



NETWORK MANAGEMENT

Windows Me Dial-Up Access

OBJECTIVES

1. Install Dial-Up Networking.
2. Establish a connection to another computer, using Dial-Up Networking via modem.



Networking

RESOURCES

1. Marcraft 8000 Trainer with Windows Millennium installed
2. Modem installed
3. ISP dial-up account

DISCUSSION

If your Windows Me installation is new, the necessary IP and DNS information will need to be set up. If the installation is an upgrade of an earlier operating system that already had established communication settings, Windows Me will attempt to detect these settings, and install them as the default settings.

In a dial-up environment, the dialing information and parameters are set up through the Start menu. Simply click on Start\Settings and select the Dial-Up Networking entry. This should produce the Dial-Up Networking window. Select the Make New Connection icon.

There are basically two types of Internet connection schemes to deal with. The first is a dial-up installation involving a local modem and the telephone system. The second is a remote connection through a local area network. Currently, the fastest speed for an analog is 56K.

From this point, the connection wizard will prompt you for information about the modem type, COM port selection, ISP dial-up telephone number, and the country. Entering this information will produce a My Connection icon in the Dial-Up Networking window. Click on the new icon to set up the appropriate Internet information. Clicking the Properties button and selecting the Networking tab brings you to Advanced options. Clicking the TCP/IP Settings button allows you to input ISP-provided DNS information as shown in Figure 31-1. Normally, the Server assigned IP address option is selected. This allows the Dynamic Host Configuration Protocol (DHCP) server at the ISP to dynamically assign IP addresses to your system using one of its allotted IP addresses. In most cases, an ISP would not be willing to service a normal account with a static IP address. When this option is selected, the given IP is assigned to your system even when it is not being used. Therefore, the ISP cannot use that IP for any other account even though it is not busy.

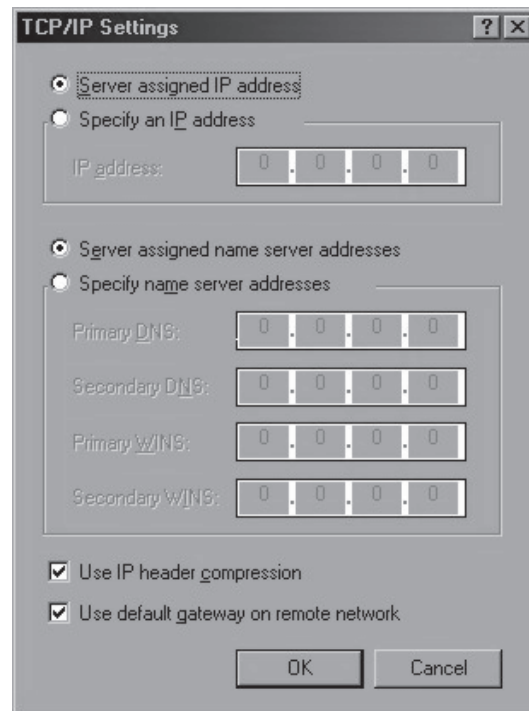


Figure 31-1: Establishing Internet Properties

If the Internet connection is made through a LAN system, the communication information is entered through the Control Panel's Network icon. The network administrator will need to supply Windows Me with the computer's DNS information from the local network router installation. In most cases, the network server communicates with the ISP as described for the dial-up network installation above. However, within a LAN-based system, the router software assigns each node on the network a static IP address, as shown in Figure 31-2.

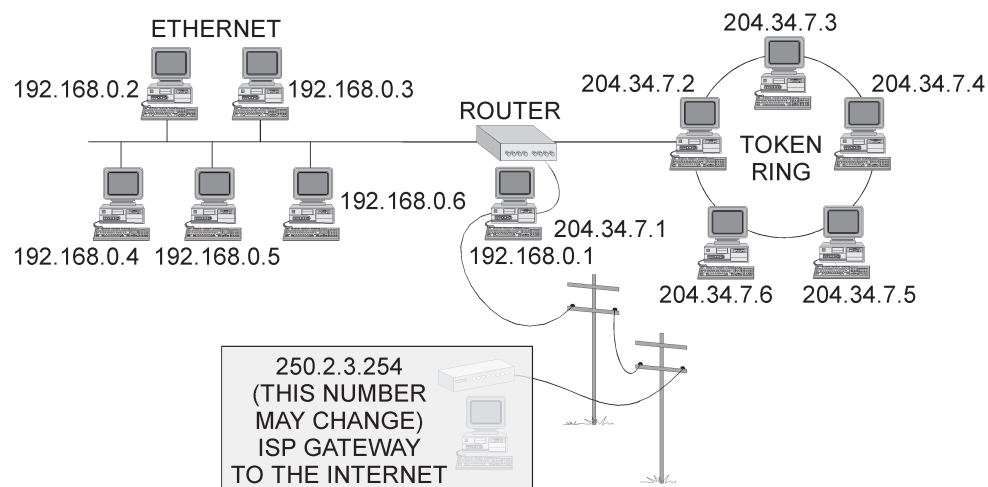


Figure 31-2: Local IP Addresses in a LAN System

PROCEDURE



Networking

Configure the Dial-Up Networking Feature

1. Boot the computer to Windows Millennium

- ___ a. Turn on the computer and select Windows Me from the OS selection menu.

2. Set up dial-up networking to connect to the Internet.

NOTE: If your computer already has the Dial-Up Networking installed, proceed to Step 2j.

- ___ a. Use the path Start/Settings/Control Panel/ and double-click the Add/Remove Programs icon to open the Add/Remove Programs window.
- ___ b. Click the Windows Setup table.
- ___ c. In the Components box, select Communications.
- ___ d. Click the Details button.
- ___ e. In the Components window, check the check box next to Dial-Up Networking to select it.
- ___ f. Click the OK button twice, and follow the instructions.
- ___ g. Restart the computer.
- ___ h. Close the Control Panel window.
- ___ i. Use the path Start/Setting and select Dial-Up Networking from the menu.
- ___ j. Double-click on Make New Connection.
- ___ k. In the Make New Connection screen, enter the name of your Internet Service Provider (ISP) in the Type window.

3. Check the Windows Me modem configuration

- ___ a. Click the Configure button.
- ___ b. Set the Maximum speed value to the highest setting available.
- ___ c. Click the Connection tab, and record the modem connection preferences information ion Table 31-1.
- ___ d. Click the Port Settings button.
- ___ e. Set the Receive Buffer speed setting to Maximum.
- ___ f. Set the Transmit Buffer speed setting to High.

The Receive Buffer speed is set above the Transmit Buffer speed, otherwise the modem will try to transmit as fast as it receives, and will end up filling the buffer. This will slow down the operation of the connection.

- ___ g. Click the OK button to return to the Connection window.
- ___ h. Click the Advanced button.
- ___ i. Record the Hardware and Software flow control settings in Table 31-2.

This is also where you would add any extra settings you would want to have for your modem. An example is M0, which usually turns the volume on your modem off so your computer is silent when connecting to the Internet.

- ___ j. Click on OK to return to the Modem Preferences window.

PROCEDURE - 31

4. Set up the ISP dial-up connection information

- Click on OK again to return to the *Make New Connection* window.
- Click Next to advance to the phone number entry page.
- Type in the phone number of your ISP (provided by your instructor) and click Next.
- Click the Finish button to produce an icon in the *Dial-Up Networking* window similar to the one depicted in Figure 31-3.

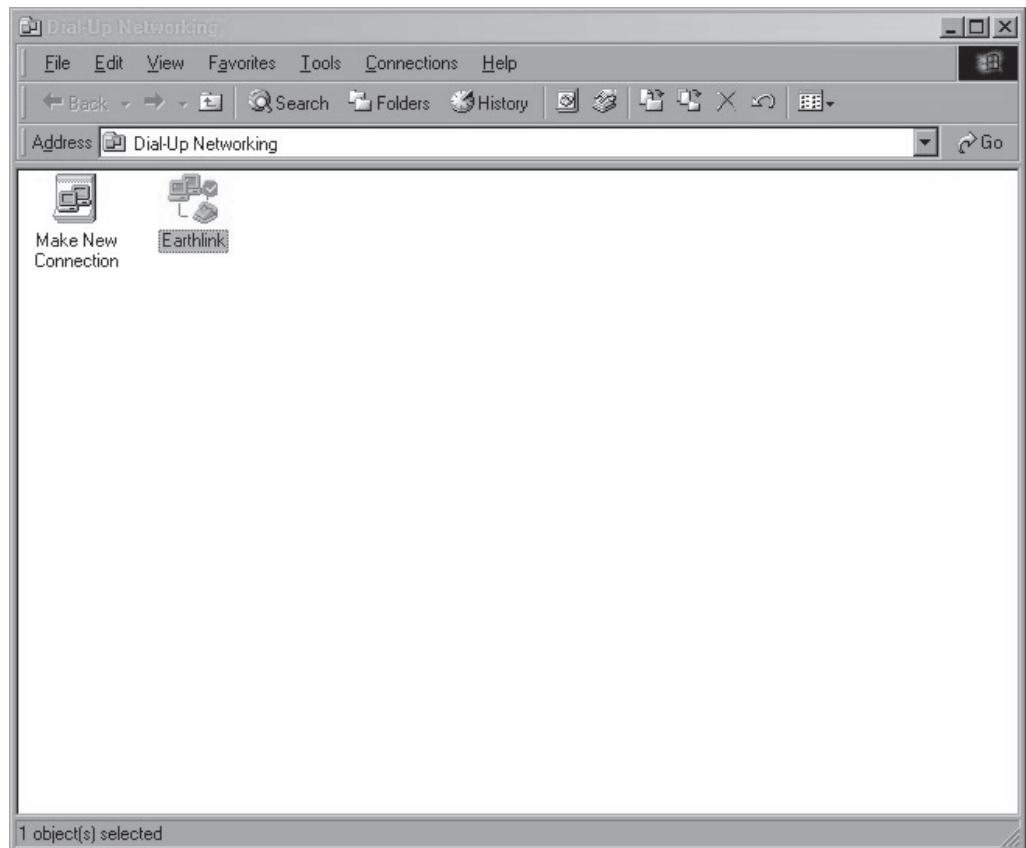


Figure 31-3: Dial-Up Networking Window

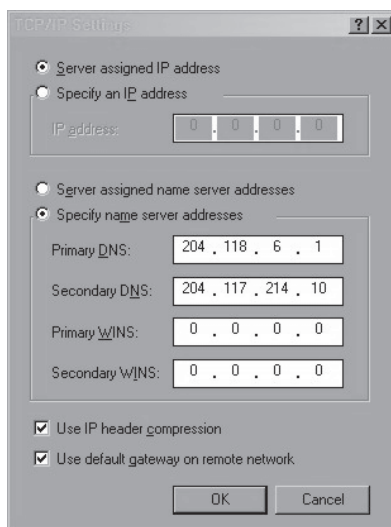


Figure 31-4:
Editing a String

5. Establish the server address for the connection

- Right-click the icon just created in the *Dial-Up Networking* window.
- Select Properties from the list.
- Under Networking, click the TCP/IP Settings button.

NOTE: Your ISP should connect to the Internet through a specific server address. You'll need to get this information from your instructor.

- If they specify an address click the "Specify name server addresses" radio button to mark it.
- Type in the Primary DNS (Domain Name Service) and Secondary DNS address provided to you by your ISP. The screen should be similar to the one depicted in Figure 31-4, except for your ISP addresses.
- Click on OK twice to return to the *Dial-Up Networking* window.

6. Connect to the Internet

- a. Double-click the icon of the new connection.
- b. Enter the User name and Password supplied by your instructor (from the ISP).
- c. Click on Connect.

You should hear the modem dialing (unless you specified M0). A *Connecting To* window should appear, displaying the status of the modem. The duration time is continually updated. If an Internet browser was already set up, the *Connected To* window would minimize to the Taskbar. The system is now connected to the Internet.

7. Shut down the computer

TABLES

Table 31-1

Modem Connection Preferences	
Data Bits:	
Parity:	
Stop Bits:	

Table 31-2

Hardware and Software Flow Control Settings:	

LAB QUESTIONS

1. Describe the information that must be obtained from the ISP when setting up a dial-up networking account.
2. What type of protocol was selected for connecting to the Internet?
3. What is a DNS address?
4. What type of server is used to dynamically assign IP addresses?
5. What is the current maximum speed of an analog modem?



Feedback

