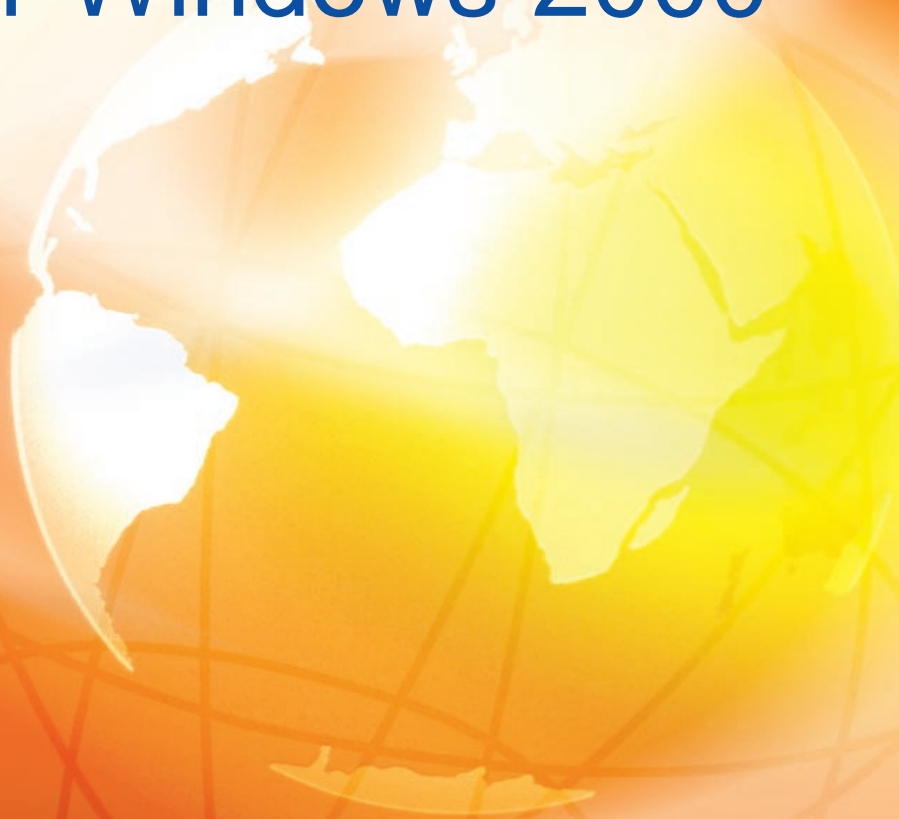


# *BeWAN ADSL PCI*

User's guide  
for Windows 2000



**BeWAN**  
*systems*

<http://www.bewan.com>

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## Foreword

The BeWAN ADSL PCI card allows you to connect to the Internet. Before using it, you will require a subscription with an ADSL service provider and an Internet service provider using ADSL.

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## Technical support

The BeWAN ADSL PCI card together with its documentation have been designed to be as simple as possible so that they can be used as easily by private users as by professionals.

Follow the step-by-step instructions in this User's guide.

If a problem arises:

- If you are not sure you have installed the system correctly, don't hesitate to uninstall the BeWAN ADSL PCI card programs and start installation again from the beginning.
- If you still can't solve the problem, write down the actions you perform and the results they produce. Then contact your dealer and give them this information. They will either assist you directly or put you in contact with the appropriate service if they cannot solve the problem.

---

## Technical documentation on the card

The present BeWAN ADSL PCI card User's guide contains practical information for installing and using the BeWAN ADSL PCI card under Windows 2000 as quickly as possible.

If you use the BeWAN ADSL PCI card under Windows 98 or Me, consult the guide concerning these systems supplied on the BeWAN ADSL CD-ROM.

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## Knowledge required

In the BeWAN ADSL PCI card User's guide, we assume that you are already familiar with the Windows user interface, commands and utilities. Therefore we will not back over these notions. If necessary, please refer to the Windows manual or the Windows on-line help.

Prior knowledge of telecommunications is not necessary when using the BeWAN ADSL PCI card.

# Installing the BeWAN ADSL PCI

You will find a detailed description of the BeWAN ADSL PCI card installation procedures in this chapter. We advise you to follow the installation steps.

Disable any software that might disrupt the installation procedure, such as anti-virus products. Exit any open applications.

Firstly, one operation must be carried out. Proceed as follows:

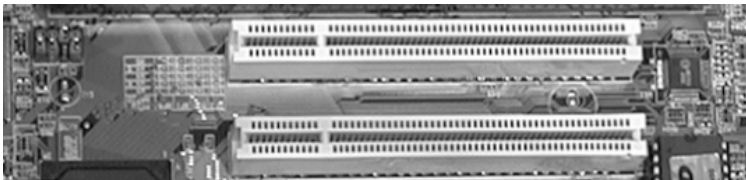
1. Click on **Start, Settings**, then on **Control Panel**.
2. Double click on **System**; click on the **Hardware** tab, and then on **Driver Signing...**
3. Selection **Ignore - Install all files, regardless of file signature**, and then click on **OK**.
4. Then switch off your PC.

---

## Setting up the card

After switching off your PC, proceed as follows to install the BeWAN ADSL PCI card:

1. Unplug the PC power cable.
2. Remove the cover of your PC so that you can accede to the expansion slots.
3. Choose an available PCI expansion slot.



} PCI expansion slots

4. Unscrew and remove the metal strip facing the expansion slot.
5. Insert the card in the expansion slot and make sure it is secure.



6. Screw down the metal tongue of the BeWAN ADSL PCI card.
7. Put the cover back on your PC.
8. Retrieve the cable provided in the package. Connect one end to the BeWAN ADSL PCI card and the other to the ADSL filter which must be connected directly to the phone line socket.
9. Plug the PC power cable and restart your PC.

---

## Installing the drivers using automatic detection

This section outlines procedure to be followed in order to install the BeWAN ADSL PCI card drivers using automatic detection. If you would like to use the automatic installation program (Autorun), please refer to the section “Installing the drivers using Autorun” on page 10.

*Note: depending on your initial configuration, your Windows 2000 CD-ROM may be required during the driver installation phase.*

1. When starting up the PC, Windows indicates that it has found a new hardware device (the BeWAN ADSL PCI card).

The **Found New Hardware Wizard** is automatically launched. To begin installing the drivers, click on **Next**.



2. If your BeWAN ADSL CD-ROM has not yet been inserted, placed in the drive now.

*Note: once the CD-ROM has been installed, the driver installation program launches automatically. Disregard this. Close this window and continue the installation using the **Found New Hardware Wizard**.*

3. Select **Search for a suitable driver for my device (recommended)**, and then click on **Next**.



4. Select the **Specify a location** box, then click on **Next**.



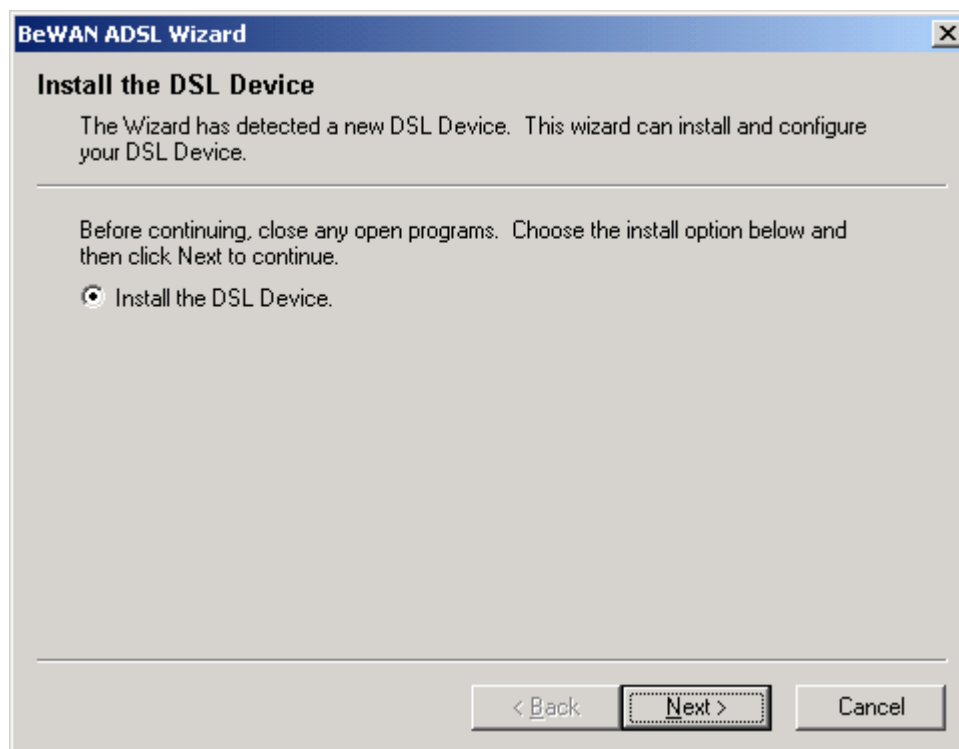
5. A new window opens. Click on **Browse...**. Enter the letter of your CD-ROM drive, and then enter the following path (presuming that your CD-ROM drive is drive letter D): **D:\adslpci\uk**.

*Note: this indicates the folder containing the driver information (.INF file).*



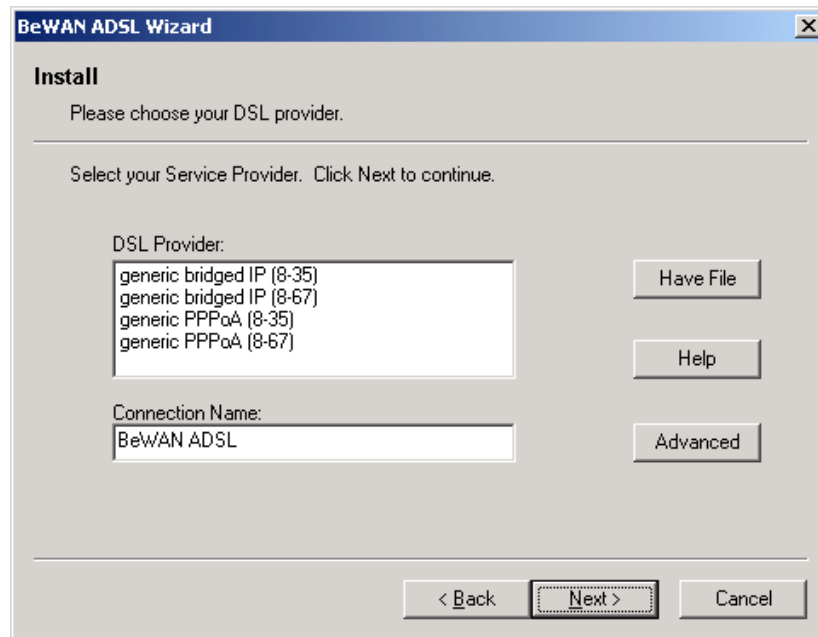
Click on **Open** and then on **OK**.

6. The Wizard indicates that it has found a driver for your device. To install this driver, click on **Next**.
7. Windows has completed the first phase of the installation. Then click on **Finish**.
8. The BeWAN ADSL Wizard appears. This Wizard will initialise and configure your modem. The **Install the DSL Device** option must be selected. Click on **Next**.



9. In the heading **DSL Provider**, select the profile configured by default required by your ADSL service provider from amongst the list of profiles.

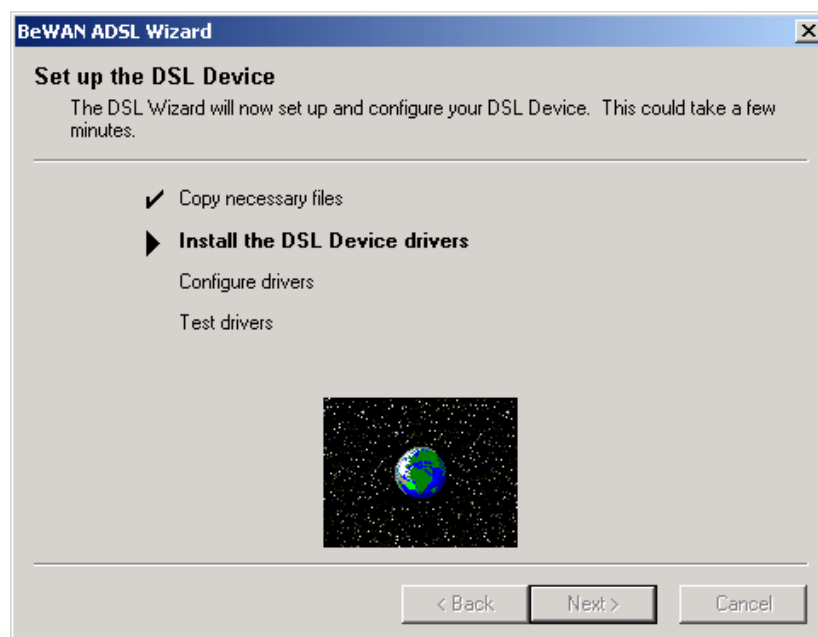
If none of the profiles correspond with your configuration, please refer to the chapter "Configuration of a new profile" on page 11.



- If you have to use the PPPoA protocol, select one of the two "generic PPPoA" profiles offered by default.
- If you have to use the PPPoE profile, select one of the two "IP derived" profiles.  
*Note: in this case, you must install a third party software for the RAS to be able to use the LAN interface and the PPPoE protocol. After having installed the drivers, refer to the chapter "Installation of the RASPPoE software" on page 16, which is contained on the BeWAN ADSL CD-ROM.*

Then click on **Next**.

10. The driver installation starts.



11. At the end of the installation, click on **Finish**.

## Installing the drivers using Autorun

1. When starting up the PC, Windows indicates that it has found a new hardware device (the BeWAN ADSL PCI card).

The **Found New Hardware Wizard** is automatically launched.

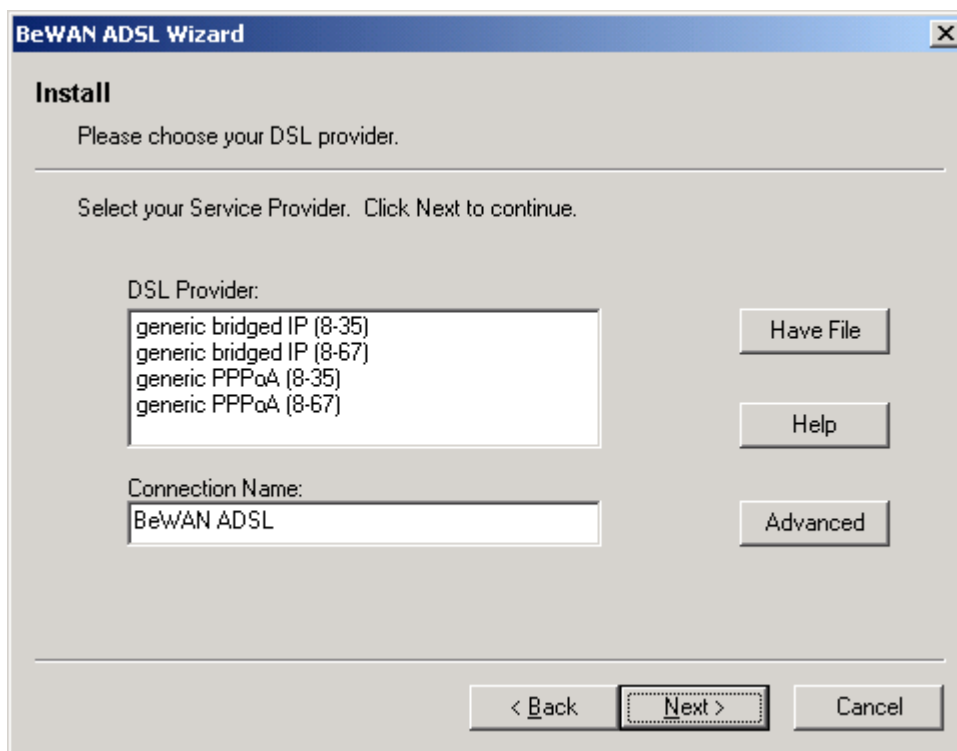
Warning, you will then have to click on **Cancel** twice in order to leave the Wizard.

2. Insert the BeWAN ADSL CD-ROM in your PC's driver. If your configuration is set up for it, the installation program will launch automatically.

*Note: if not, run the **autorun.exe** program which is located at the root of the CD-ROM.*

3. Click on **English, BeWAN ADSL PCI**, then on **Drivers**.
4. The BeWAN ADSL Wizard appears. This Wizard will initialise and configure your modem. The **Install the DSL Device** option must be selected. Click on **Next**.
5. In the heading **DSL Provider**, select the profile configured by default required by your ADSL service provider from amongst the list of profiles.

If none of the profiles correspond with your configuration, please refer to the chapter "Configuration of a new profile" on page 11.



- If you have to use the PPPoA protocol, select one of the two "generic PPPoA" profiles offered by default.
- If you have to use the PPPoE profile, select one of the two "IP derived" profiles.  
*Note: in this case, you must install a third party software for the RAS to be able to use the LAN interface and the PPPoE protocol. After having installed the drivers, refer to the chapter "Installation of the RASPPPoE software" on page 16, which is contained on the BeWAN ADSL CD-ROM.*

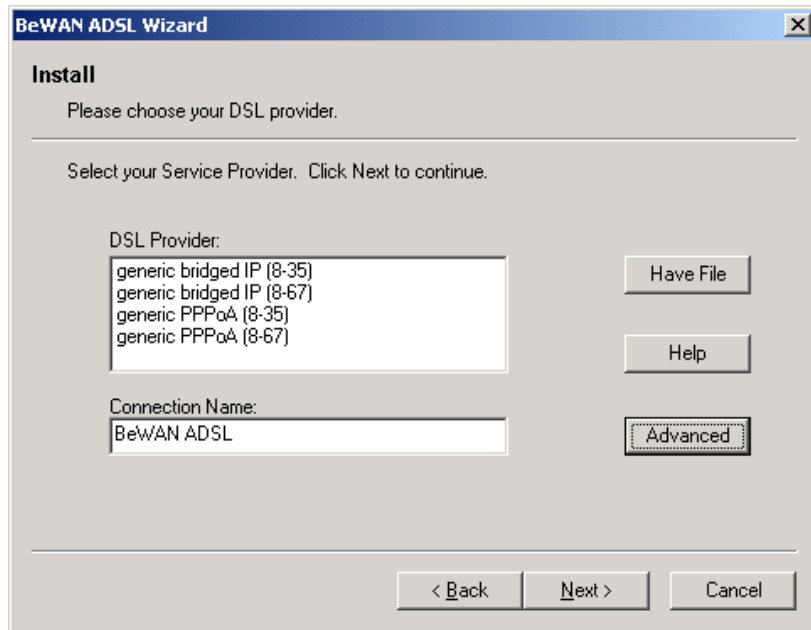
Then click on **Next**.

6. The driver installation starts. At the end of the installation, click on **Finish**.

## Configuration of a new profile

If none of the default configured profiles correspond with the parameters of your ADSL service provider, you will then have to set up a new profile. To do so, follow these steps:

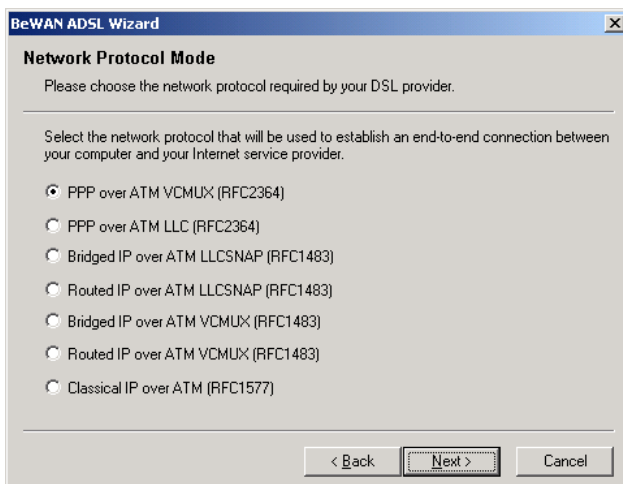
1. Once in the **Install** window (see screen below), click on the **Advanced** button.



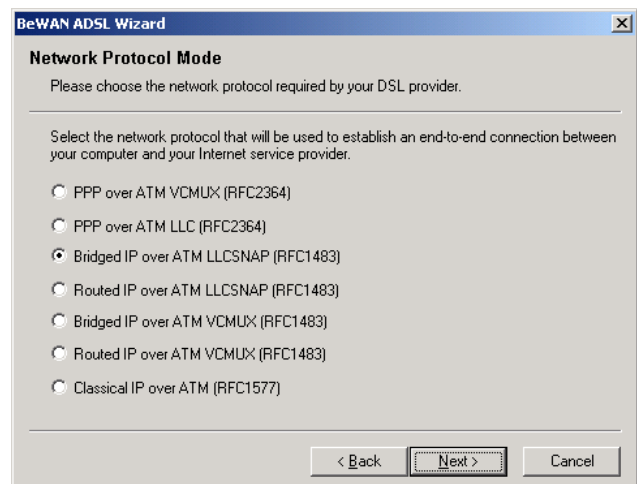
2. First, select the protocol (check with your ADSL service provider).

*Notes: there are two main protocols: the PPPoA protocol and the PPPoE protocol.*

- *The former uses the RFC2364 protocol. This protocol is used to create a WAN interface which can be used with the Windows RAS for an Internet connection. This protocol is used by most ADSL service providers.*
- *The PPPoE protocol, for its part, uses the derived IP protocol (RFC1483) with the BeWAN ADSL PCI card. It creates a LAN interface which cannot be used directly with the Microsoft RAS. In this case, you must install a third party software for the RAS to be able to use the LAN interface and the PPPoE protocol. After having installed the drivers, refer to the chapter "Installation of the RASPPPoE software" on page 16, which is contained on the BeWAN ADSL CD-ROM.*



Using the PPPoA protocol

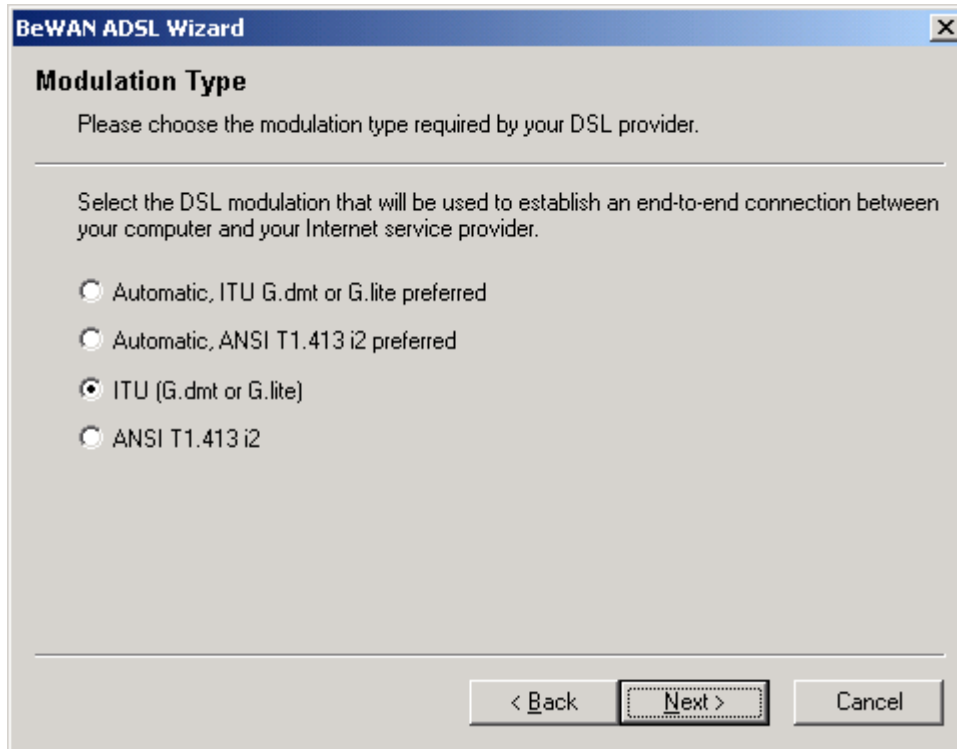


Using the PPPoE protocol

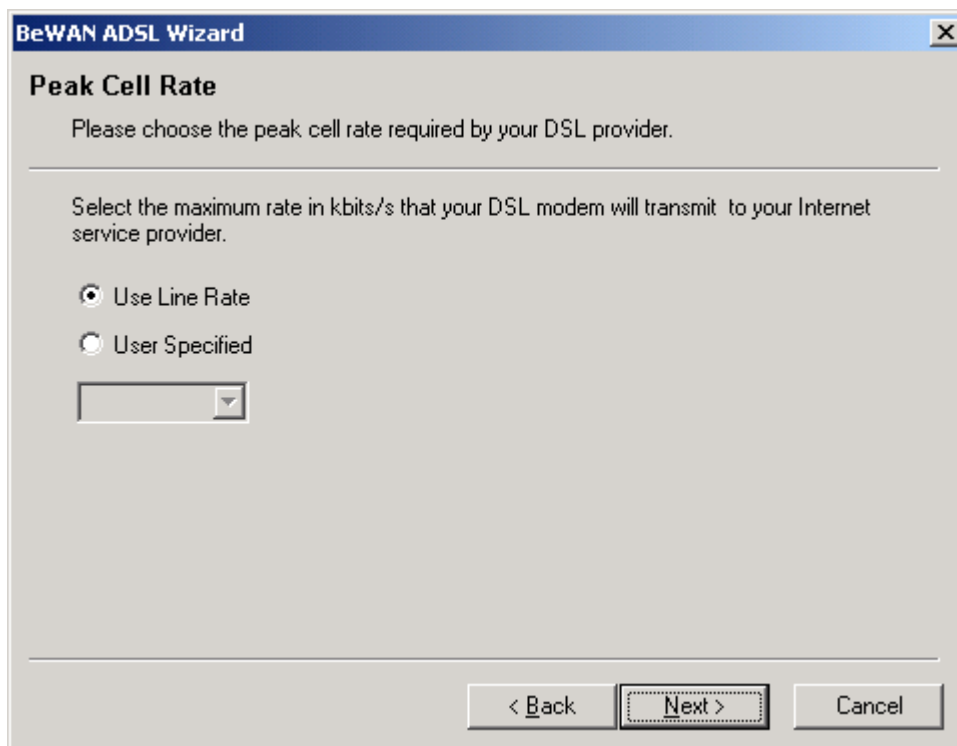
If you have to use the PPPoA protocol, select **PPP on ATM VCMUX (RFC2364)**.  
If you have to use the PPPoE protocol, select **derived IP on ATM LLC SNAP (RFC1483)**.

Then click on **Next**.

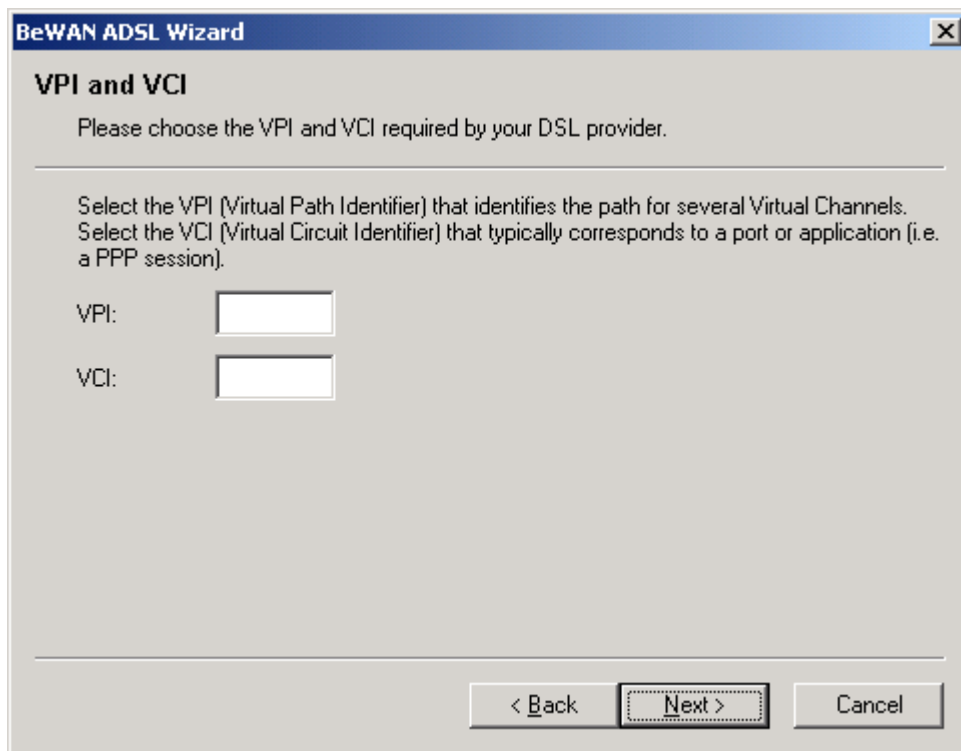
3. Select the modulation type required by your telecommunications operator. The **ITU (G.dmt or G.lite)** modulation is used most often. Click on **Next**.



4. Select **Use Line Rate**. Or, if you prefer, you can select a data transmission speed by clicking on **User Specified**, and then choosing a speed from the available menu. Click on **Next**.



- In the **VPI** and **VCI** headings, enter the required parameters of your ADSL service provider. Click on **Next**.

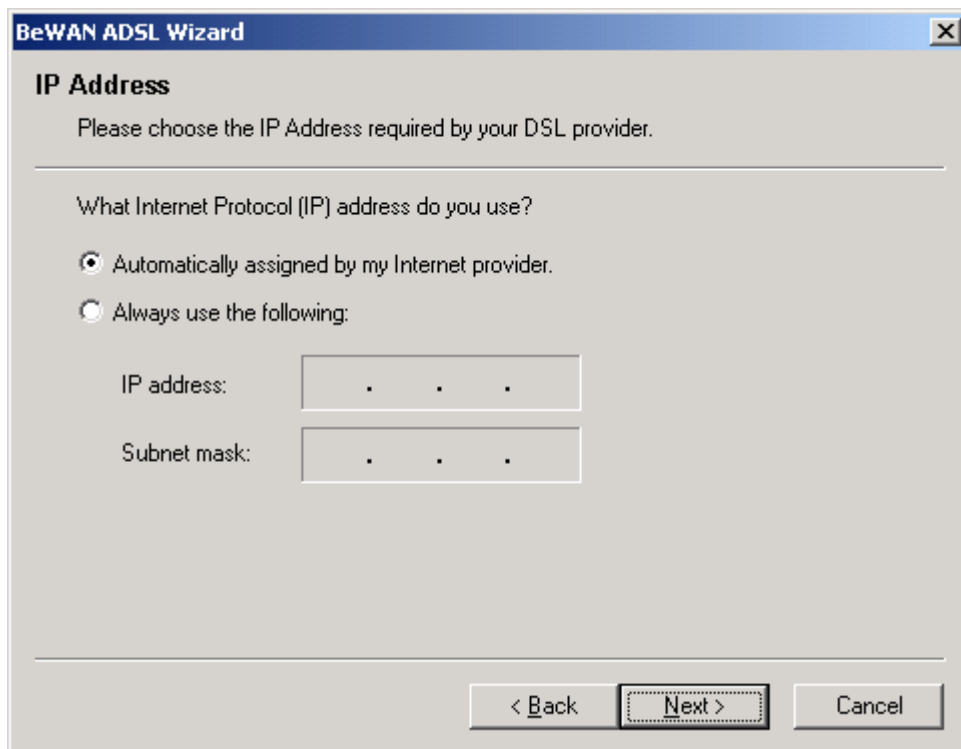


The screenshot shows a dialog box titled "BeWAN ADSL Wizard" with a close button (X) in the top right corner. The main heading is "VPI and VCI". Below the heading, it says "Please choose the VPI and VCI required by your DSL provider." There is a horizontal line. Below the line, it says "Select the VPI (Virtual Path Identifier) that identifies the path for several Virtual Channels. Select the VCI (Virtual Circuit Identifier) that typically corresponds to a port or application (i.e. a PPP session)." There are two input fields: "VPI:" followed by a text box, and "VCI:" followed by a text box. At the bottom, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

- In the next window, select **Automatically assigned by my Internet provider**.

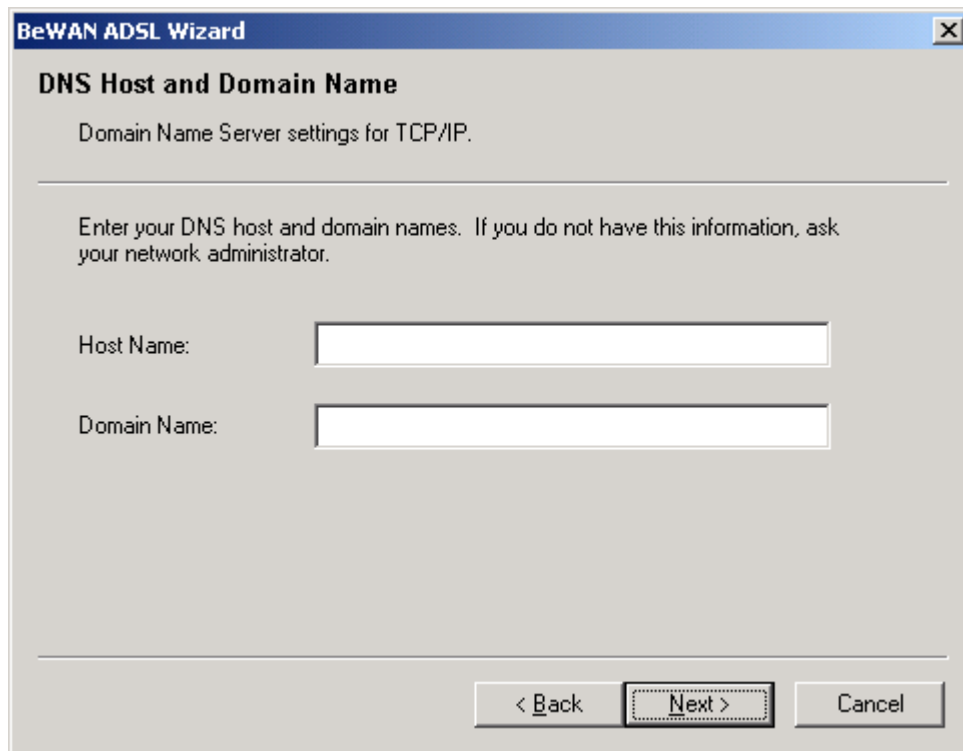
*Note: choose the second option if you have requested a fixed IP address from your Internet service provider for the ADSL.*

Click on **Next**.



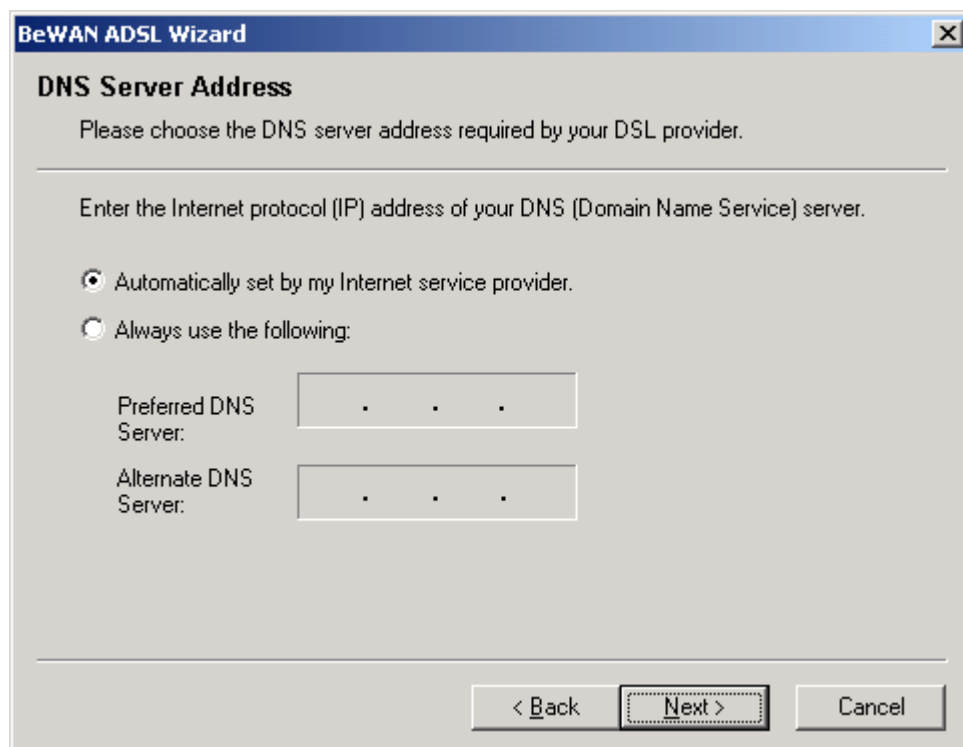
The screenshot shows a dialog box titled "BeWAN ADSL Wizard" with a close button (X) in the top right corner. The main heading is "IP Address". Below the heading, it says "Please choose the IP Address required by your DSL provider." There is a horizontal line. Below the line, it says "What Internet Protocol (IP) address do you use?". There are two radio button options: "Automatically assigned by my Internet provider." (which is selected) and "Always use the following:". Below the second option, there are two input fields: "IP address:" followed by a text box containing ". . ." and "Subnet mask:" followed by a text box containing ". . .". At the bottom, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

7. Enter your DNS parameters. Click on **Next**.



The screenshot shows a dialog box titled "BeWAN ADSL Wizard" with a close button (X) in the top right corner. The main heading is "DNS Host and Domain Name". Below the heading, it says "Domain Name Server settings for TCP/IP." A horizontal line separates this from the instructions: "Enter your DNS host and domain names. If you do not have this information, ask your network administrator." There are two text input fields: "Host Name:" and "Domain Name:". At the bottom, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

8. Select **Automatically set by my Internet service provider**. Click on **Next**.



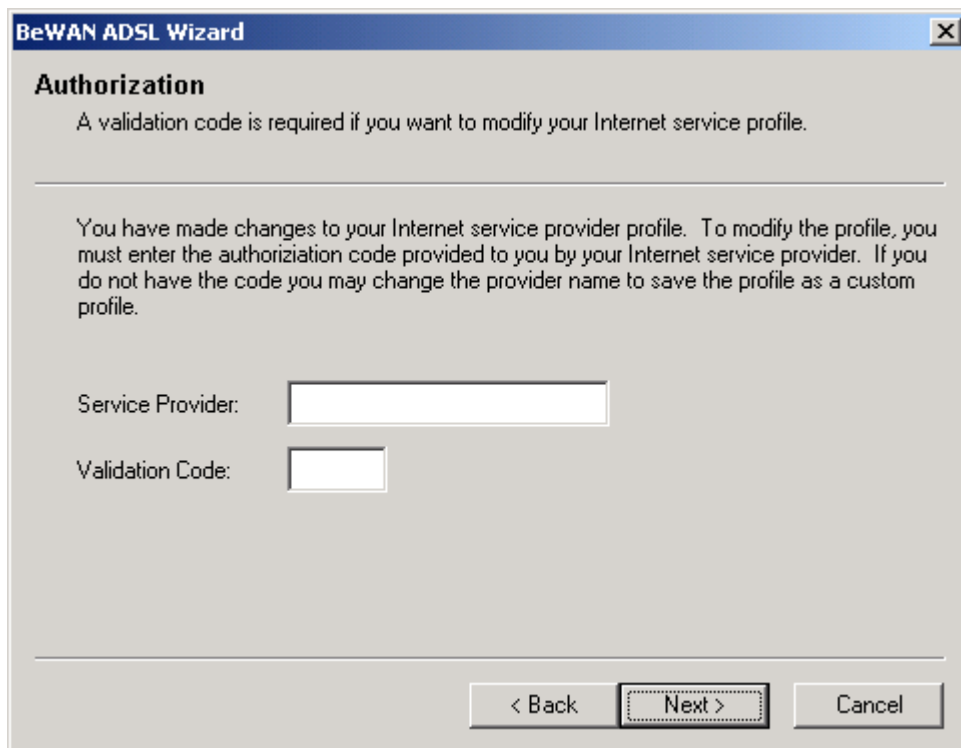
The screenshot shows a dialog box titled "BeWAN ADSL Wizard" with a close button (X) in the top right corner. The main heading is "DNS Server Address". Below the heading, it says "Please choose the DNS server address required by your DSL provider." A horizontal line separates this from the instructions: "Enter the Internet protocol (IP) address of your DNS (Domain Name Service) server." There are two radio button options: "Automatically set by my Internet service provider." (which is selected) and "Always use the following:". Below these are two text input fields for IP addresses: "Preferred DNS Server:" and "Alternate DNS Server:". Each field contains three dots. At the bottom, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

9. Leave the **Default Gateway** heading blank. Click on **Next**.



The screenshot shows a window titled "BeWAN ADSL Wizard" with a close button in the top right corner. The main heading is "Default Gateway". Below the heading, there is a text prompt: "Please enter the default gateway required by your DSL provider." A horizontal line separates this from the question "What default gateway address do you use?". Below the question, there is a label "Default Gateway:" followed by a text input field containing three dots. At the bottom of the window, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

10. Enter the name of your service provider, or choose a name which will allow you to quickly identify your new profile. Click on **Next**.



The screenshot shows a window titled "BeWAN ADSL Wizard" with a close button in the top right corner. The main heading is "Authorization". Below the heading, there is a text prompt: "A validation code is required if you want to modify your Internet service profile." A horizontal line separates this from a paragraph of text: "You have made changes to your Internet service provider profile. To modify the profile, you must enter the authorization code provided to you by your Internet service provider. If you do not have the code you may change the provider name to save the profile as a custom profile." Below this text, there are two labels with corresponding input fields: "Service Provider:" followed by a wide text box, and "Validation Code:" followed by a smaller text box. At the bottom of the window, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Cancel".

11. This takes you back to the Wizard's **Install** window. In the **DSL provider** heading, your new profile is selected. Click on **Next**.
12. The driver installation starts. At the end of the installation, click on **Finish**.

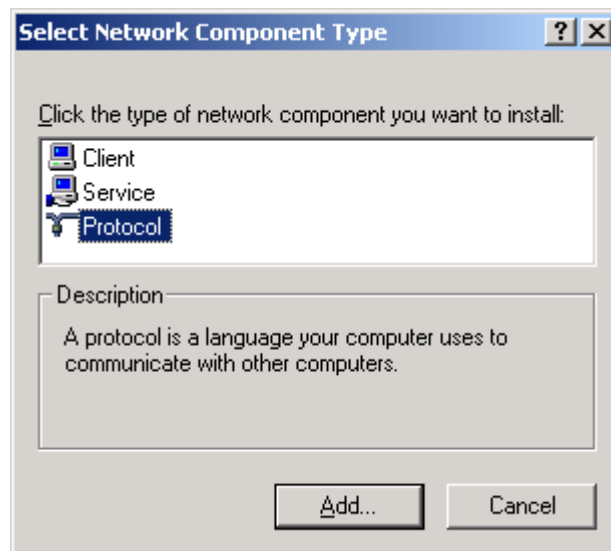
# Installation of the RASPPPoE software

Prior to installing the RASPPPoE software, you must not only have installed the drivers for the BeWAN ADSL PCI card, you must also have selected a profile which will allow you to manage the PPPoE protocol (derived IP protocol).

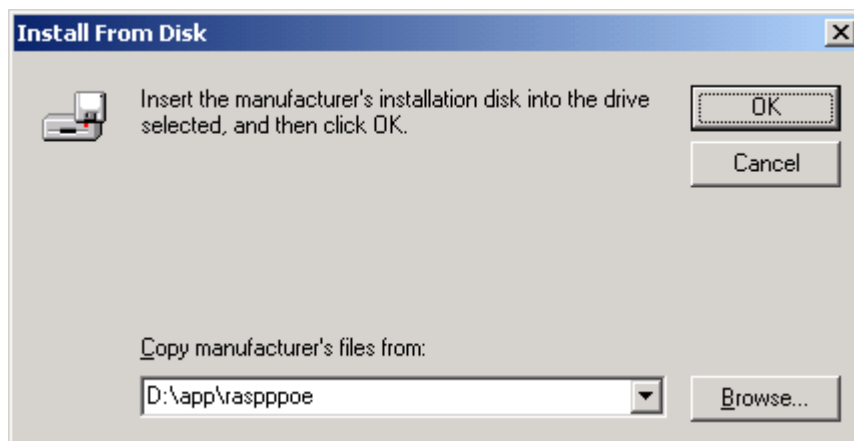
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## Installation of the protocol

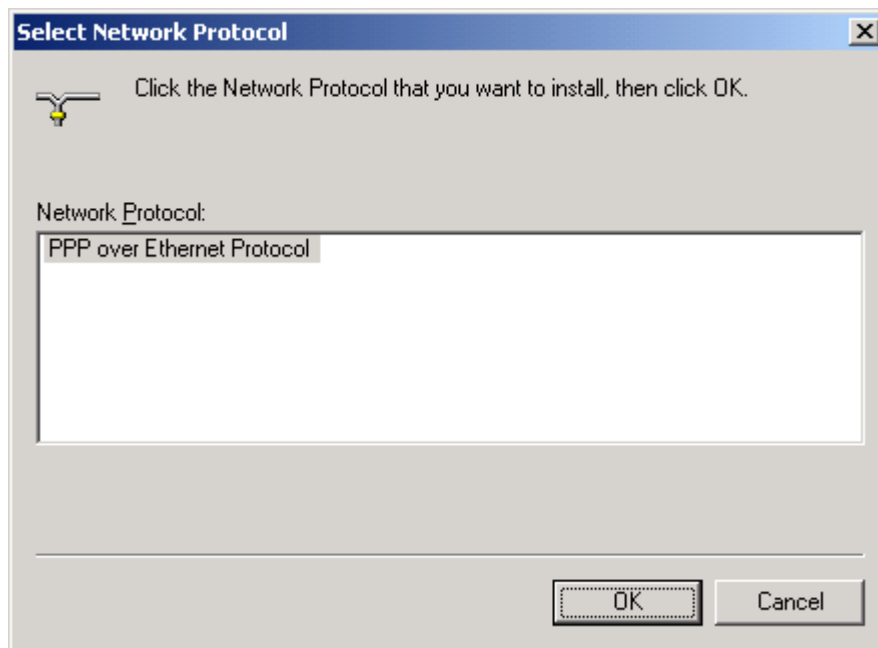
1. Click on **Start**, point to **Programs, Accessories, Communications**, then click on **Network and Dial-up Connections**.
2. Right-click the mouse on **Local Area Connection**, and then click on **Properties**.
3. In the **General** tab of the **Local Area Connection Properties** window, click on the **Install...** button.
4. The **Select Network Component Type** window appears. Select **Protocol** and click on the **Add...** button.



5. In the **Selection Network Protocol** window, click on **Have Disk....**
6. A new window opens. Click on **Browse...**. Enter the letter of your CD-ROM drive, and then enter the following path (presuming that your CD-ROM drive is drive letter D): **D:\app\rasppoe**. Click on **Open** and then on **OK**.



7. In the **Network Protocol** heading of the **Select Network Protocol** window, the element **PPP over Ethernet Protocol** is available. Click on **OK**.

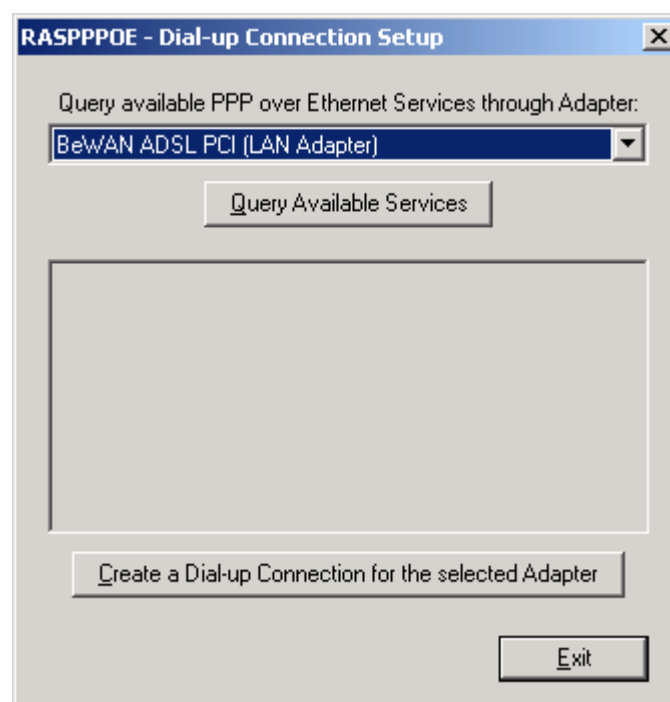


8. Close the **Local Area Connection Properties** window by clicking on **Close**.

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## Creating your connection

1. After restarting your computer, click on **Start**, point to **Programs**, then click on the **Windows Explorer**.
2. Enter the following path: **C:\WINNT\system32**.
3. Double-click on the **rasppoe** file.
4. The **RASPPPOE – Dial-up Connection Setup** window opens. Select **BeWAN ADSL PCI (LAN Adapter)**.



5. Then click on **Create a Dial-up Connection for the selected Adapter**. This creates a shortcut providing access to your connection window. A shortcut is placed on your desktop.

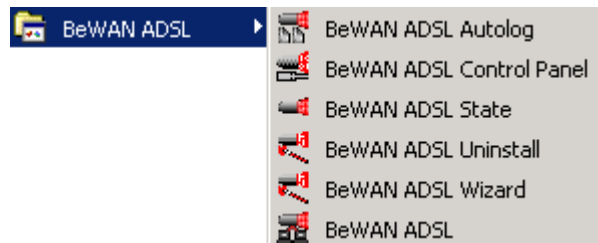


6. Click on **Exit** to close the window.

## Summary of the installed elements

You have just installed the BeWAN ADSL PCI card and its drivers. The card is now in service. Here are the new elements installed in your PC.

1. In the **Programs** menu of the Windows **Start** menu, a **BeWAN ADSL** folder has been created.



- **BeWAN ADSL Autolog:** used to display on the screen or to record as a text file all of the events relating to the ADSL connection (this module, intended for technicians, can be useful when calling for technical assistance).
- **BeWAN ADSL Control Panel:** provides information on the ADSL connection (synchronisation, bytes received and sent, drivers version,...).
- **BeWAN ADSL State:** displays the number of bytes received and sent during the connection.

*Note: you can also use the icon located in the task bar.*

- **BeWAN ADSL Uninstall:** used to uninstall the drivers.
- **BeWAN ADSL Wizard:** helps you to configure your ADSL connection, to change your service provider's profile or to uninstall your card.
- **BeWAN ADSL:** corresponds with the connection profile name (only if you use the PPPoA protocol).

2. Elements have also been added to your system's device manager. To display them, click on **Start**, then point to **Settings**, then click on **Control panel**. Double-click on **System**. Click on the **Hardware** tab, and then on **Device Manager...**

- Under **Network adapters**, the element **BeWAN ADSL PCI (WAN Adapter)** has been added.

*Note: if you are using the PPPoE protocol, this element is called **BeWAN ADSL PCI (LAN Adapter)**.*

- Two elements have been added under **System devices**: **BeWAN ADSL PCI (ADSL Interface)** and **BeWAN ADSL PCI (PCI Arbitration)**.

3. On your hard disk, a **BeWAN** folder has been created in the **Program Files** folder. It contains all of the elements needed to the operation of the BeWAN ADSL PCI card. You will never need to directly access this folder. Be careful not to move it, nor to modify its name or contents in any way. This could hinder the correct operations of the BeWAN ADSL PCI card.

# Connection to the Internet

## Parameterisation of your connection

During the installation, a default connection name was created, but additional settings may be necessary. Proceed as follows:

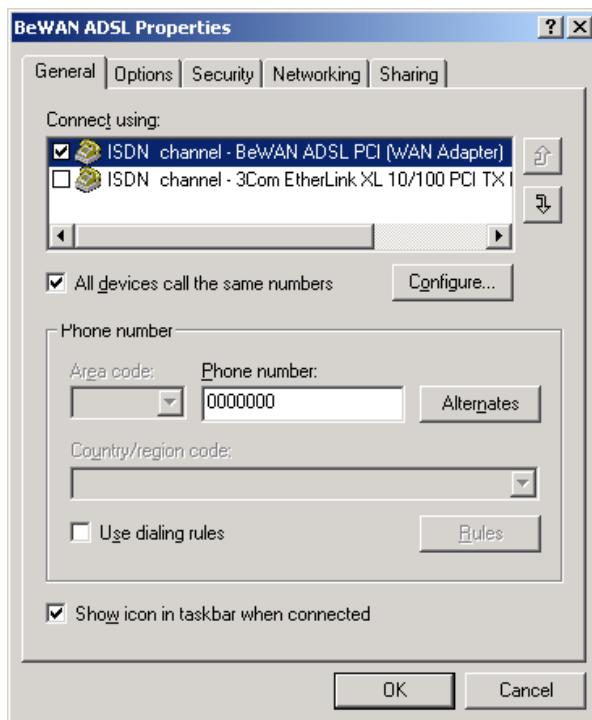
1. Click on **Start**, point to **Programs, Accessories, Communications**, then click on the folder **Network and Dial-up Connections**. It opens.

*Note: if this is the first time that you install a communications device, Windows will ask you for information about your site. Enter the area code for your region. Enter this information. Click on **OK**, and then once again on **OK**.*

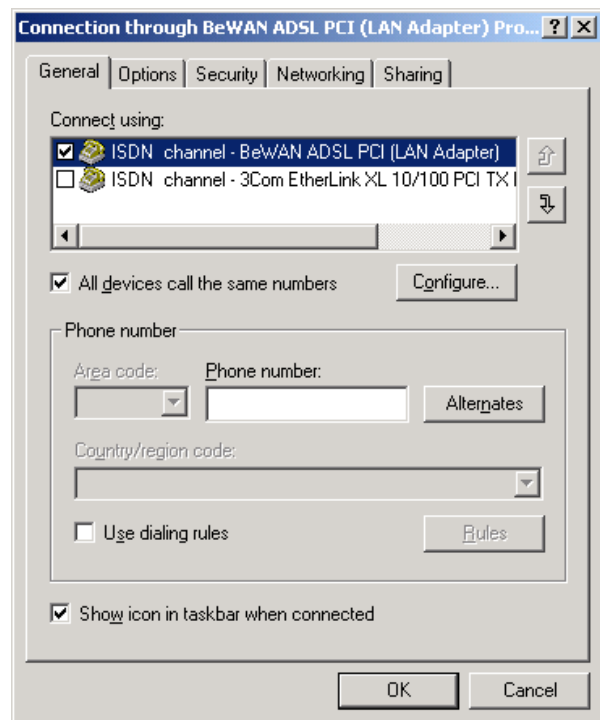
2. If you are using the PPPoA protocol, right-click the mouse on the **BeWAN ADSL** element, then click on **Properties**.

If you are using the PPPoE protocol, right-click the mouse on the **Connection through BeWAN ADSL PCI (LAN Adapter)** element, then click on **Properties**.

A window displaying the general parameters opens.



Using the PPPoA protocol



Using the PPPoE protocol

3. If you are using the PPPoA protocol, **ISDN channel - BeWAN ADSL PCI (WAN Adapter)** must be selected in the heading **Connect using**.

If you are using the PPPoE protocol, **ISDN channel - BeWAN ADSL PCI (LAN Adapter)** must be selected in the heading **Connect using**.

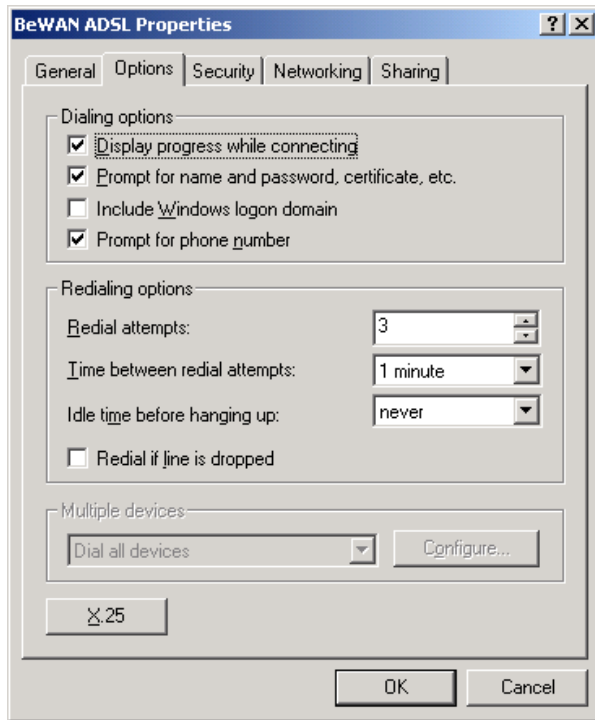
4. Do not pay attention to the heading **Phone number**. There is no need to modify it.

*Note: with the ADSL service, it is not a call number which provides the connection with the Internet service provider; rather, it is the user name.*

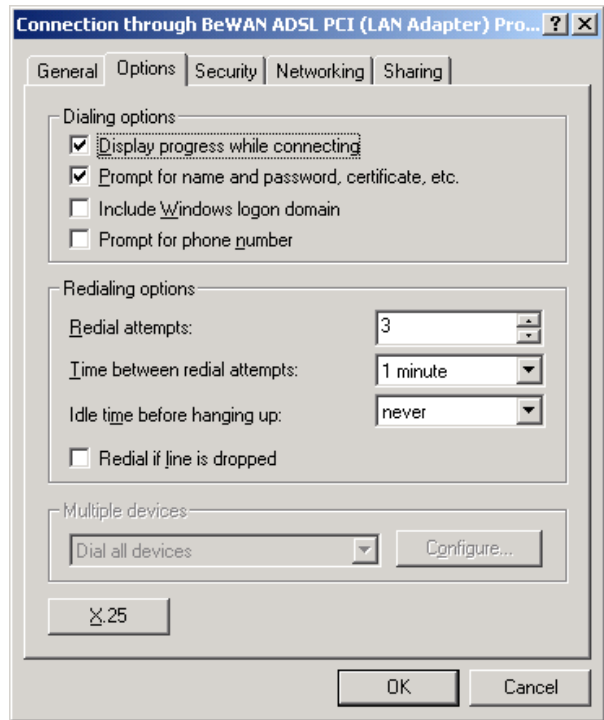
5. Select **Show icon in taskbar when connected**.

6. Click on the **Options** tab.

Whether you are using the PPPoA protocol or the PPPoE protocol, select the options **Display progress while connecting** and **Prompt for name and password, certificate, etc.**

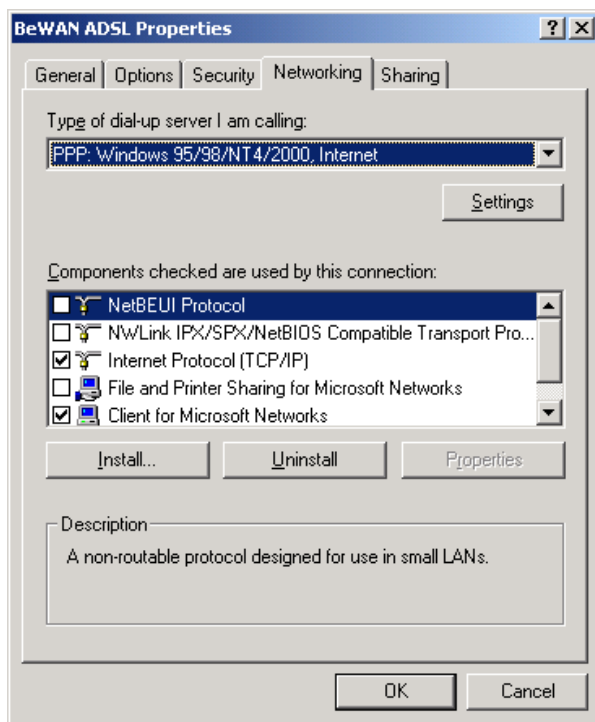


Using the PPPoA protocol

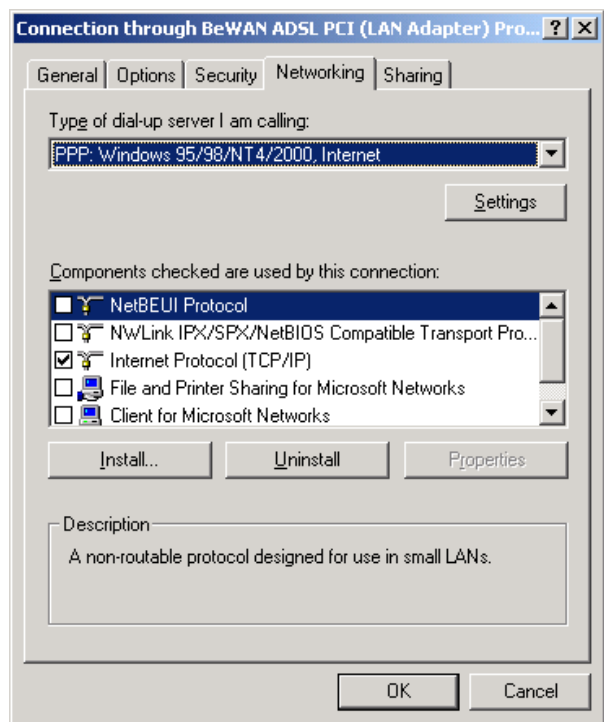


Using the PPPoE protocol

7. Click on the **Networking** tab. The **Internet Protocol (TCP/IP)** box must be checked.



Using the PPPoA protocol



Using the PPPoE protocol

8. Once you have finished, click on **OK** to validate the settings. You are ready to establish your connection.

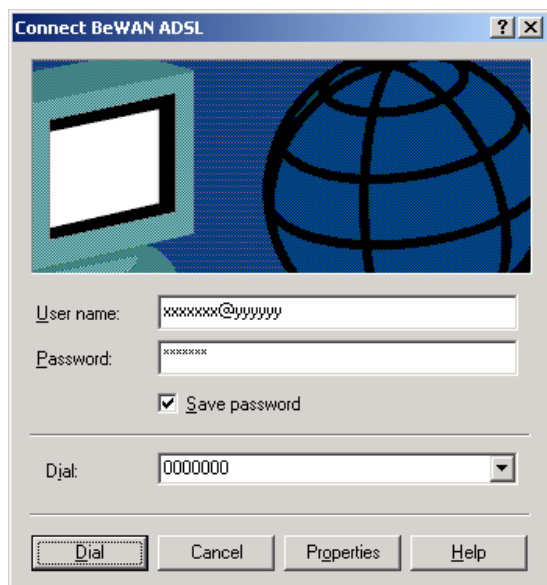
## Establishing the connection

To carry out the connection, follow these steps:

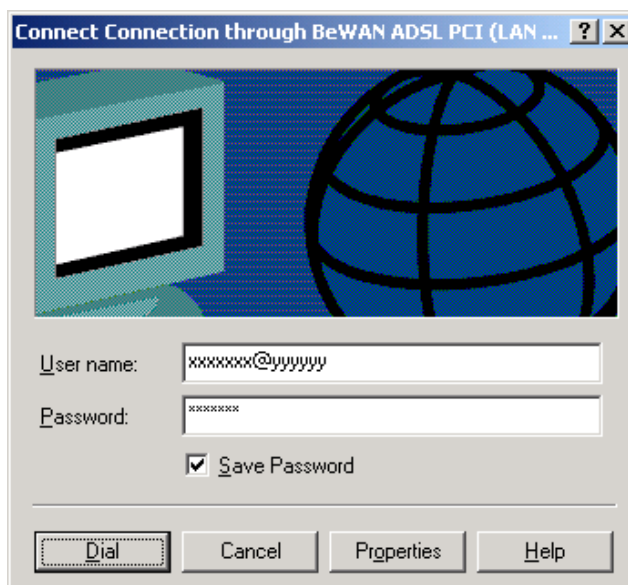
1. If you are using the PPPoA protocol, double-click on the **BeWAN ADSL** element.

If you are using the PPPoE protocol, double-click on the **Connection through BeWAN ADSL PCI (LAN Adapter)** element.

The corresponding connection window opens. You have only to enter your identification settings.



Using the PPPoA protocol



Using the PPPoE protocol

2. Under the **User name** and **Password** headings, enter the identification parameters provided by your Internet access provider.

*Notes on the Internet connection:*

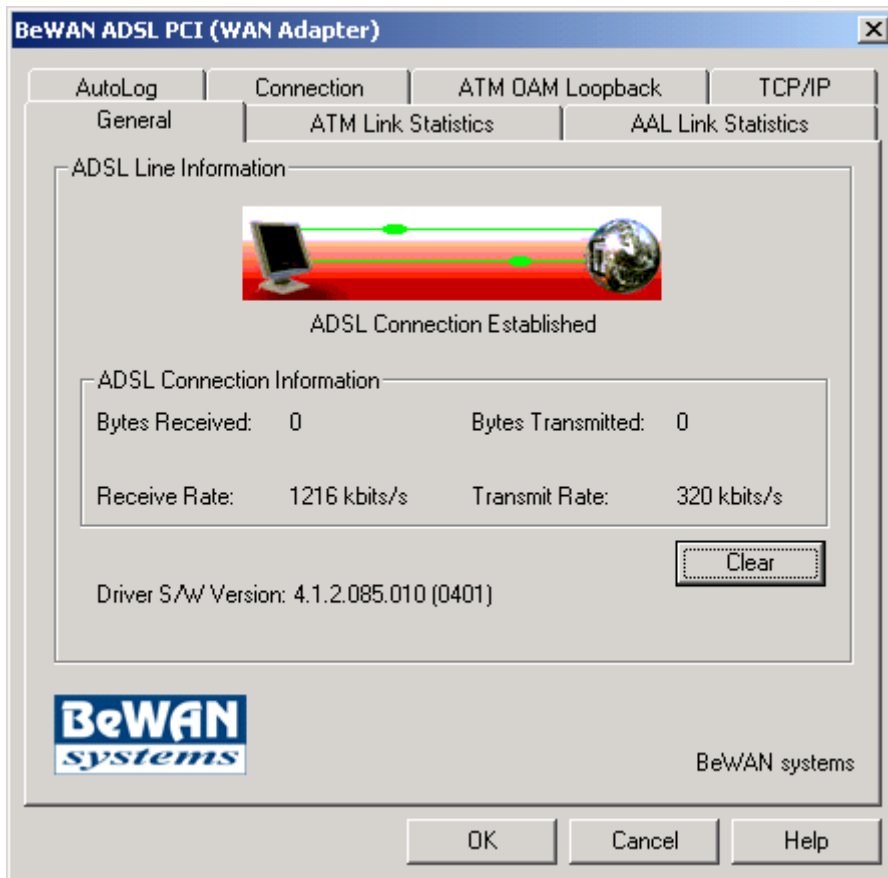
- *The terminology used by the various Internet service providers can vary. To identify the user name, the following expressions are also sometimes used: "client account", "connection identifier", etc.*
- *Do not confuse the connection identifiers (user name and password) with the message system identification elements which your Internet service provider may have given you.*
- *The connection identifiers are case sensitive.*

3. If you do not want to enter your password upon each connection, select **Save password**.



**Note:** *in this case, any person with access to your PC will be able to access the Internet through your account.*

4. Before launching the connection, you must make sure of the proper synchronisation with the ADSL line. To verify this, click on **Start**, point to **Programs**, **BeWAN ADSL**, and then click on **BeWAN ADSL Control Panel**.

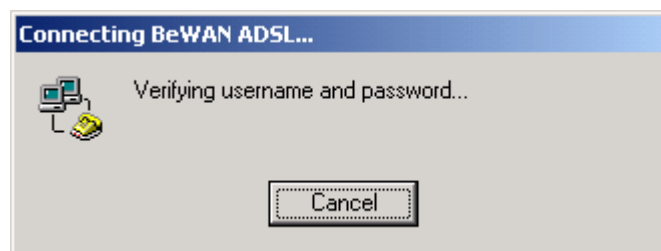


The following window appears. Wait until the **ADSL Connection Established** message appears. The synchronisation with the ADSL line has now been made.

*Note: to check the presence of the synchronisation, the ADSL network connection indicator in the task bar changes its appearance. The cross disappears from the icon.*



5. Then click on **Dial** in the connection window. The connection is carried out and your identification parameters are checked.



6. If the parameters are correct, the connection is established in a few seconds. The connection window automatically disappears. To the right of the task bar, the remote access indicator also appears.

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## Using the connection

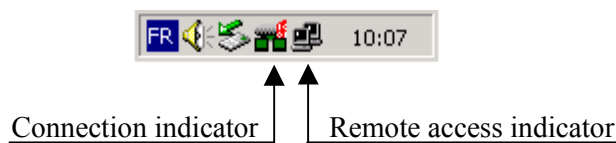
Once the connection has been made, you can use the Internet software of your choice. To visit a web site, launch your browser.

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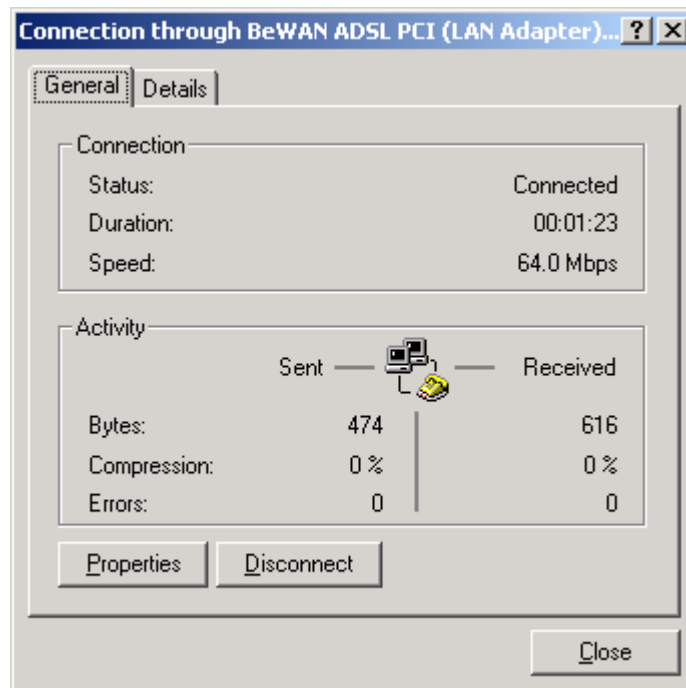
## Ending the connection

When you have finished, you should disconnect. Indeed, closing the Internet software does not necessarily terminate the connection in progress.

The Remote access indicator, which depends on the **Dial-up Networking**, indicates that the connection has been established. Double-clicking on this indicator will open a window which provides the main connection parameters (speed, connection duration...).



The following window appears. In the **General** tab, a **Disconnect** button will interrupt the connection (see below).



*Note: you do not have to open the preceding window. To interrupt the connection in progress, right-click the mouse on the remote access indicator, and then click on **Disconnect**.*

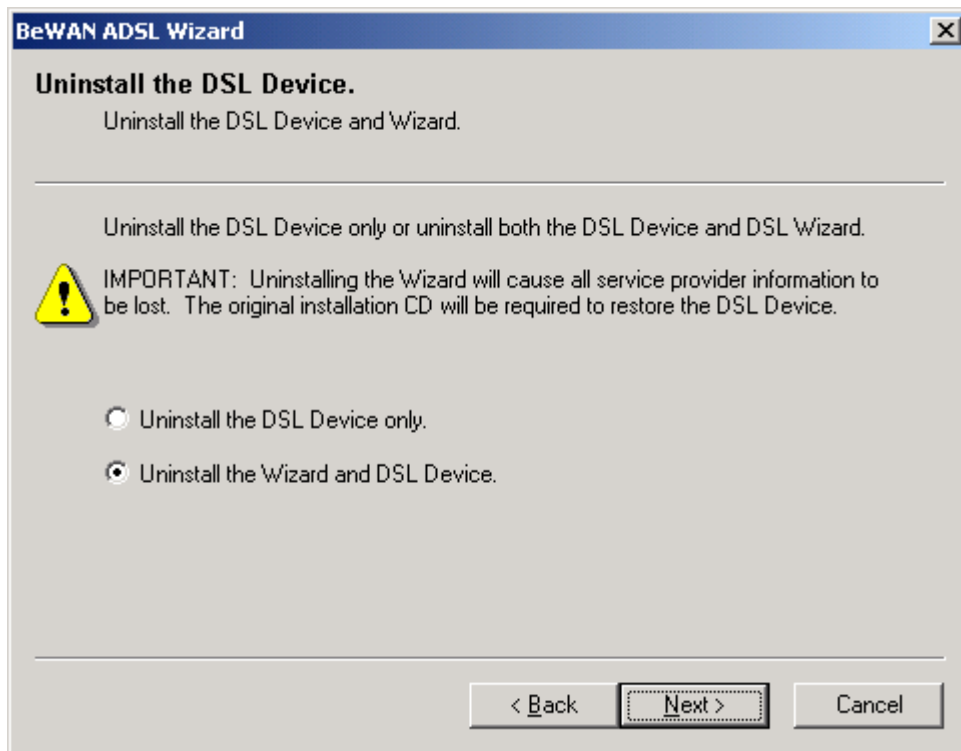


**Note: if you want to change protocols (the PPPoA or PPPoE protocol) for your next connection, you must imperatively first uninstall the card drivers, then reinstall them with the new protocol. Referred to the chapter "Uninstalling the drivers" on page 25.**

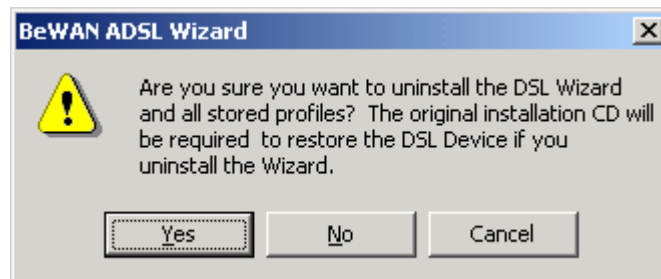
# Uninstalling the drivers

Before proceeding, disable any software which might hinder the uninstall procedure, such as anti-virus software. Close all open applications.

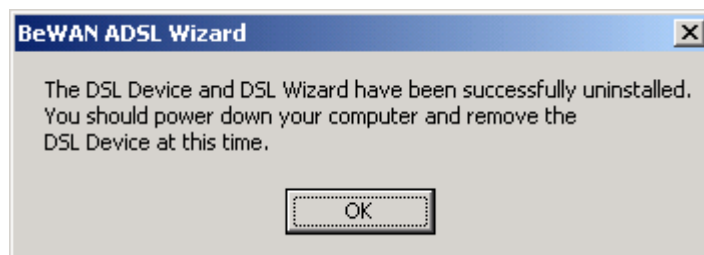
1. Click on **Start, Programs, BeWAN ADSL**, and then on **BeWAN ADSL Uninstall**. The Wizard window opens.
2. Select **Uninstall the Wizard and the DSL Device**. Click on **Next**.



3. In the confirmation window, click **Yes**.



4. The uninstall procedure takes place. A window informs you that the uninstall has taken place successfully. Click on **OK**.



*Note: if you intend to uninstall the drivers and then immediately reinstall them, don't forget to turn off your PC between the two operations to ensure that all of the components of the previous installation are removed.*



<http://www.bewan.com>

### DECLARATION OF CONFORMITY

Name: BeWAN systems

Registered office: BeWAN systems

Phone: 01 43 34 69 20

Address: 16, rue du Moulin des Bruyères

Fax: 01 46 91 03 71

City: Courbevoie

Postal code: 92400

Identification of the product:

- Type: Internal ADSL Modem
- Commercial reference: BeWAN ADSL PCI

Declare under its whole responsibility that the product describes above is in conformity with the following specifications:

- **EC Marking**
- Safety certifications: compliant to the applicable requirements of **UL1950**, Third Edition and **EN60950**, Third Edition standards.

Date: July 2001

Eric TEISSANDIER  
Chairman of the board