

## »» C: Windows Dial-up Networking (DUN)

- Installing a modem driver for PinPoint X
- Creating a Dial-Up Networking (PPP) Connection
- Connecting to the Internet Using DUN

Dial-up Networking (DUN) allows a computer or other device to use the serial port or USB virtual serial port on your PinPoint X to connect to the Internet or private network using PPP just like an analog modem using a standard phone line.

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**Caution:** *To install any driver on your computer, you may need to be logged in as Administrator or have Administrator privileges for your login.*

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Microsoft Windows XP is used in the examples below. The modem driver installation and DUN setup and configuration is similar in Microsoft Windows products. Examples are not provided here for installing the driver or configuring DUN for any other operating system.

### Installing a modem driver for PinPoint X

Standard installations of Microsoft Windows XP and 2000 include a generic modem driver which will work with your PinPoint X.

#### 1. Connect the PinPoint X.

- a. Connect the modem to the computer with a DB-9 cable or the USB port in serial mode. .
- b. Plug in the AC adapter, connect the antenna(s) and power on the modem.

#### 2. Install the driver.

- a. Select *Start > Control Panel > Phone and Modem Options* (in Classic View).

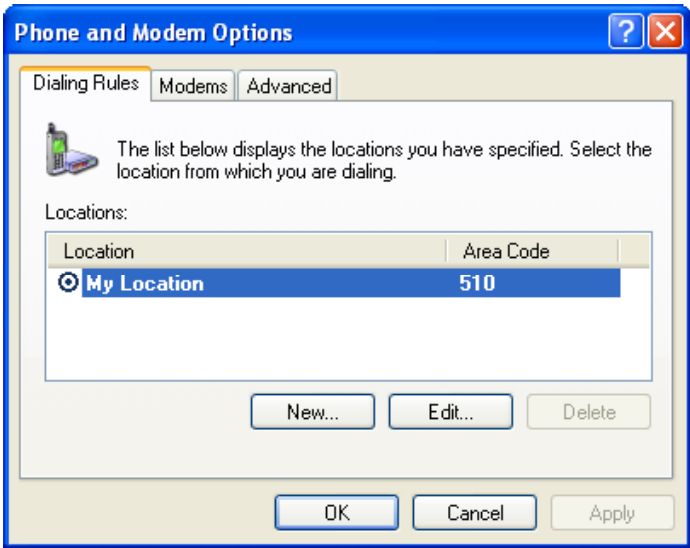


Figure 3-1: Phone and Modem Options

b. Select the *Modems* tab.

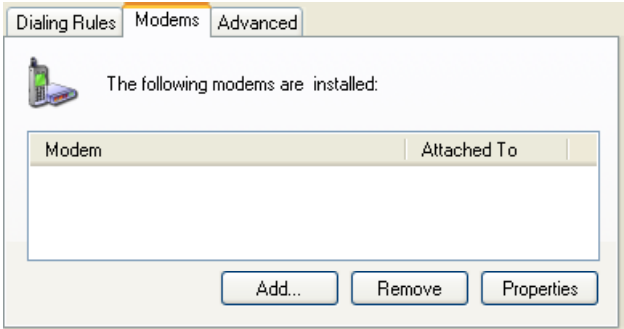


Figure 3-2: Phone and Modem Options: Modems

c. Select *Add*.



Figure 3-3: Add Hardware Wizard

- d. Check *Don't detect my modem; I will select it from a list.*
- e. Select *Next.*

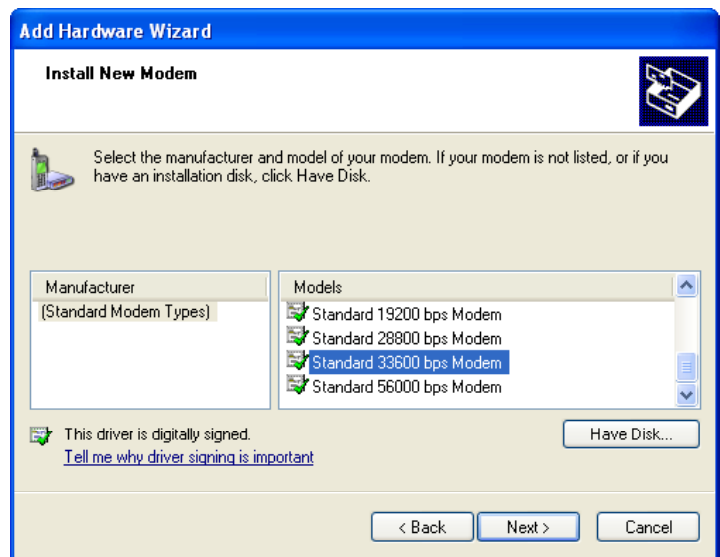


Figure 3-4: Add Hardware Wizard: Install New Modem

- f. Select *(Standard Modem Types)* from the Manufacturers column.
- g. Select *Standard 33600 bps Modem* from the Models column.

**Tip:** If you have the speed for your modem configured as something other than the default, use the Standard Modem that matches the speed you configured.

**h.** Select *Next*.

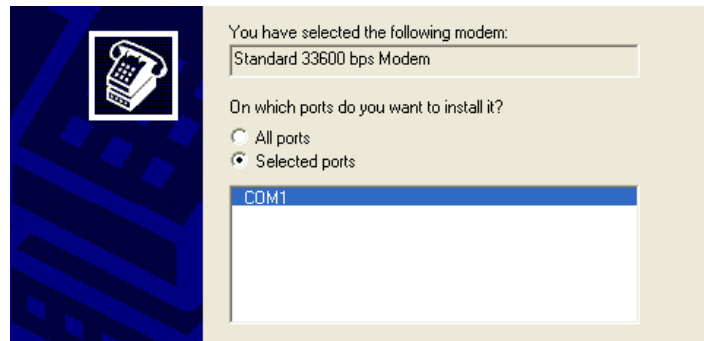


Figure 3-5: Add Hardware Wizard: Select Ports

- i.** Check *Selected Ports*
- j.** Select the COM port the modem is connected to (commonly COM1).
- k.** Select *Next*.



Figure 3-6: Add Hardware Wizard: Finish

- l.** Once the modem driver is installed, select *Finish*.

### 3. Configure the driver.

When you return to the *Phone and Modem Options* window, you should see the newly installed modem “attached to” the correct COM port.

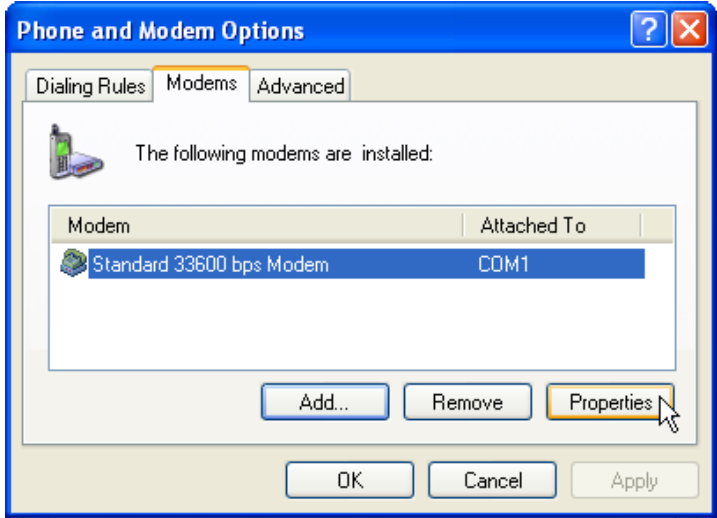


Figure 3-7: Phone and Modem Options: Modems

- a. Highlight the modem and select *Properties*.

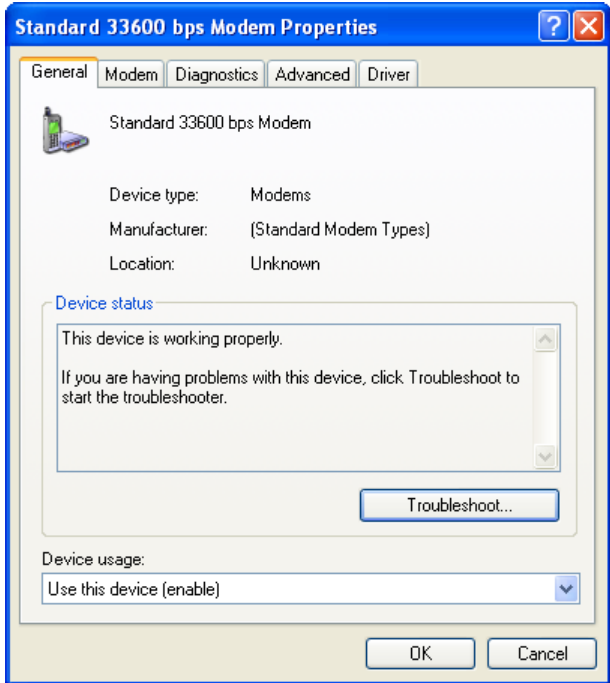


Figure 3-8: Modem Properties

- b. Select the *Modem* tab.

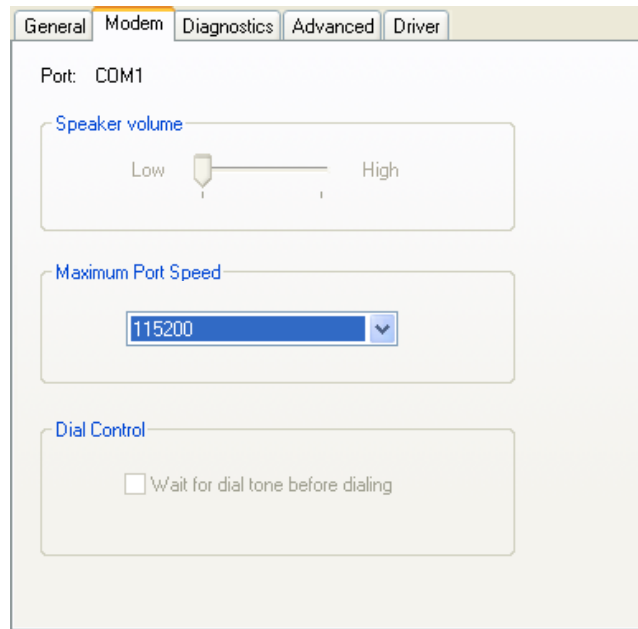


Figure 3-9: Modem Properties: Modem

- c. Maximum Port Speed should be set to *115200* (default).
- d. Select *OK* to exit.
- e. Select *OK* again to exit out of the Phone and Modem Options.

## Creating a Dial-Up Networking (PPP) Connection

Once you have the driver for the modem installed on your computer, you can set up and configure Dial Up Networking (DUN) to use the modem as your connection to the Internet using PPP.

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*Note: No other device or program can be using the same COM port (serial port) configured for the modem driver.*

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**Caution:** *If you have an existing LAN connection, installing DUN for the modem may interfere with the LAN connection. It's recommended to disconnect your LAN connection before using a PPP connection with your PinPoint X.*

Once the DUN connection is initiated, by default, it will take over as the “default route” for network communication and specifically for Internet access. If you want the two connections to co-exist, you will need to de-select “Use default gateway on remote network” (described later) and use the route command in Windows to setup routing through the modem properly. This guide does not provide information on the route command. You may need to consult with your network administrator to properly configure routing.

## 1. Create a new network connection.

- a. Select *Start > Connect To > Show All Connections* to open the Network Connections window.

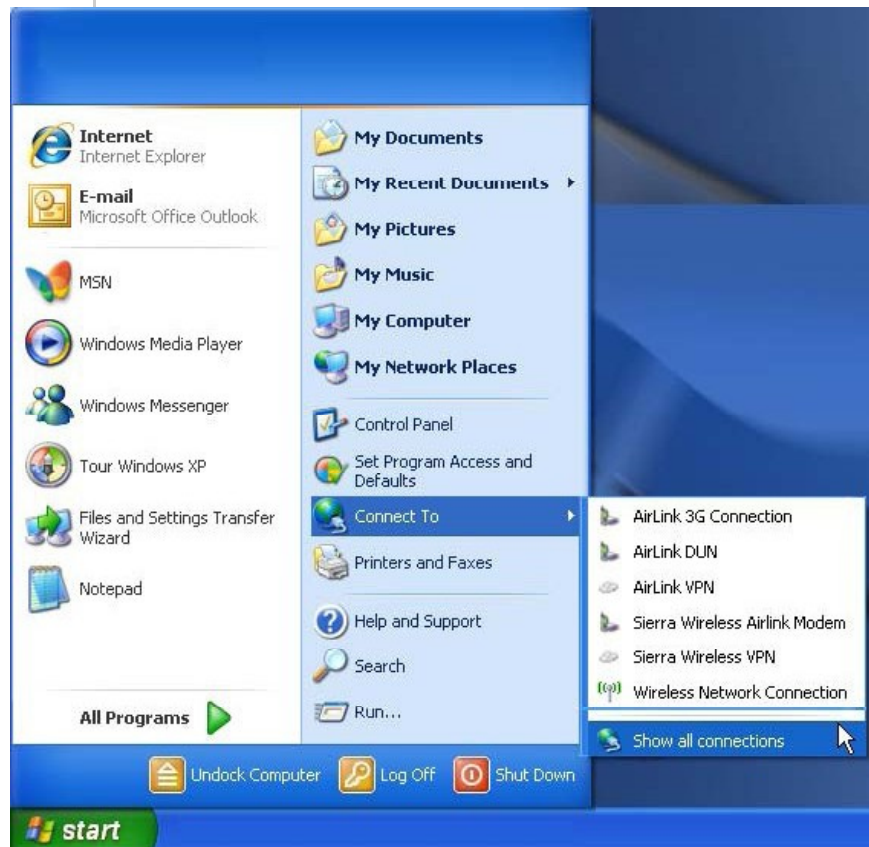


Figure 3-10: Windows : Start menu

- b. Select *Create a New Connection* under Network Tasks in the menu area on the left.

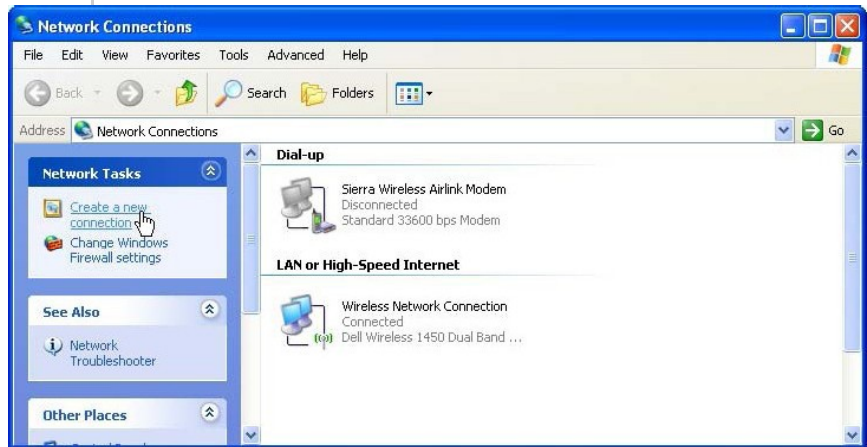


Figure 3-11: Create New Connection

- c. Select *Next* to start installing and configuring the DUN connection.



Figure 3-12: New Connection Wizard

- d. Select *Connect to the Internet*.
- e. Select *Next*.

- 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 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.

Figure 3-13: New Connection: Type

- f.** Select *Set up my connection manually*.
- g.** Select *Next*.

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**

Figure 3-14: New Connection: How do you want to connect?

- h.** Select *Connect using a dial-up modem*.
- i.** Select *Next*.

- Connect 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.

Figure 3-15: New Connection: Connect using...

- j.** *Optional:* If you have multiple modems installed on your computer, you may be prompted to select the modem to be used. If you only have one modem installed, this option will be omitted.
- k.** Check *Standard 33600 bps Modem*.
- l.** Select *Next*.

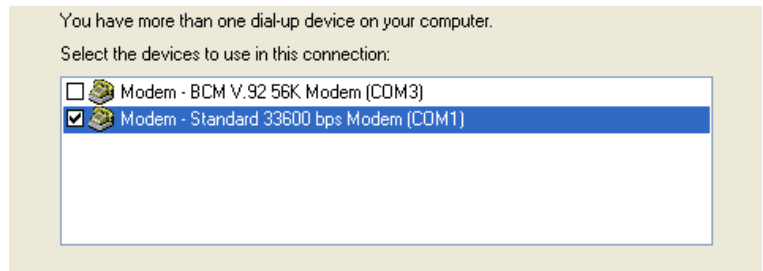


Figure 3-16: New Connection: Select Modem

- m.** Type in a name for the connection, such as *Sierra Wireless AirLink Modem*.
- n.** Select *Next*.

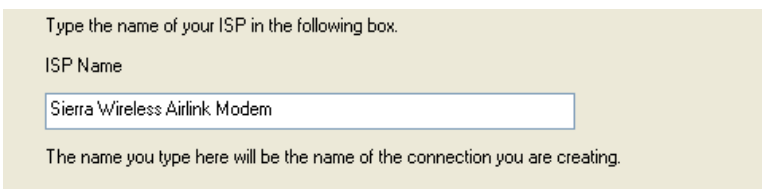


Figure 3-17: New Connection: Connection Name

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**Tip:** The name provided here will not effect the connection in any way. It is only a label for the icon. It can be the name of your wireless service provider (Provider), your modem (PinPoint X), or any other designation for the connection.

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- o.** Type in *10001* as the phone number for the modem to dial.
- p.** Select *Next*.

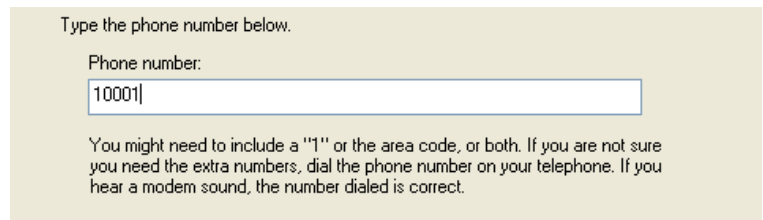


Figure 3-18: New Connection: Phone Number

- q.** *Optional:* If you have multiple users configured for your computer, you may be prompted for Connection Availability. If you select *My use only*, the account currently logged on will be the only one able to use this DUN connection.
- r.** Select *Next*.

A connection that is created for your use only is saved in your user account and is not available unless you are logged on.

Create this connection for:

- Anyone's use  
 My use only

Figure 3-19: New Connection: Permissions

Generally the modem takes care of the Account Information, User name and Password, for the connection, so you can leave the fields blank (unless otherwise instructed by Support).

- s. If you want to allow others to use the same login for the modem, select *Use this account name and password...*
- t. Select *Next*.

Type an ISP account name and password, then write down this information and store it in a safe place. (If you have forgotten an existing account name or password, contact your ISP.)

User name:

Password:

Confirm password:

Use this account name and password when anyone connects to the Internet from this computer

Make this the default Internet connection

Figure 3-20: New Connection: Connection Information

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**Caution:** *If you have a LAN connection to the Internet and select **Make this the default Internet Connection** for the DUN configuration, you will not be able to use the LAN to connect to the Internet and may also affect the network connection on your computer to the rest of the LAN. Select this option **ONLY** if the PinPoint X will be your sole network connection.*

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- u. If you want to add a shortcut for this DUN connection to your desktop, check *Add a shortcut*.
- v. Select *Finish* to exit the Network Connection Wizard.



Figure 3-21: New Connection: Finish

## 2. Configure the DUN connection

After you complete the New Connection Wizard, there are a few more things you will want to configure in the connection.

- a. Select *Properties*.

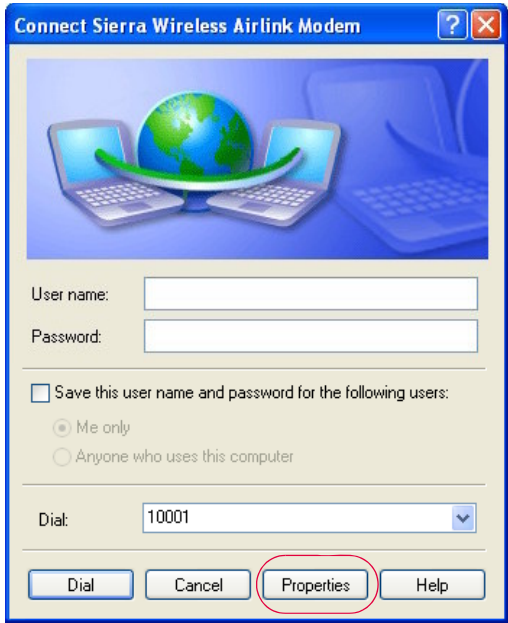


Figure 3-22: DUN Connection

- b. Uncheck *Use dialing rules*.

- c. Check *Show icon...when connected*.
- d. Select *Configure*, below the Connect using line.

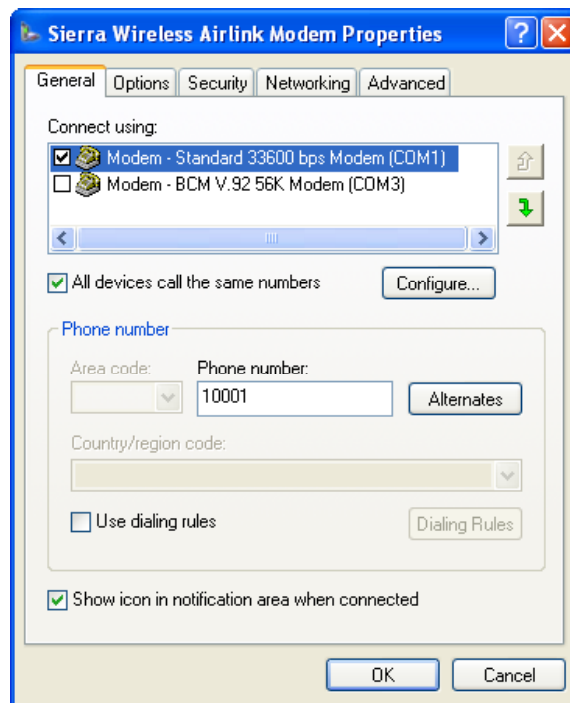


Figure 3-23: DUN Properties

- e. Select *115200* as the Maximum speed.
- f. Check *Enable hardware flow control*.
- g. Do not check any other option.
- h. Select *OK*.

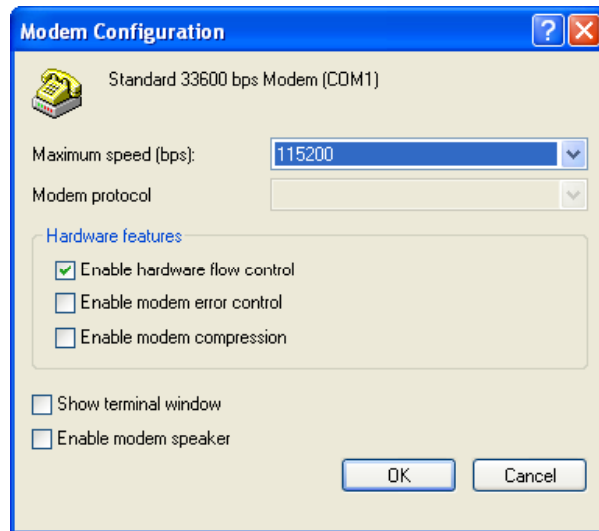


Figure 3-24: Modem Configuration

- i. Back at the main properties screen, select the *Networking* tab.

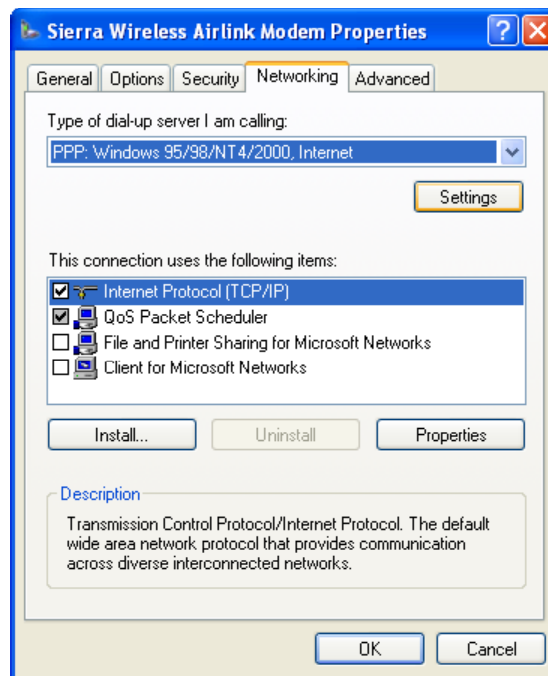


Figure 3-25: Networking

- j. Select *Settings*.
- k. Remove the checks from all three PPP settings.
- l. Select *OK*.

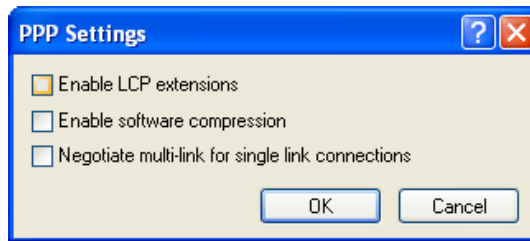


Figure 3-26: PPP Settings

- m.** Select (highlight) Internet Protocol (TCP/IP) and then select *Properties*.

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**Tip:** For most configurations, you will be obtaining the IP address and the DNS server address automatically.

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- n.** Select *Advanced*.

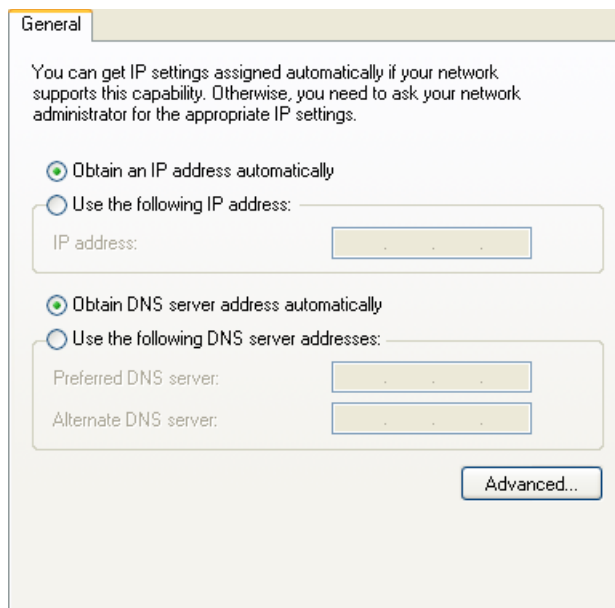


Figure 3-27: TCP/IP Properties

- o.** Uncheck *Use IP header compression*.
- p.** Check *Use default gateway on remote network*.
- q.** Select *OK*.

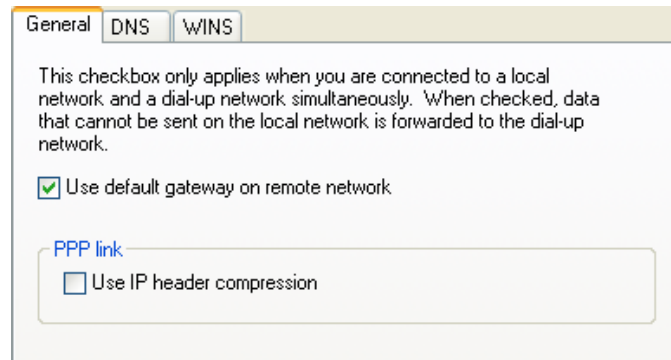


Figure 3-28: Advanced TCP/IP

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**Tip:** You may want to check the *Options* tab and change the settings for applications you might be using. The default options are generally applicable for most uses.

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**Caution:** Unless specifically directed to do so by Support or your network administrator, you do not need to make any changes to the options on the *Security* tab.

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- r. Select *OK* until you return to the *Connect* window.

## Connecting to the Internet Using DUN

There are two methods you can use to connect with PinPoint X to the Internet using DUN, AceView and the Windows DUN connection directly.

### AceView

AceView is a small utility which can maintain your DUN connection and monitor the connection of your PinPoint X to Provider. If you have not already installed AceView you can obtain the most recent version from the Sierra Wireless Airlink website.

This guide assumes you have a default installation of AceView.

### 1. Start AceView.

*Start > All Programs > AirLink Communications > AceView*

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*Note: The direct DUN connection features of AceView are not available in Windows 98 or Windows NT.*

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## 2. Enable the Connection.

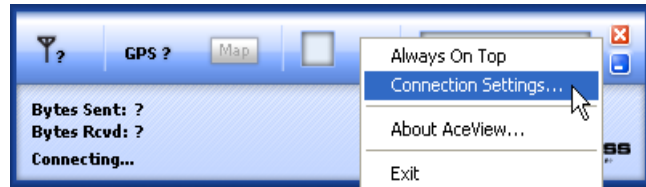


Figure 3-29: AceView: Menu

- a. Right-click on the AceView window to open the menu.
- b. Select *Connection Settings*.

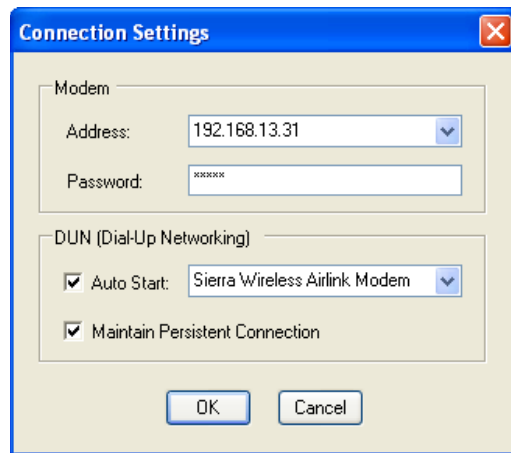


Figure 3-30: AceView: Connection Settings

- c. Select *Auto Start* in the DUN section.
- d. Select *Maintain Persistent Connection*.

When checked, AceView will continually check the DUN connection to ensure it is not down. If so, AceView will attempt to connect again.

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**Tip:** When using the DUN connection, make sure the IP Address is set to the local IP address of the modem, 192.168.13.31 by default.

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- e. Select *OK*.
- f. *OK*.

## Windows DUN

You can directly use the Dial-up link for the DUN connection.

## 1. Start the DUN session.

*Start > Connect To > Sierra Wireless Airlink Modem*

If you named the connection differently, use the name of the PPP connection you made earlier.



Figure 3-31: DUN Connection

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**Tip:** Generally you will not need to enter a Username or Password. If you do need to enter either, you can enter these parameters beforehand using \*NETUID and \*NETPW.

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## 2. Select Dial to connect to the modem and the cellular network.

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*Note: The speed shown in the connection is the speed between the modem and your computer, it is not the speed of the modem's connection to Provider or the Internet.*

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When you're connected, an icon should appear in the system tray showing the connection status.

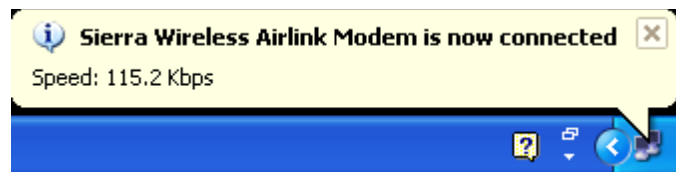


Figure 3-32: Connection indicator

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**Caution:** *For DUN connections on a Windows Mobility or other non-personal computer, the DNS settings may not be configured with the DUN connection. You may need to go into the network settings and add DNS servers manually.*

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