

Gateway Notebook

Networking Guide



Networking Your Notebook

Wireless networking is the latest advance in computer communication. With a wireless home network, you can use your notebook wherever you like. From the comfort of your sofa, kitchen, or patio, you can browse the Internet, send and receive e-mails, transfer files, and use your printer.

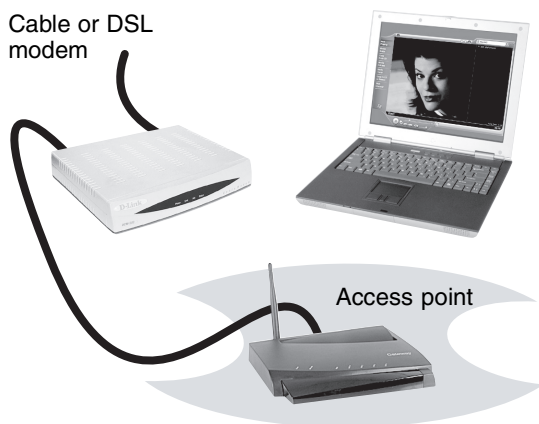
You can even browse the Internet and check your e-mail when you are away from your home by connecting to public “hot spots” commonly available in airports, libraries, book stores, and coffee shops.

For the computer user on the go, wireless networking just makes life easier.

Wireless networking

A wireless network uses radio waves to communicate. Typically, a wireless network is made up of an access point, a cable or DSL modem (for Internet access), and your wireless computers.

An access point is a small electronic device that serves as the central control point for your network. You connect your modem to the access point, set up a network connection, then browse the Internet, send e-mail, share files and folders with other networked computers, and access other devices, like a printer or scanner.



Buying wireless equipment

For a wireless network you need:

- Your Gateway notebook with built-in wireless networking
- A broadband Internet connection
- An access point

Tips & Tricks



When you buy your access point, make sure it has:

- IEEE 802.11g support. 802.11g (also known as 54g™) is the fastest method for wireless communications. 802.11g is compatible with the older IEEE 802.11b format but not with the competing IEEE 802.11a format. Make sure that you get the correct format that matches your notebook.
- DHCP server/dynamic IP address assignment capability that makes it easier to set up and access your network.
- Internet security features like a firewall to keep intruders out of your network.
- Wireless security features like SecureEasySetup™ or 128-bit WEP encryption.

If you are not sure what to buy, check out Gateway's accessory store at accessories.gateway.com.

Setting up your wireless network

Setting up your wireless network involves three steps:

- 1 Make sure your broadband connection works.
- 2 Set up your access point and network security.
- 3 Set up your notebook.

Making sure your broadband connection works

Before you change anything about your home setup, make sure that your broadband connection is working correctly. To test the connection, log onto the Internet using your current setup. If the connection is not working, contact your Internet service provider.

Important



If you do not have a broadband connection already installed, make the necessary arrangements with your ISP. Be sure to find out when the line will be activated. Also ask your ISP about any specific instructions you need to follow when you set up your network.

Setting up your access point and making your wireless network secure

A wireless network sends and receives information through radio waves. This means that another computer outside your network can intercept the radio waves and take control of your network.

If you do not set up security for your network, a *hacker* can gain access to your Internet connection to send spam e-mail and to your hard drive to download viruses or view your personal data, like credit card numbers, Social Security numbers, and personal online banking information.

Check your access point documentation for information about installing it and setting network security.

Setting up your notebook

Naming your computers and workgroup

Important



Each computer on your network needs a unique Computer Name. All the computers on your network need the same Workgroup Name. You may have already named your computer and workgroup the first time you turned on your notebook.

To identify this computer on the network:

- 1 Click **Start**, right-click **My Computer**, then click **Properties**. The *System Properties* dialog box opens.
- 2 Click **Computer Name**.
- 3 Click **Change**. The *Computer Name Changes* dialog box opens.
- 4 Type a unique computer name in the **Computer name** box. Use a computer name of up to 15 characters with no blank spaces. Make sure that your computer name is unique. Your computer name cannot be all numeric. It must contain some letters.

- 5 Type a name for your workgroup in the **Workgroup** box. Use a workgroup name of up to 15 characters with no blank spaces. The workgroup name must be the same for all computers on your home network, and the name must be different than any computer name on your network.
- 6 Click **OK** to close the *Computer Name Changes* dialog box.



Turning the wireless radio on

After you have completed your initial Windows setup, turn on the wireless radio.

Model	To turn the wireless radio on or off
Gateway M275	Press FN + F7 on the keyboard.
Other Gateway notebooks	Press FN + F2 on the keyboard. The wireless networking status indicator turns on when the wireless radio is turned on.

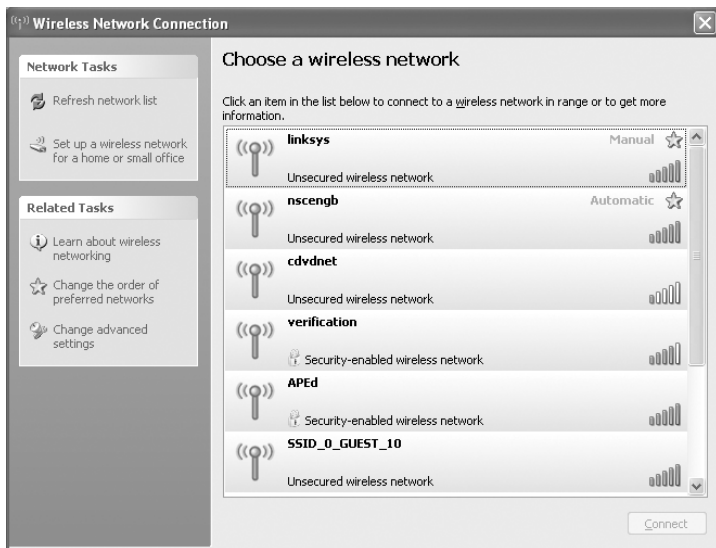
Connecting to your network

After you have named your computer and workgroup and turned on your wireless radio, you need to set up the network connection on your computer.



To connect to your wireless network:

- 1 Click **Start**, right-click **My Network Places**, then click **Properties**. The *Network Connections* window opens.
- 2 Right-click the **Wireless Network Connection** icon, then click **View available wireless networks**. The *Wireless Network Connection* dialog box opens.



- 3 Click the network you created in the **Choose a wireless network** list, then click **Connect**. If you successfully connected to the network, go to [“Testing your network” on page 7](#).

If you can see the network name in the **Choose a wireless network** list but you cannot connect to it, your network is using security. You will need to modify the security settings for the network in your notebook.

If your network does not appear in the **Choose a wireless network** list, your network is not broadcasting its SSID. This is not an error and is one way to add security to your wireless network. You will need to manually add the network to your notebook.

Help and Support



For more information about connecting to your network, click **Start**, then click **Help and Support**. Type one of the following keywords in the Help and Support **Search** box

Search , then click the arrow:

- **connect to an available network**
- **manually add a wireless network**
- **connecting to wireless network.**



Testing your network

Now that your home network is set up, log onto your notebook and access a favorite Internet Web site. If you are unable to connect to the Internet:

- Run the New Connection Wizard
- Make sure that your access point is plugged in and compare the status lights on the front of the access point with the patterns described in the access point documentation
- Temporarily turn off any firewall software on your notebook
- Turn off all of the devices, then turn them back on
- Contact your Internet service provider

Using your notebook on your network

With a network, you can share your Internet connection, drives, and printers. For information about using your notebook on a network, see “Using your computer on a network” in *Using Your Computer* which has been included on your hard drive. To access this guide, click **Start**, **All Programs**, then click **Gateway Documentation**.

Adding a desktop computer to your network

After you have your wireless network up and running, you can add your desktop computer to your wireless network. To add a desktop computer to the network, do one of the following:

- Purchase a wireless PCI card or USB adapter for your desktop computer so it can communicate with your network wirelessly.

- Connect your desktop computer to an available Ethernet port on your access point using an Ethernet cable. You can use this option only if your access point has Ethernet ports. For more information, see the documentation for your access point.

Adding a printer to your network

Instead of plugging a printer into your notebook, you can add a printer to your wireless network. To add a printer to the network, do one of the following:

- Use a printer that has built-in wireless networking.
- Connect your printer to your networked desktop computer, then share the printer. For information about sharing printers, see “Using your computer on a network” in *Using Your Computer* which has been included on your hard drive. To access this guide, click **Start**, **All Programs**, then click **Gateway Documentation**.
- Connect your printer to your access point if the access point includes a USB or parallel port. For more information, see the instructions that came with your access point.
- Use a wireless print server.

Troubleshooting your network

You turned wireless networking on, but it takes a while to connect.

- When wireless networking is turned on, it automatically scans for available connections. The scan can take approximately 30 seconds to complete.

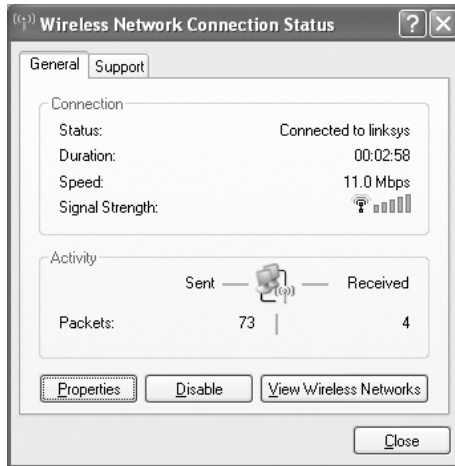
Your connection on the network seems intermittent or your wireless network is running slower than you expect.

- The speed of a wireless network is related to signal strength. Signal strength is affected by the distance between your wireless network devices, by radio interference, and by interference from natural obstructions such as walls, ceilings, floors, and doors.

If your wireless network is running slower than you expect, you should check your network signal strength. If you find the signal strength is low, try moving to a new location to increase the signal strength.

▶ To check the signal strength of your wireless network:

- 1** Click **Start**, right-click **My Network Places**, then click **Properties**. The *Network Connections* window opens.
- 2** Right-click **Wireless Network Connection**, then click **Status**. The *Wireless Network Connection Status* dialog box opens. The meter shows the signal strength for wireless networking on your computer if other computers with the same network name are within range of your computer.



You are in a wireless network, you can see the network, but cannot communicate, send files, print, or get to the Web.

- If your access point uses WEP, go to the Windows XP *Wireless Networking Properties* window and make sure that both the WAP and the WLAN in the computer have matching WEP keys.

You are in a wireless network, but no available networks are listed in the Windows XP Wireless Networking utility.

- If the network you are attempting to access does not broadcast its SSID, you need to request the SSID from the administrator and add that network's information into the wireless utility.
- You may want to try entering ANY as the SSID, which will make the computer try to auto-detect the network.

Your wireless network is listed as a preferred network, but it has an "x" on it.

- An x means your preferred network is not currently available or you are not currently in range to connect.

Internet Explorer is unable to access the Internet.

- Reset the power on your cable or DSL modem and your access point. This reestablishes communication between your Internet Service Provider and your modem and between your modem and your access point.
- If you previously accessed the Internet through a dial-up modem, Internet Explorer may not be set up to access the Internet through a network.

You cannot see other computers on your network.

- Your notebook may not have the same workgroup name as the other computers on your network. For more information, see ["Naming your computers and workgroup" on page 4.](#)
- If your notebook was previously connected directly to your cable or DSL modem, and your ISP requires you to use a static IP address, your notebook is not set up to use a DHCP server.

You cannot connect to your network.

- If your notebook is a member of a domain at your workplace, you may not be able to connect your notebook to your home network workgroup to access shared files or printers on your home network. You may, however, be able to access the Internet through your home network.

Caution



If your notebook was a member of a domain before you join a workgroup, it is disjoined from the domain and your computer account disabled. Contact your company computer department or network administrator for more information.

Important wireless information

Warning



Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. IEEE 802.11a and IEEE 802.11g communication devices are examples of devices that provide wireless communication. For more information, see [“Turning the wireless radio on” on page 5](#).

Important



See “Safety, Regulatory, and Legal Information” in your notebook user guide for general wireless regulatory and safety guidelines.

Important



Note any antenna placement constraints in the access point user guide as the speed of a wireless network is related to signal strength. Signal strength is affected by the distance between your wireless network devices, by radio interference, and by interference from natural obstructions such as walls, floors, and doors.

Notices

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