



# Connecting to the Internet

It's best to configure your network and Internet connection using Setup Assistant when you first set up Mac OS X. The assistant helps you enter your Internet configuration information, set up your networking software, and sign up for an Internet service provider (ISP) if you don't already have one.

If you did not already use the Setup Assistant to configure your Internet connection, you may be able to use it now. Open the Utilities folder and double-click the Setup Assistant icon. If you don't want to use the Setup Assistant or if there is no Setup Assistant icon in the Utilities folder, you can use the information in this appendix to set up your connection.

Whether you connect through a dialup modem, cable modem, digital subscriber line (DSL), or an Ethernet local area network (LAN), you need specific setup information from your ISP or network administrator before you begin.

**Note:** For instructions on connecting to the Internet in Mac OS 9, open Mac Help, available in the Help menu, and click "Internet and Networking."

If you are connecting for the first time, changing your settings, or adding a new configuration, follow the steps that correspond to your connection method:

- Dialup modem with Point-to-Point Protocol (PPP) connection
- Cable modem, DSL, or LAN connection using these configurations:
  - Manual
  - DHCP
  - PPPoE

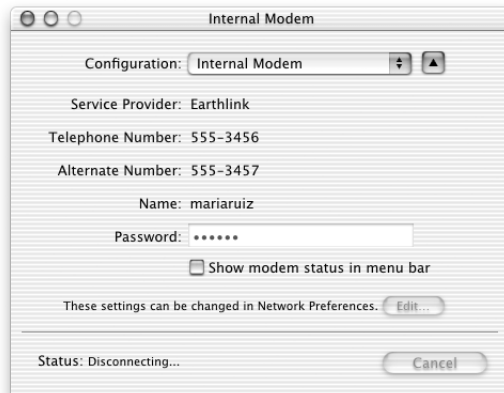
**Important** To set up your AirPort Base Station, use the AirPort Setup Assistant, located in the Utilities folder in your Applications folder.

## Dialup (PPP) Connections

The most common way to connect to the Internet is through a dialup modem. Your modem uses Point-to-Point Protocol (PPP) to connect you to an ISP. For instructions on connecting your modem to a phone line, see “Using Your Modem” on page 60.

If you have an external modem, follow the setup instructions that came with your modem. If you have an internal modem, gather the following information from your ISP and have it available as you configure your network:

- Service provider name
- Telephone number
- Alternate number
- Account name
- Your password



To set up your network preferences for the Internal Modem port:

- 1 Choose System Preferences from the Apple menu.
- 2 Click the Network icon to open the Network pane.
- 3 Choose Network Port Configuration from the Show pop-up menu and click Internal Modem.



- 4 Drag Internal Modem to the top of the Port Configurations list to make it the preferred, or primary, network interface.
- 5 Choose Internal Modem from the Show pop-up menu and click the PPP tab.

- 6 Enter the information from your ISP and click Apply Now.



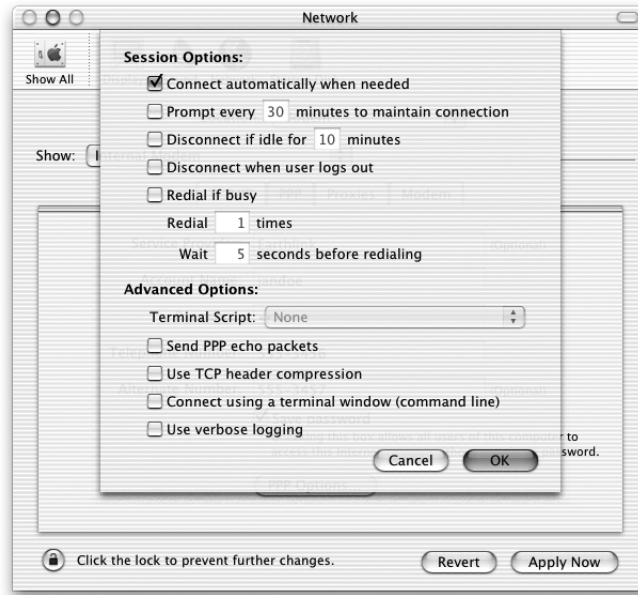
To test your Internet configuration, dialup your ISP and establish a connection:

- Open the Internet Connect application in your Applications folder.
- Click Connect.

You can connect automatically when you start a TCP/IP application, such as a Web browser or email, by setting your PPP Options as follows:

- 1 Click PPP Options in the PPP tab of Network preferences.

- 2 Click the “Connect automatically when needed” checkbox.



- 3 Click OK and Apply Now and close System Preferences.

## DSL, Cable Modem, or LAN Internet Connections

If you connect to the Internet through a DSL, cable modem, or LAN, ask your ISP or network administrator whether you should

- configure your connection manually. With a manual configuration, your ISP or network administrator provides a static IP address and other information that you enter in the Network pane.
- use the Dynamic Host Configuration Protocol (DHCP). With a DHCP configuration, the DHCP server automatically enters the information for you.
- use Point-to-Point Protocol over Ethernet (PPPoE). If you use a DSL modem and need a user name and password to connect to the Internet, you may need to configure your network to use PPPoE.

Obtain the following information and have it available as you configure your network:

- Domain name server (DNS) addresses, if necessary
- DHCP or manual IP address configuration
- IP address
- Router address
- Subnet mask

**Note:** If your ISP or local network does not provide DNS addresses, they may have a method of providing this information automatically.

First, set up your network preferences for the built-in Ethernet port:

- 1 Choose System Preferences from the Apple menu.
- 2 Click the Network icon to open the Network pane.
- 3 Choose Network Port Configurations from the Show pop-up menu.
- 4 Click Built-in Ethernet.



- 5 Drag Built-in Ethernet to the top of the Port Configurations list to make it the preferred, or primary, network interface.

Next, follow the instructions to either configure your network manually, using DHCP, or using PPPoE, as instructed by your ISP or network administrator.

## Manual Configuration

For a manual configuration, have your static IP address, router address, and subnet mask from your ISP ready:

- 1 Choose System Preferences from the Apple menu.
- 2 Click the Network icon to open the Network pane.
- 3 Choose Built-in Ethernet from the Show pop-up menu.
- 4 Click the TCP/IP tab, if necessary.
- 5 Choose Manually from the Configure pop-up menu.



- 6 Type the other information into the corresponding fields.
- 7 Click Apply Now and close System Preferences.

Once you configure your network, your connection is ready. Open your Web browser or other TCP/IP application to test your Internet connection.

## DHCP Configuration

After you set up a DHCP configuration, the DHCP server automatically provides your network information:

- 1 Choose System Preferences from the Apple menu.
- 2 Click the Network icon to open the Network pane.

- 3 Choose Built-in Ethernet from the Show pop-up menu.
- 4 Click the TCP/IP tab, if necessary.
- 5 Choose Using DHCP from the Configure pop-up menu.



- 6 Click Apply Now and close System Preferences.

Open your Web browser or other TCP/IP application to test your Internet connection.

**Note:** Unless your ISP instructs you to do otherwise, ignore the DHCP Client ID field and the Search Domains field.

### PPPoE Configuration

Some DSL-based ISPs use Point-to-Point Protocol over Ethernet (PPPoE). Check with your ISP to determine if you should connect using PPPoE. If you use a DSL modem and need a user name and password to connect to the Internet, follow these instructions.

- 1 Gather this information from your ISP:
  - User name and password
  - Domain name server (DNS) address

**Note:** Your ISP may not require you to enter a DNS server address.
- 2 Choose System Preferences from the Apple menu.
- 3 Click the Network icon to open the Network pane.

- 4 Choose Built-in Ethernet from the Show pop-up menu.
- 5 Click the PPPoE tab and select Connect using PPPoE.



- 6 Type your user name in the Account Name field and your password in the Password field. If you want all users of your computer to use the same connection method, select “Save password.”

**Note:** To connect automatically when you start a TCP/IP application, such as a Web browser or email, click PPPoE Options, then click “Connect automatically when needed.”

- 7 Click the TCP/IP tab and choose either PPP or Manually from the Configure pop-up menu, as instructed by your Internet service provider. If you have a static IP address from your ISP, choose Manually and type the address in the IP address field.

- 8 Type the Domain Name Server (DNS) addresses in the corresponding field.



- 9 Click Apply Now and close System Preferences.

Once you configure your network, your Internet connection is ready. You can open your Web browser or other TCP/IP application to test your connection.

**Important** If you did not click the option to automatically connect, then you will need to open the Internet Connect application, choose the correct configuration, and then click Connect. See Internet Connect Help in the Help menu for more information.

## Troubleshooting Your Connection

### Cable Modem, DSL, and LAN Internet Connections

If you are not able to connect to the Internet using your cable modem, DSL, or local area network (LAN), follow these steps.

**Important** Instructions that refer to modems do not apply to LAN users. LAN users may have hubs, switches, routers, or connection pods that cable and DSL modem users do not. LAN users should contact their network administrator rather than an ISP.

### **Check the cables and power supplies**

Make sure all modem cables are firmly plugged in, including the modem power cord, the cable from the modem to the computer, and the cable from the modem to the wall jack. Check the cables and power supplies to Ethernet hubs and routers.

### **Cycle the power and reset the modem hardware**

Cycle the power on your DSL or cable modem by turning it off for a few minutes then turning it back on. Some ISPs recommend that you unplug the modem's power cord. If your modem has a reset button, you can press it either before or after cycling the power.

## **PPPoE Connections**

If you are unable to connect to your Internet service provider using PPPoE, first check the cables and power supplies, then cycle the power and reset the modem hardware.

### **Check System Preferences settings**

Use System Preferences in the Apple menu to verify that you've selected PPPoE and to verify your

- account information
- TCP/IP settings
- primary network interface is set to "Built-in Ethernet"

Next, follow these steps:

- 1** Choose System Preferences from the Apple menu.
- 2** Click the Network icon to open the Network pane.
- 3** Choose Active Network Ports from the Show pop-up menu.
- 4** Select Built-in Ethernet and drag Built-in Ethernet to the top of the Port Configurations list.
- 5** Choose Built-in Ethernet from the Show pop-up menu.
- 6** Select the PPPoE tab.
- 7** Select Connect using PPPoE.
- 8** Check the Account Name field to be sure you have entered the correct information from your ISP.
- 9** Retype your password if you chose to save your password, to be sure it is correct.
- 10** Select the TCP/IP tab. Follow your ISP's instructions for setting up this pane.
- 11** Click Apply Now if you make any changes and then close System Preferences.

## Network Connections

If you have two or more computers attempting to share an Internet connection, be sure that your network is set up properly. You need to know if your ISP provides only one IP address or if it provides multiple IP addresses. If only one IP address is used, then you must have a router capable of sharing the connection, also known as network address translation (NAT) or “IP masquerading.” Check the documentation provided with your router for setup information. Check with the person who set up your network. The AirPort Base Station may be used for this routing function. For information on using the AirPort Base Station, check the online help. Choose Help Center from the Help menu and click AirPort Help. You can also find information on Apple’s AirPort website at [www.apple.com/airport](http://www.apple.com/airport)

### **Contact your ISP**

If you cannot resolve the issue using these steps, contact your ISP.