

Configuring Microsoft Windows® XP Network and Internet Connections for the Express 3000

Introduction

This Technical Support Note details the configuration of Microsoft Windows[®] XP Network and Internet 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.
- This note assumes that Windows[®] XP is in Category View. If Windows[®] XP is not in Category View, then right-click on the taskbar, select Properties, Start Menu and select Category View.
- 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 allows access on only 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>Control Panel** (see Figure 1).



Figure 1

2. Click on Network and Internet Connections (see Figure 2).





3. Click Network Connections (see Figure 3).



Figure 3

4. Under Network Tasks, click Create a new connection (see Figure 4).





5. The New Connection Wizard will open. Click Next to continue (see Figure 5).



Figure 5

6. Select the **Connect to the Internet** option and click **Next** (see Figure 6).

New Connection Wizard
Network Connection Type What do you want to do?
 Connect to the Internet Connect to the Internet so you can browse the Web and read email. Connect to the network at my workplace Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location. Set up a home or small office network Connect to an existing home or small office network or set up a new one. Set up an advanced connection Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.
< Back Next > Cancel

Figure 6

7. Select the **Set up my connection manually** option and click **Next** to continue (see Figure 7).

New Connection Wizard
Getting Ready The wizard is preparing to set up your Internet connection.
How do you want to connect to the Internet?
Choose from a list of Internet service providers (ISPs)
 Set up my connection manually For a dial-up connection, you will need your account name, password, and a phone number for your ISP. For a broadband account, you won't need a phone number. Use the CD I got from an ISP
< Back Next > Cancel

Figure 7

Select Connect using a dial-up modem and click Next to continue (see Figure 8).

New Connection Wizard
Internet Connection How do you want to connect to the Internet?
Onnect using a dial-up modem
This type of connection uses a modem and a regular or ISDN phone line.
Connect using a broadband connection that requires a user name and password
This is a high-speed connection using either a DSL or cable modem. Your ISP may refer to this type of connection as PPPoE.
Connect using a broadband connection that is always on This is a high-speed connection using either a cable modem, DSL or LAN connection. It is always active, and doesn't require you to sign in.
< Back Next > Cancel



9. Enter your **Connection Name** (any name) and click **Next** (see Figure 9).

New Connection Wizard	
Connection Name What is the name of the service that provides your Internet connection?	S)
Type the name of your ISP in the following box. ISP Name	
Adtran Test Server	
The name you type here will be the name of the connection you are creating.	
< Back Next >	Cancel

Figure 9

10. Enter the **Phone number** of your ISP and click **Next** (see Figure 10).

New Connection Wizard	
Phone Number to Dial What is your ISP's phone number?	
Type the phone number below. Phone number: 15555555555 You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telephone. If you hear a modem sound, the number dialed is correct.	
< Back Next > Cancel)



11. Enter your **User name** and **Password** provided by your Internet Service Provider (ISP), **Confirm** your **password** and click **Next** (see Figure 11). Chose to enable the following options: Use this account name and password when anyone connects to the Internet from this computer; Make this the default Internet Connection; and Turn on the Internet Connection Firewall for this connection.

New Connection Wizard	
Internet Account Inform You will need an accou	nation Int name and password to sign in to your Internet account.
Type an ISP account n safe place. (If you have	ame and password, then write down this information and store it in a forgotten an existing account name or password, contact your ISP.)
User name:	user
Password:	•••••
Confirm password:	•••••
Use this account in this computer	ame and password when anyone connects to the Internet from
🗹 Make this the defau	It Internet connection
🗹 Turn on Internet Co	nnection Firewall for this connection
	< Back Next > Cancel

Figure 11

12. Click **Finish** (see Figure 12).

New Connection Wizard	
S	Completing the New Connection Wizard
	You have successfully completed the steps needed to create the following connection:
	Adtran Test Server • Make this the default connection • This connection is firewalled • Share with all users of this computer • Use the same user name & password for everyone
	The connection will be saved in the Network Connections folder.
	Add a shortcut to this connection to my desktop
	To create the connection and close this wizard, click Finish.
	< Back Finish Cancel

Figure 12

User name: Password: I To change the saved password, click here] Save this user name and password for the following users: Anyone who uses this computer	onnect Adtr	an Test Server	?
User name: User Password: [To change the saved password, click here] Save this user name and password for the following users: Me only Anyone who uses this computer	B		
 Save this user name and password for the following users: Me only Anyone who uses this computer 	User name: Password:	user [To change the saved password]	click here]
Anyone who uses this computer	Save this us	ser name and password for the follo	wing users:
	 Anyone 	who uses this computer	
	Dial	Cancel Properties	Help

13. Before you connect, click **Properties** (see Figure 13).

Figure 13

14. In the **Connect using** field, select the appropriate ADTRAN product. Click on the **Configure** button (see Figure 14).

🖢 Adtran Test Server Properties 🛛 🛜 🔀
General Options Security Networking Advanced
Connect using: Modem - ADTRAN Express 3000 Plug and Play (COM1)
Configure
Phone number
Area code: Phone number: 1555555555 Alternates
Country/region code:
Use dialing rules Dialing Rules
Show icon in notification area when connected
OK Cancel

Figure 14

15. Set the Maximum speed to 115200, set the Modem protocol to PPP(112K) or PPP(128K), leave Enable hardware flow control checked and the rest unchecked, and click OK (see Figure 15).

Modem Configuration	? 🛛
ADTRAN Express 300	00 Plug and Play (COM1)
Maximum speed (bps):	115200
Modem protocol	PPP (128K) 🧭
Hardware features	
Enable hardware flow cor	itrol
Enable modem error contr	ol
Enable modem compressi	on
Show terminal window	OK Cancel

Figure 15

16. Click on the **Networking** tab. On the **Type of dial-up server I am calling** option at the top of the window, make sure **PPP: Windows 95/98/NT4/2000, Internet** is selected. Click **Settings** (see Figure 16).

🕨 Adtran Test Server Properties 🛛 🕐 🔀
General Options Security Networking Advanced
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
Settings
This connection uses the following items:
Gos Packet Scheduler Gos Packet Scheduler Gos File and Printer Sharing for Microsoft Networks Gient for Microsoft Networks
Install Uninstall Properties
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

Figure 16

17. Uncheck the **Enable LCP extensions** option and **Enable software compression** option and leave the **Negotiate multi-link for single link connections** checked. Then click **OK** (see Figure 17).

Adtran Test Server Properties
General Options Security Networking Advanced
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
Settings
PPP Settings
Enable LCP extensions Enable software compression
Negotiate multi-link for single link connections
OK Cancel
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

Figure 17

18. On the This connection uses the following items: option, make sure Internet Protocol (TCP/IP) is selected and highlighted; then click Properties (see Figure 18).

🕨 Adtran Test Server Properties 🛛 😨 🔀
General Options Security Networking Advanced
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
Settings
This connection uses the following items:
QoS Packet Scheduler
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

Figure 18

19. 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 19).

Internet Protocol (TCP/IP) Properties 🛛 🕐 🔀					
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
Obtain an IP address automatically					
O Use the following IP address:					
IP address:					
Obtain DNS server address automatically Ouse the following DNS server addresses: Preferred DNS server:					
Alternate DNS server:					
Advanced					
OK Cancel					

Figure 19

20. Leave the settings on the **Options**, **Security**, and **Advanced** tabs with the default values and click **OK** (see Figures 20, 21 and 22).

🖕 ADTRAN Prop	erties	e tea tea tea tea tea tea		? 🗵
General Options	Security	Networking	Advanced	
Dialing options - Display prog Prompt for r Include Wir Prompt for r	press while name and p ndows logo nhone num	connecting bassword, cert on domain ber	ificate, etc.	
- Redialing option	s			
Redial attempts	4		3	*
Time between i	edial atter	npts:	1 minute	~
Idle time before	hanging u	ip:	never	*
🔄 Redial if line	is droppe	d		
×.25				Cancel
		L	OK	Cancel

Figure 20



Figure 21



Figure 22

21. Go into Control Panel>Printers and Other Hardware and select Phone and Modem Options (see Figure 23).



Figure 23

22. Go to the **Modems** tab and select the ADTRAN ISDN product; then select **Properties** (see Figure 24).

Phone and Modem Options	? 🛛
Dialing Rules Modems Advanced	
The following moderns are installed:	
Modem	Attached To
ADTRAN Express 3000 Plug and Play	COM1
Add Rer	nove Properties
ОК	Cancel Apply

Figure 24

23. Select the **Advanced** tab, type in the appropriate **Extra initialization commands**, and click **OK** (see Figure 25).

ADTRAN Express 3000 Plug and Play Properties
General Modem Diagnostics Advanced Driver
Extra Settings Extra initialization commands: ats54=12s53=3s27=1s13=1s6=0
Change Default Preferences
OK Cancel



Note: For a complete list of Suggested Initialization Commands see the ADTRAN Technical Support Note **Initialization Strings for the Express XRT and Express 3000 in Microsoft Windows® 95, 98, NT, 2000, ME and XP Operating Systems** (kb article # 1594)

24. Close the **Phone and Modem Properties** and **Control Panel**, and return to **Network and Internet Connections** and double-click on the **Dial-up** connection that you have just created (see Figure 26).



Figure 26

25. Fill in the **User name** and **Password** given by your ISP, and click **Dial** to connect to your ISP (see Figure 27).



Figure 27

26. The ADTRAN Terminal Adapter should dial and connect (see Figure 28).

Dial-up
Adtran Test Server Disconnected, Firewalled ADTRAN Express 3000 Plug a
LAN or High-Speed Internet
Connecting Adtran Test Server
Dialing 1555555555
Cancel

Figure 28