#).' and three buttons: '< Back', 'Next >', and 'Cancel'.

6. Enter a workgroup name. The workgroup name is the name of the network, and you will use it to connect other computers to the network.



The screenshot shows the 'Network Setup Wizard' window with the title 'Name your network.' The window contains a text input field labeled 'Workgroup name:' with the text 'MSHOME' entered. Below it are examples: 'Examples: HOME or OFFICE'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

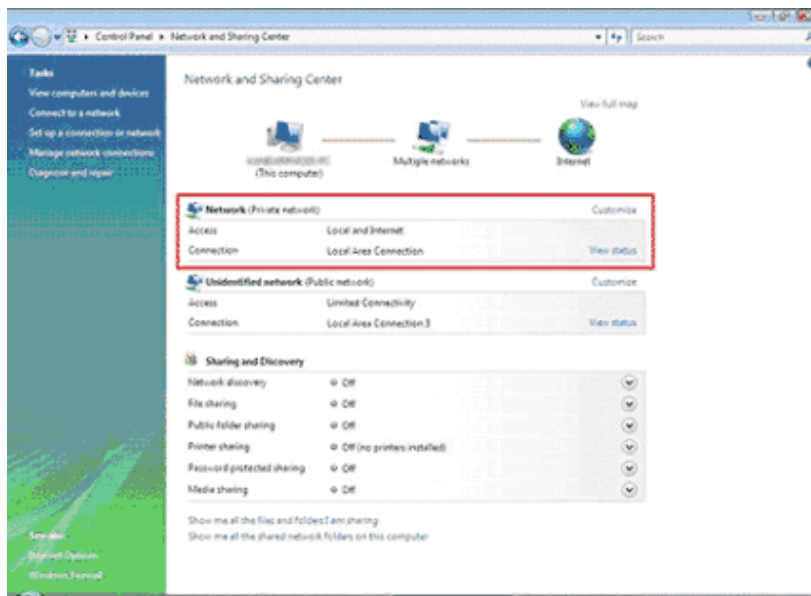
7. Click **Next** to review the settings you chose, and **Next** again when you are satisfied - The wizard will configure the computer's network settings.

8. The wizard will now ask if you want to make a Network Setup Disk. Click **Yes** if you have Windows 98 or ME computers that you want to connect to the network, otherwise, select **Just finish the Wizard** and click **Next**.
9. If you chose to make a Network Setup Disk, follow the onscreen instructions to format a floppy disk and copy over the required files - Click **Next** when the process is complete.
10. The wizard's completion screen appears - click **Finish** to exit the wizard.
11. Click **Yes** to restart your computer if prompted, otherwise, restart your computer as you normally would.

Server Setup - Windows Vista

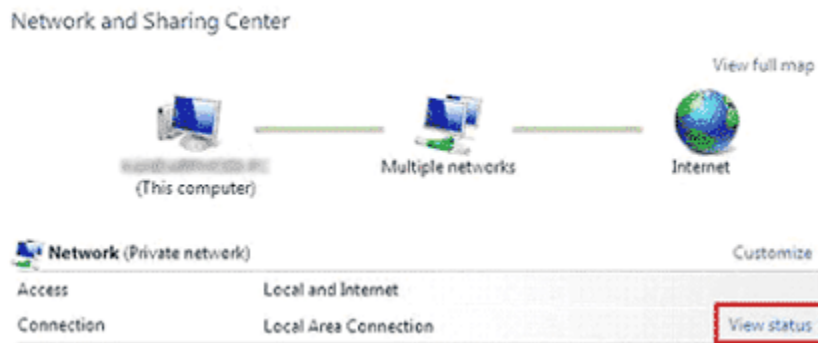
Note: Throughout these instructions, if you are prompted to give permission to continue, always choose to continue.

1. Click **Start** and then **Control Panel** - The *Control Panel* appears.
2. In the top left corner, click **Classic View** and then double-click **Network and Sharing Center** - The *Network and Sharing Center* appears.
3. If your computer is properly configured, you should see a network connection listed under *Network (Private Network)*.

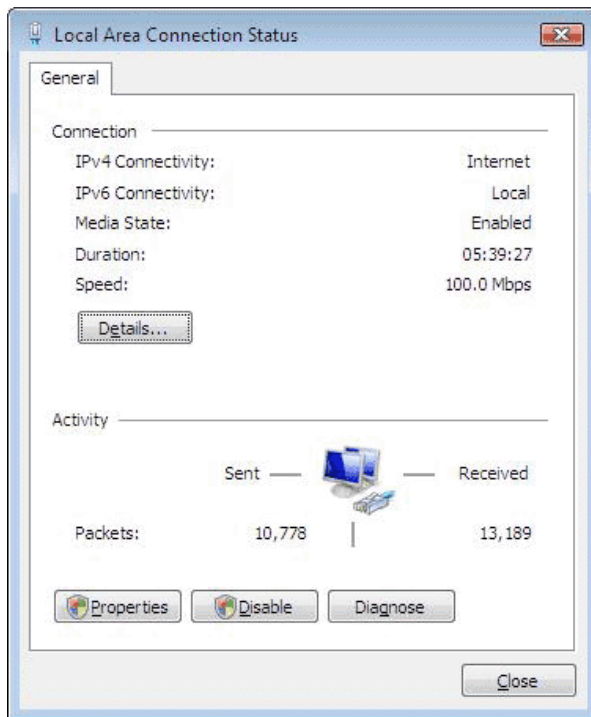


4. If you don't see a network connection, follow the instructions under *Computer Setup*, below, before following these instructions.

5. Click **View Status** beside the network connection you want to use - The *Local Area Connection Status* window appears.

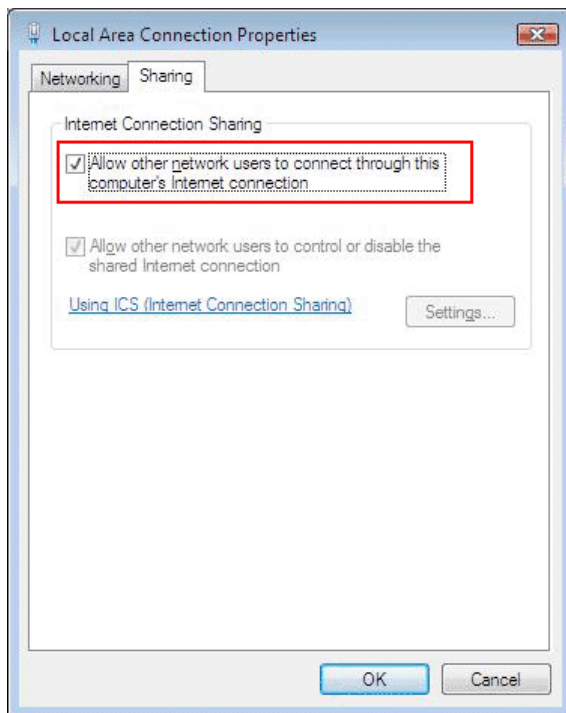


6. Click the **Properties** button - The *Local Area Connection Properties* window appears.



7. Click the **Sharing** tab (Note: this tab will be available only if you have installed a second Ethernet port on your computer).

8. Check the box beside **Allow other network users to connect through this computer's Internet connection** and then click **OK**. Your computer is now ready to share Internet access with other computers.



Computer Setup - Windows XP and Vista

When you have finished connecting everything, and your server computer has been properly set up, your computers should automatically connect to the network and the Internet. Open Internet Explorer and try to visit some websites. If you connect, that's great! You're all finished!

If you can't connect to any websites, try the following three steps:

Step 1 - Check your network

- Ensure the computers are properly connected to the hub.
- Ensure the server computer is properly connected to both the hub and the modem.
- Ensure the modem and hub (if required) are turned on, and that your modem is connected to the Internet.

Step 2 - Refresh your network connection/Restart your computer

- If you are familiar with the command window and IPCONFIG, release and renew your IP address manually.
- If you are not, restart your computer. This will automatically refresh your network settings.
- Once you have renewed your IP, or your computer has restarted, try to connect to a website. If you can, that's great! You're all finished! If you can't, continue below:

Step 3 - Check your network settings with SHS

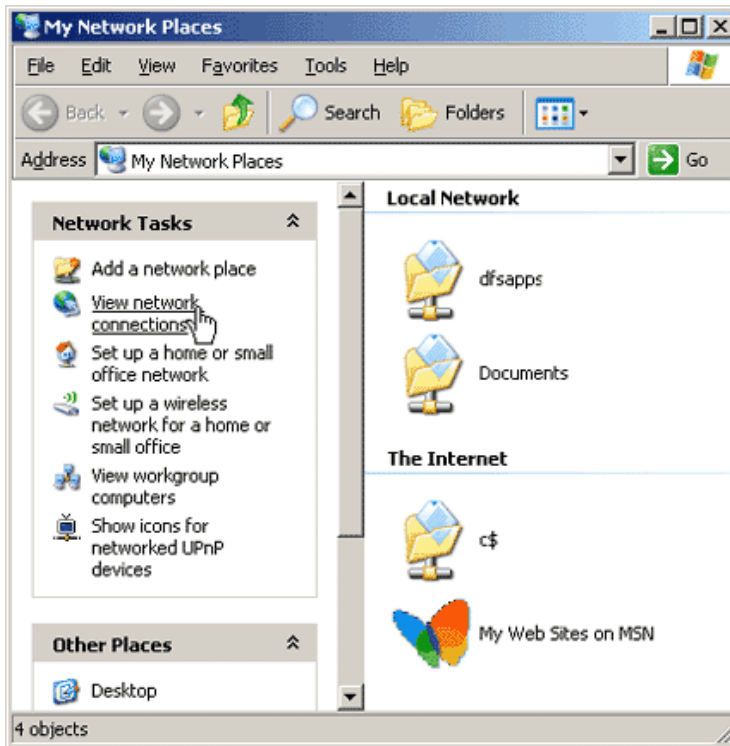
Run the Rogers Self Healing Software (SHS) to check that your network connection is properly set up. If SHS isn't installed, you can install it from the Rogers Yahoo! CD.

To learn how to manually check your network connection settings, please continue below.

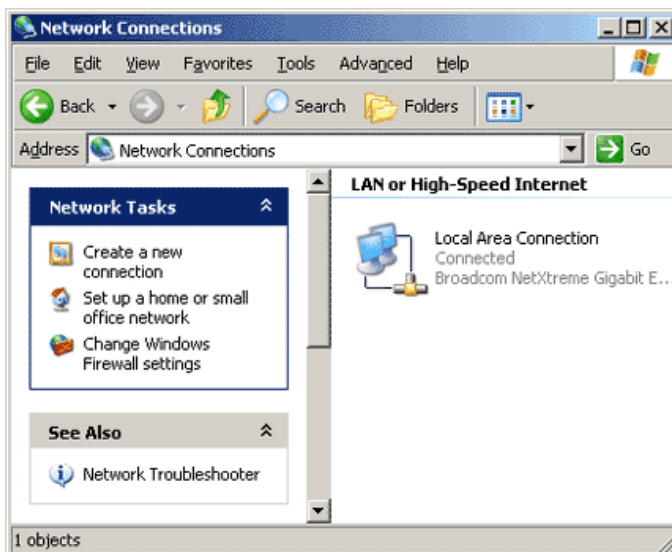
Checking Your Wired Network Connections

Windows XP

1. Click **Start** and then **My Network Places** - the *My Network Places* window appears.

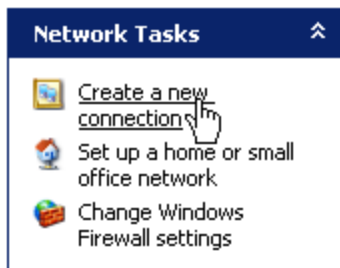


2. Now click **View Network Connections** - the *Network Connections* window appears.



If there are *no* network connections listed:

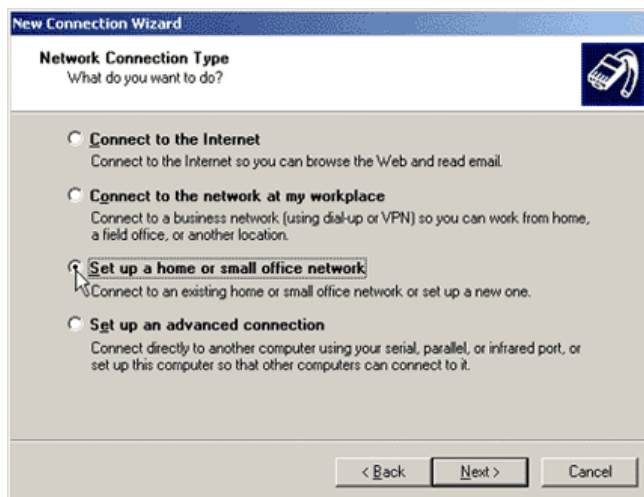
1. Click **Create a new connection** - the *New Connection Wizard* appears.



2. Click **Next** - the *Network Connection Type* window appears.



3. Select **Set up a home or small office network** and click **Next**, and then **Finish** - The *Network Setup Wizard* appears.



4. Click **Next**, and **Next** again - the *Network Setup Wizard* will search for your network.

5. Select **This computer connects to the Internet through a residential gateway or through a computer on my network** and click **Next**.

The screenshot shows the 'Network Setup Wizard' window with the title 'Select a connection method.' and a printer icon. The main area contains the instruction 'Select the statement that best describes this computer:' followed by three radio button options. The second option, 'This computer connects to the Internet through a residential gateway or through another computer on my network', is selected and highlighted with a dashed border. Below the options is a link to 'Learn more about home or small office network configurations.' At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

Network Setup Wizard

Select a connection method.

Select the statement that best describes this computer:

- This computer connects directly to the Internet. The other computers on my network connect to the Internet through this computer.
[View an example.](#)
- This computer connects to the Internet through a residential gateway or through another computer on my network.
[View an example.](#)
- Other

Learn more about [home or small office network configurations.](#)

< Back Next > Cancel

6. Enter a computer description and computer name, then click **Next**.

The screenshot shows the 'Network Setup Wizard' window with the title 'Give this computer a description and name.' and a printer icon. It features two text input fields. The first is labeled 'Computer description:' and contains the text 'Desktop', with examples 'Family Room Computer or Monica's Computer' listed below. The second is labeled 'Computer name:' and contains 'DRCS8550391', with examples 'FAMILY or MONICA' listed below. A status line reads 'The current computer name is DRCS8550391.' At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

Network Setup Wizard

Give this computer a description and name.

Computer description:
Examples: Family Room Computer or Monica's Computer

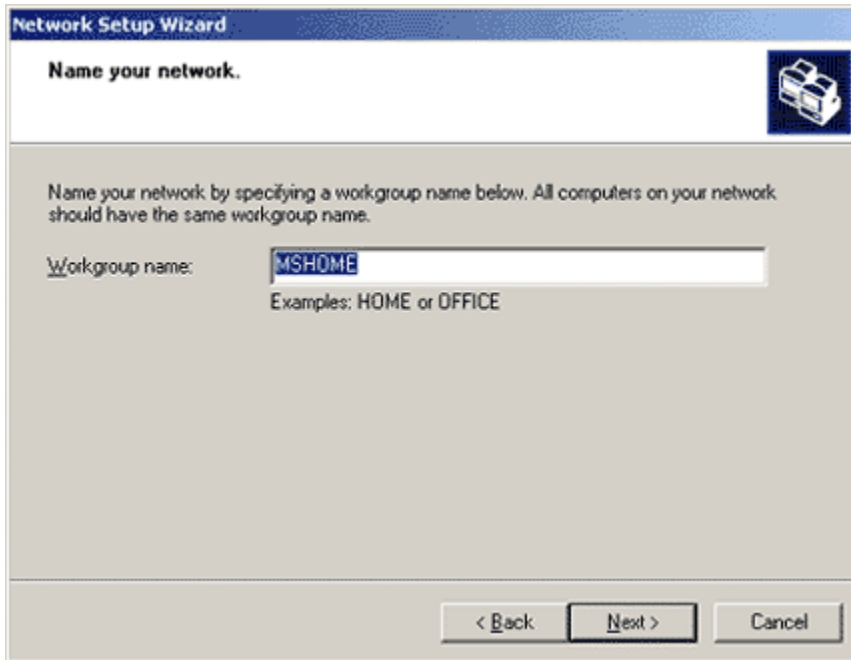
Computer name:
Examples: FAMILY or MONICA

The current computer name is DRCS8550391.

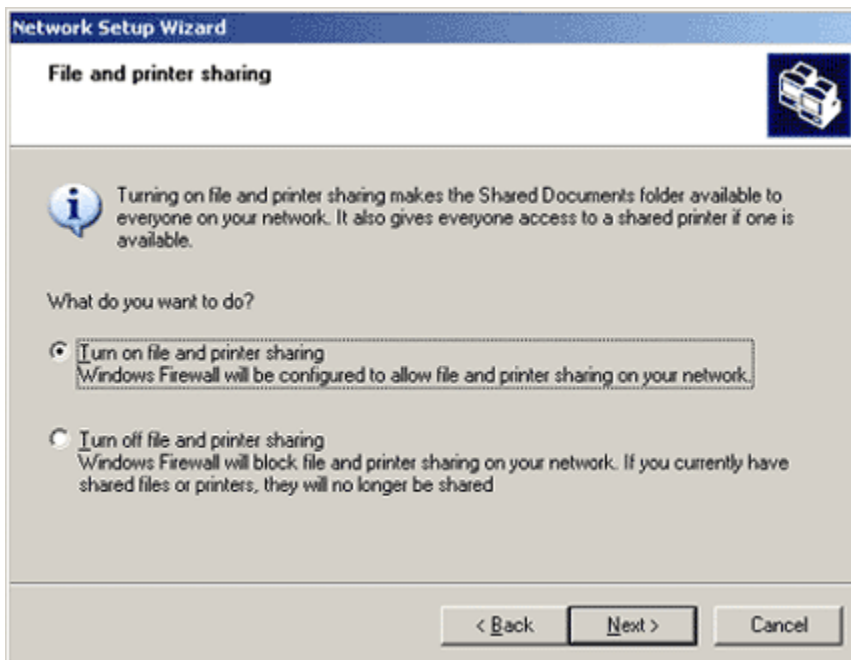
Learn more about [computer names and descriptions.](#)

< Back Next > Cancel

7. If you have already entered a network name using another computer, enter the same name here. If not, enter a unique, personalized name for your network.



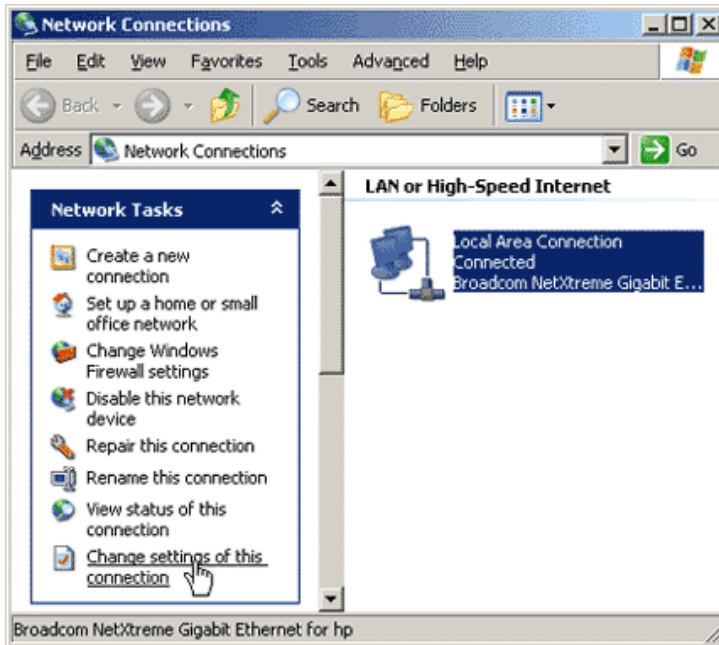
8. Choose if you want to activate file and printer sharing. If you intend to share files or printers among your computers, this must be on. If you do not intend to share files and printers, this should be turned off.



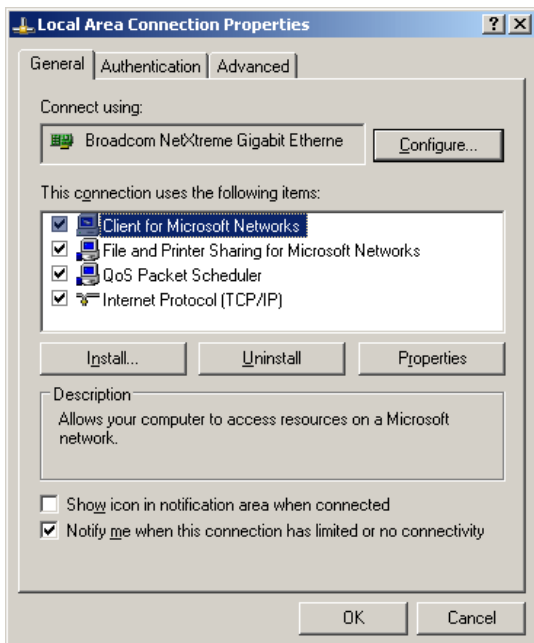
9. Click **Next** to apply the network settings, and then **Finish**. Your network is now configured.
10. Click **Yes** to restart your computer if prompted, or restart your computer manually.

If there are network connections listed:

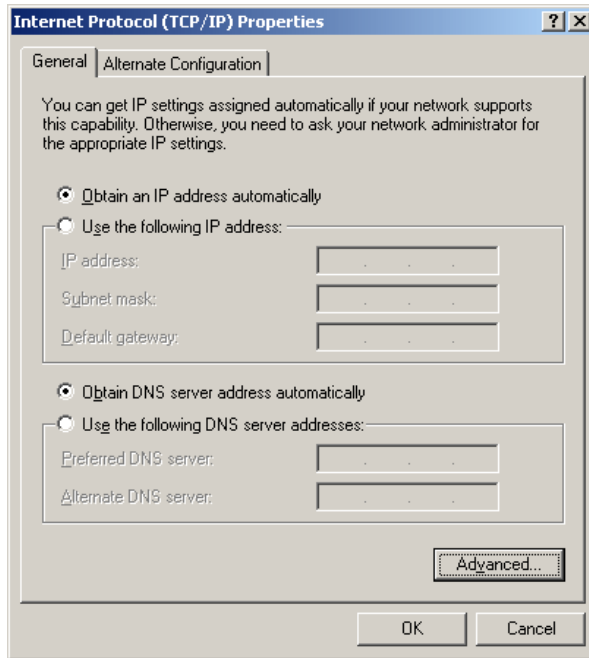
1. Click on the icon of the network connection you wish to check, and then click **Change settings of this connection** - the *Local Area Connection Properties* window appears.



2. Ensure the following items are there and checked, as shown in the image below:
 - a. Client for Microsoft Networks
 - b. File and Printer Sharing for Microsoft Networks
 - c. QoS Packet Scheduler
 - d. Internet Protocol (TCP/IP)



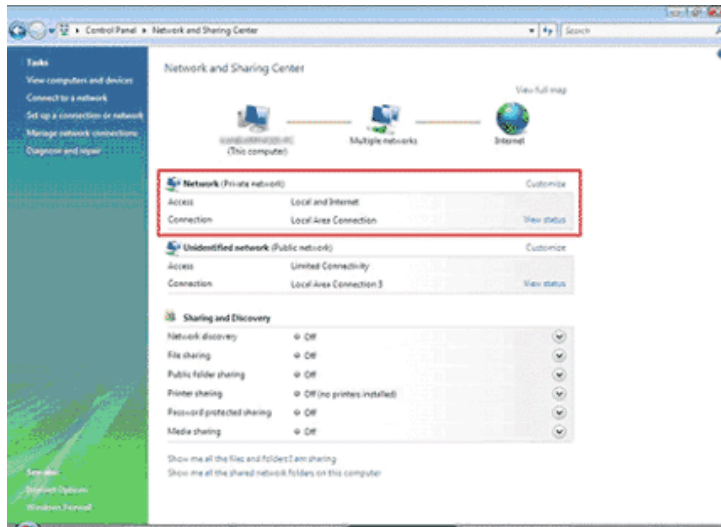
3. Select **Internet Protocol (TCP/IP)** and then click **Properties** - the *Internet Protocol (TCP/IP) Properties* window appears.
4. Ensure that *Obtain an IP address automatically* and *Obtain DNS server automatically* are both selected, as shown in the image below:



5. Click **OK** and then **OK** again. Your network is properly configured.

Windows Vista

1. Click **Start**, and then **Control Panel**.
2. From the options on the left, click on **Classic View**.
3. Double-click **Network and Sharing Center**, the *Network and Sharing Center* appears.
4. Your network connection will appear as a *Local Area Connection* under *Network (Private Network)*.



5. If there is no Local Area Connection, it means that Windows Vista did not detect a network adapter in your computer (to provide you with an Ethernet port).
6. If there *is* a network adapter in your computer, you will need to find out why Windows is not detecting it, which is beyond the scope of these instructions. Please consult Windows Help for further assistance with troubleshooting your network adapter.
7. If there is no network adapter in your computer, you will need to install one to proceed. If you're not comfortable doing this, most major electronics stores like Best Buy or Future Shop can take care of the installation for a small fee. You can also use a USB-to-Ethernet adapter, or connect your modem using a USB connection (if your modem has a USB port).

IPCONFIG instructions

IPCONFIG is a utility in Windows XP and Windows Vista which you can use to refresh your network settings (release/renew your IP address) without restarting your computer.

To refresh your network settings using IPCONFIG:

1. Click **Start**, then **Run** - The *Run* window appears.
2. In the *Open* field, type **cmd**.
3. Click **OK** - the *Command Window* appears.
4. In the Command Window, type **ipconfig /release** and press **Enter** - your network connection will be released.
5. In the Command Window, type **ipconfig /renew** and press **Enter** - your network connection will be refreshed.