Configuring Microsoft Windows® 2000 Networking and Dial-Up Connections for use with ADTRAN ISDN Products

Introduction

This Technical Support Note details the configuration of Microsoft Windows 2000 Networking and Dial-Up Connections for use with ADTRAN ISDN products.

Before You Begin

- This note assumes that the ADTRAN ISDN device is already installed in the Windows operating system. If not, please refer to kb article # 1548 before you continue.

- Your PC hardware affects your throughput. If the COM port connected to the ADTRAN device does not have at least a 16550 UART chip, it will adversely affect the performance of your application for baud rates of over 19.2 kbps. For rates over 19.2 kbps, you need to purchase an add-on card with the 16550 UART chipset.

- If your terminal adapter is not set up to run MP or BONDING (it is only connecting on one bearer channel), or if your Internet provider only allows access on one bearer channel, then setting your serial port to a baud rate of 115.2 kbps may allow you to improve your throughput. In some cases, doing this will allow the full use of the 64 kbps bearer channel, instead of using a baud rate of only 57.6 kbps.

- In order to place calls at 230.4 kbps, you are required to have a 16650 UART on your COM port.

Configuring Network and Dial-Up Connections Options

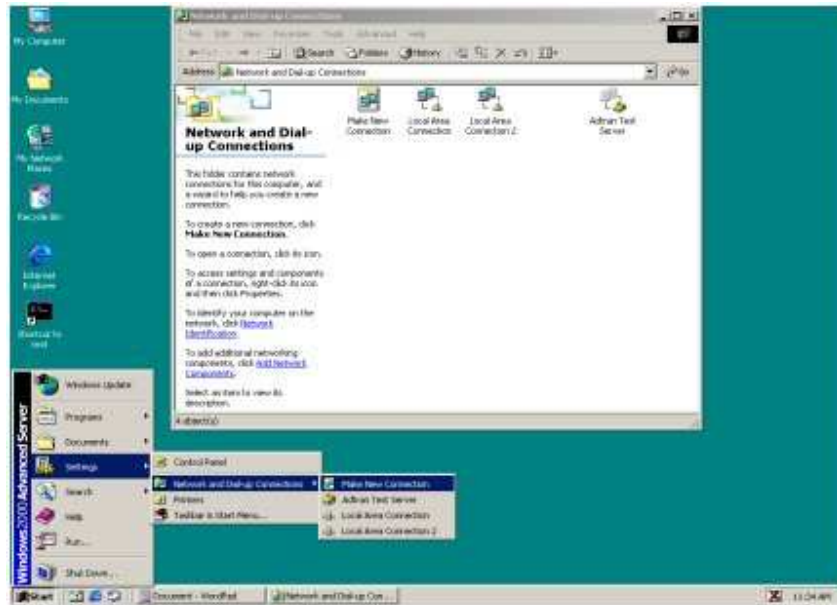1. Click on **Start>Settings>Network and Dial-up Connections** (see Figure 1).

Figure 1

2.   Double click on **Make New Connection** (see Figure 2).

Figure 2

3.   The **Network Connection Wizard** will open. Click **Next** to continue (see Figure 3).

Figure 3

4. Select the **Dial-up to the Internet** option and click **Next** (see Figure 4).

Figure 4

5. Select the **I want to set up my Internet connection manually, or I want to connect through a local area network (LAN)** option and click **Next** to continue (see Figure 5).

Figure 5

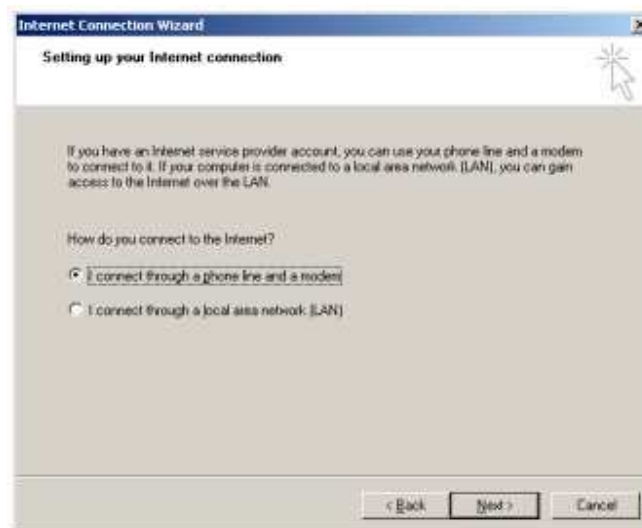6. Select **I connect through a phone line and a modem** and click **Next** to continue (see Figure 6).

Figure 6

7. Enter the **Area Code** and **Telephone Number** of your ISP and click **Advanced** (see Figure 7).
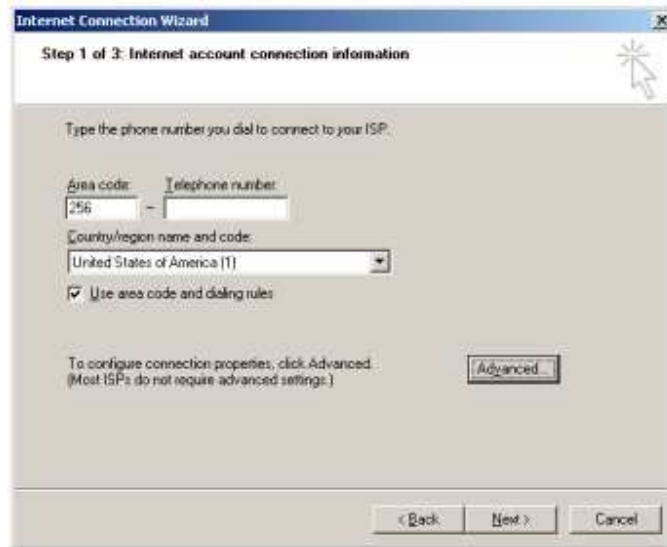
Figure 7

8. Make sure **PPP (Point to Point Protocol)** is selected and check **Disable LCP Extensions** also (see Figure 8).

Figure 8

9. Click on the **Addresses** tab, make sure **Internet service provider automatically provides one** for **IP address** is selected and **My ISP automatically provides a Domain Name Server (DNS) address** for **DNS server address** is also selected and click **OK** (see Figure 9).
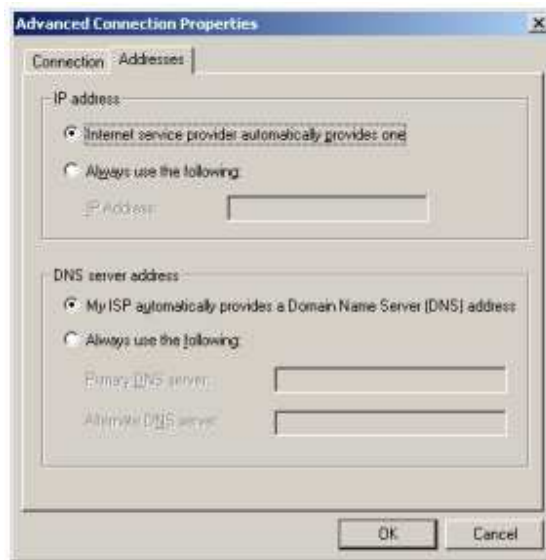
Figure 9

10. Enter your **User Name** and **Password** provided by your Internet Service Provider (ISP) and click **Next** (see Figure 10).
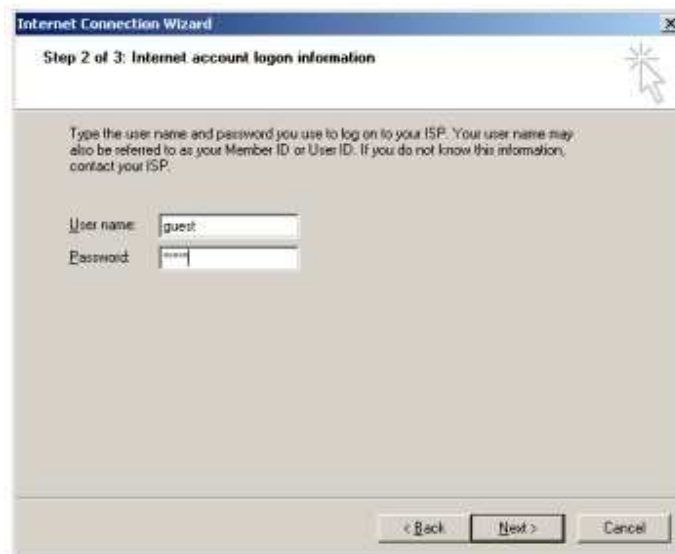

Figure 10

11. Enter your **Connection Name** (any name) and click **Next** (see Figure 11).

Figure 11

12. Select the **No** option on the last step (**Do you want to set up an Internet mail account now?**) and click **Next** (see Figure 12).

Figure 12

13. Uncheck **To connect to the Internet immediately, select this box and then click Finish** and click **Finish** (see Figure 13).

Figure 13

14. Now, an icon for your Connection should appear in the **Network and Dial-up Connections** folder. Right-click on the icon for your ISP and select **Properties** (see Figure 14).

Figure 14

15. In the **Connect Using** field, select the appropriate ADTRAN product. Click on the **Configure** button (see Figure 15).

Figure 15

16. Set the **Maximum Speed** to **115200**, set the **Modem Protocol** to **PPP(112K)** or **PPP(128K)**, leave **Enable hardware flow control** checked, and click **OK** (see Figure 16).

Figure 16

17. Select the **Networking Tab** and make sure **Internet Protocol (TCP/IP)** is selected and highlighted; then click **Properties** (see Figure 17).
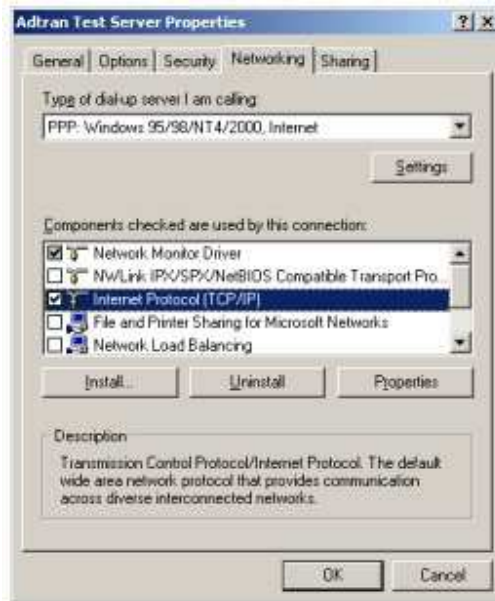
Figure 17

18. Enter your IP settings and DNS settings if your ISP has provided you with them. If not, select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK** (see Figure 18).

Figure 18

19. On the **Type of dial-up server I am calling** option at the top of the window, click **Settings** and uncheck the **Enable LCP extensions** option and **Enable software compression** option. Then, click **OK** and close the window (see Figure 19).

Figure 19

20. Go into **Control Panel** and open **Phone and Modem Options**.
21. Go to the **Modems** tab and select the ADTRAN ISDN product; then select **Properties** (see Figure 20).
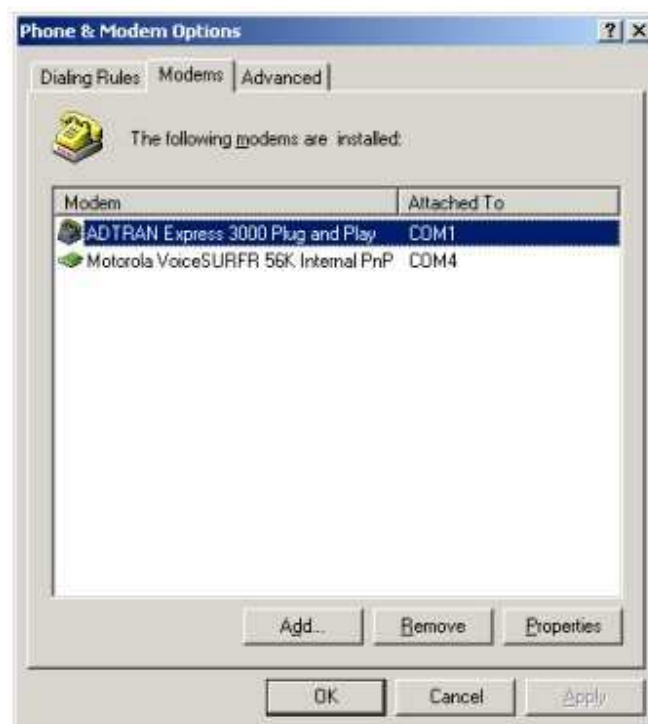

Figure 20

22. Select the **Advanced** tab and type in the appropriate initialization string (see Figure 21).

Figure 21

Suggested initialization strings are:

Protocol	Initialization String
PPP	ATS54=12 S27=0 S53=3
Multilink PPP (2 channels)	ATS54=12 S27=1 S53=3
V.120	ATS54=6 S27=0 S53=3

Note: For a complete list of Suggested Initialization Commands see kb article # 1594.

23. Close the **Phone and Modem Properties** as well as the **Control Panel** and return to **Networking & Dial-Up Connections**.
24. Double-click on the **Networking & Dial-Up** connection that you have just created, fill in the **User name** and **Password** given by your ISP, and click **Dial** to connect to your ISP (see Figure 22).

Figure 22