

# *Prestige 642M*

*ADSL Bridge (PPPoE)*

## *Quick Start Guide*

Version 2.50  
February 2001

# **ZyXEL**

TOTAL INTERNET ACCESS SOLUTION

# Copyright

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To obtain the services of this warranty, contact ZyXEL's Service Center for your Return Material Authorization number (RMA). Products must be returned Postage Prepaid. It is recommended that the unit be insured when shipped. Any returned products without proof of purchase or those with an out-dated warranty will be repaired or replaced (at the discretion of ZyXEL) and the customer will be billed for parts and labor. All repaired or replaced products will be shipped by ZyXEL to the corresponding return address, Postage Paid. This warranty gives you specific legal rights, and you may also have other rights that vary from country to country.



## Online Registration

Don't forget to register your ZyXEL product (fast, easy online registration at [www.zyxel.com](http://www.zyxel.com)) for free future product updates and information.

## DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2. 1077(a)



The following equipment:

Product Name : ADSL MODEM/ Router  
Trade Name : ZyXEL Communications Corporation  
Model Number : PRESTIGE 642M-11, PRESTIGE 642M-12, PRESTIGE 642R-11, PRESTIGE 642R-12

It's herewith confirmed to comply with the requirements of FCC Part 15 Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The result of electromagnetic emission has been evaluated by QuieTek EMC laboratory (NVLAP Lab. Code : 200347-0 ) and showed in the test report. ( Report No. : QTK-003H008E )

It is understood that each unit marketed is identical to the device as tested, and Any changes to the device that could adversely affect the emission Characteristics will require retest.

The following importer / manufacturer is responsible for this declaration:

Company Name : ZyXEL Communications Corp.  
Company Address : 1650 Miraloma Avenue Placentia, CA 92870  
Telephone : (714) 632-0882 Facsimile : (714) 632-0858

Person is responsible for marking this declaration:

Gordon Yang  
Name ( Full name )

Vice President  
Position / Title

7/10/00  
Date

  
Legal Signature



## Declaration of Conformity

The following products is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive (89/336/EEC). The listed standard as below were applied:

The following Equipment:

Product : ADSL over ISDN Router/Modem  
Model Number : PRESTIGE 642R-13, PRESTIGE 642M-13

**RFI Emission:** Limit class B according to EN 55022:1994  
Limits class A for harmonic current emission according to EN 61000-3-2/1995  
Limitation of voltage fluctuation and flicker in low-voltage supply system according to EN 61000-3-3/1995

**Immunity :** Generic immunity standard according to EN 50082-1:1997  
Electrostatic Discharge according to EN 61000-4-2:1995  
Contact Discharge: 4 kV, Air Discharge : 8 kV  
Radio-frequency electromagnetic field according to EN 61000-4-3:1995  
80 – 1000MHz with 1kHz AM 80% Modulation; 3V/m  
Electromagnetic field from digital telephones according to ENV 50204:1995  
900 ±5MHz with 200Hz rep. Frequency ,Duty Cycle 50%  
Electrical fast transient/burst according to EN 61000-4-4:1995  
AC/DC power supply: 1kV, Data/Signal lines : 0.5kV  
Surge immunity test according to EN 61000-4-5:1995  
AC/DC Line to Line: 1kV, AC/DC Line to Earth : 2kV  
Immunity to conducted disturbances, Induced by radio-frequency fields: EN 61000-4-6:1995  
0.15 – 80MHz with 1kHz AM 80% Modulation; 3V/m  
Power frequency magnetic field immunity test according to EN 61000-4-8:1995  
3A/m at frequency 50Hz  
Voltage dips, short interruptions and voltage variations immunity test according to EN 61000-4-11:1994  
30% Reduction @ 10ms, 60% Reduction @100ms, >95%Reduction @500ms

The following importer/manufacturer is responsible for this declaration:

Company Name : ZyXEL Communications A/S  
Company Address : Columbusvej 5, 2860 Soeborg, Denmark  
Telephone : +45-3955-0700 Facsimile : +45-3955-0707

Person is responsible for marking this declaration:

Torben Loth  
Name (Full Name)  
31.08.2000  
Date

Technical Manager  
Position/ Title  
[Signature]  
Legal Signature

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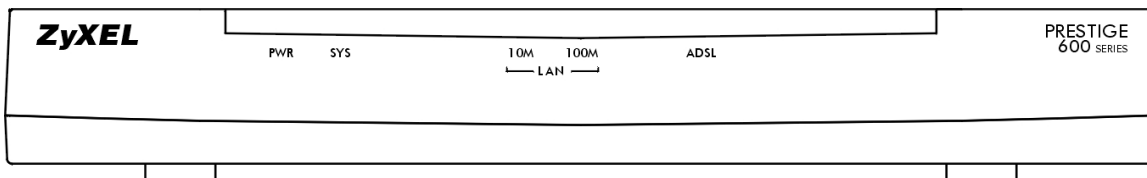
# Chapter 1

## Hardware Installation & Initial Setup

*This chapter familiarizes you with modem hardware.*

### 1.1 Front Panel LEDs of the P642M

The LED indicators on the front panel indicate the operational status of the Prestige 642M. The table below the diagram describes the LED functions:

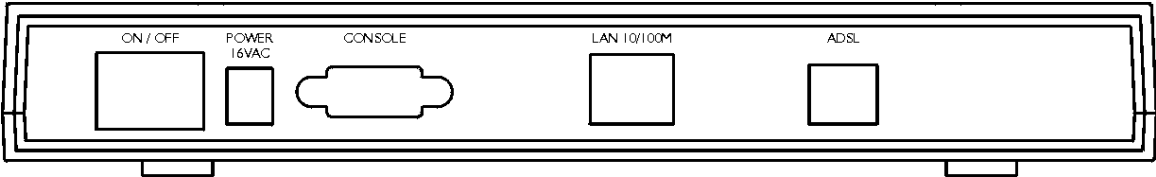


### 1.2 Front Panel LED Descriptions

LED	DESCRIPTION
<b>PWR</b>	The PWR (power) LED is on when power is applied to the Prestige.
<b>SYS</b>	The SYS (system) LED is on when the Prestige is on and functioning properly. The SYS LED is blinking when the system is rebooting. The LED is off when the system is not ready or has malfunctioned.
<b>LAN 10M</b>	The LAN 10M LED is on when a 10Mb Ethernet connection is successful. The LAN 10M LED is blinking when data is sent/received. The LED is off when the link is down.
<b>LAN 100M</b>	The LAN 100M LED is on when a 100Mb Ethernet connection is successful. The LAN 100M LED is blinking when data is sent/received. The LED is off when the link is down.
<b>ADSL</b>	The ADSL LED is on when the Prestige is successfully connected to a DSLAM. The ADSL LED is blinking when data is sent/received. The LED is off when the link is down.

## 1.3 Rear Panel and Connections of the P642M

The following figure shows the rear panel connectors of your Prestige.



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**The On/Off switch is optional with some Prestige Models**

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### Step 1. Connecting the ADSL Line

Connect the Prestige directly to the wall jack using the included ADSL cable. **OPTIONAL:** connect a microfilter between the wall jack and your telephone(s). A microfilter acts as a low pass filter (voice transmission takes place in the 0 to 4KHz bandwidth). A telephone microfilter is an optional purchase.

### Step 2. Connecting a Workstation to the Prestige 10/100M LAN port

Ethernet 10Base-T/100Base-T networks use Shielded Twisted Pair (STP) cable with RJ-45 connectors that look like a bigger telephone plug with 8 pins. Use the crossover cable (red tag) to connect your Prestige 642M to a computer directly. Use straight through Ethernet cable (white tag) to connect to an external hub and then connect one end of a straight through Ethernet cable (white tag) from the hub to the NIC on the workstation.

### Step 3. Connecting the Power Adapter to your Prestige

Connect the power adapter to the port labeled **PWR** on the rear panel of your Prestige.

### Step 4. Connecting the Console Port

For the initial configuration of your Prestige, you need to use terminal emulator software on a workstation and connect it to the Prestige through the console port. Connect the end of a console cable to the console port of the Prestige and the 25 or 9 pin end to a serial port (COM1, COM2 or other COM port) of your workstation. You can use an extension RS-232 cable if the cable you are using is too short.



# Chapter 2

## Configure Your Computer

*This chapter shows you how to enable the Prestige PPPoE feature via VPN.*

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**It is recommended that you enable the PPPoE feature of your modem before you begin this chapter. How?**

**Refer to the *Configure Your PPPoE Modem Appendix of the User's Manual* (make sure that PPPoE is enabled by your service provider).**

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### **What version of Windows do you use?**

Before you configure your computer check the version of Windows that you use. If you have Windows 95 then you should download the files MSDUN13.EXE and VPNUPD95.EXE from the Microsoft web site to your computer.

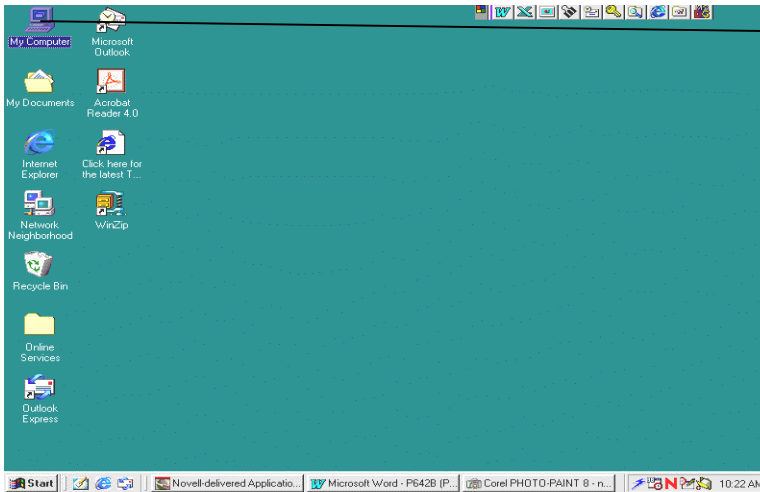
### **Follow the four sections shown next to configure your computer.**

- 1) Automatically configure an IP address.
- 2) Install a VPN Adapter.
- 3) Create a new PPPoE connection.
- 4) Connect to your ISP.

## 2.1 Automatically configure an IP address

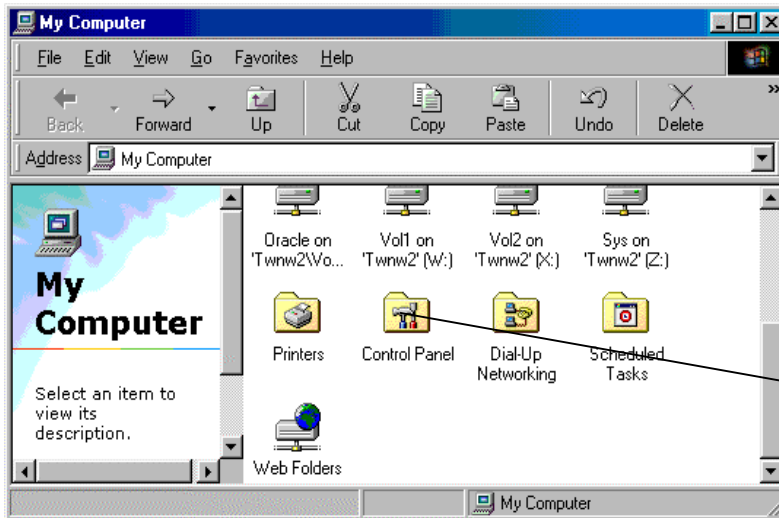
Make sure your Prestige is on and properly connected to your computer before starting.

**Step 1.** Begin at your computer desktop.



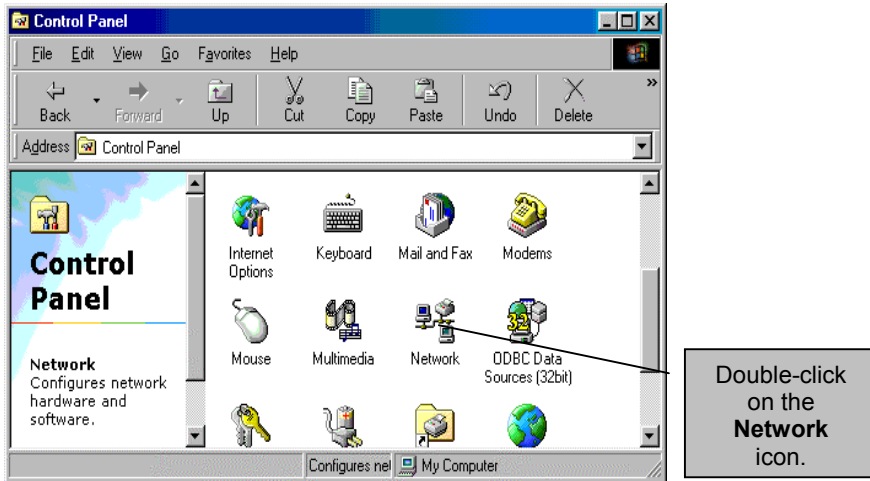
Double-click on the **My Computer** icon.

**Step 2.** This screen shows the contents of **My Computer**.

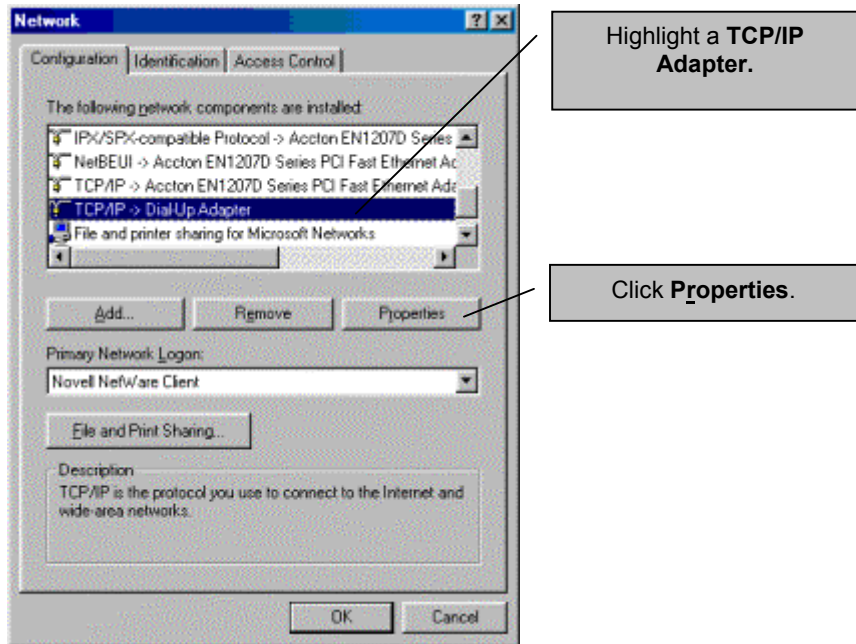


Double-click on the **Control Panel** icon.

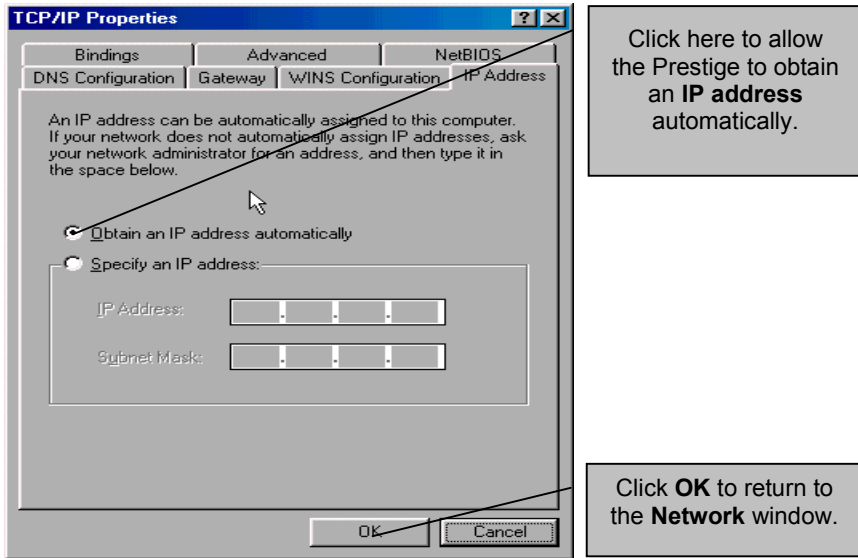
**Step 3.** Double click on the **Network** icon to configure hardware and software.



**Step 4.** This screen lists the components currently installed on your computer.



**Step 5.** This screen will automatically configure your computer as the DHCP client.



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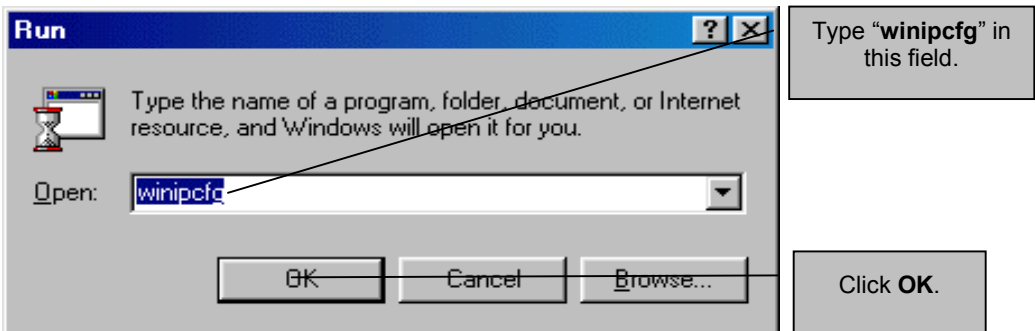
**Important: Click “Specify an IP address” only at your ISP’s request.**

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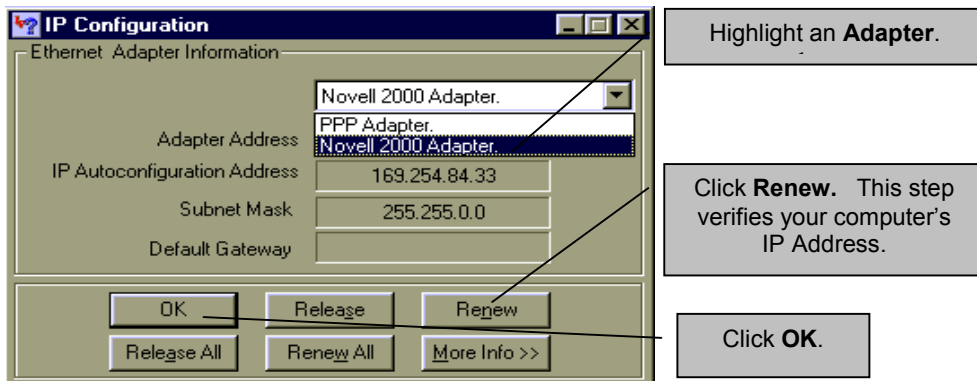
**Step 6.** Click **OK** in the **Network** window.

**Step 7.** Follow the prompts of your computer.

**Step 8.** Click **Start, Run** and then follow the steps below to open Windows IP configuration.



**Step 9.** This screen verifies your IP address.

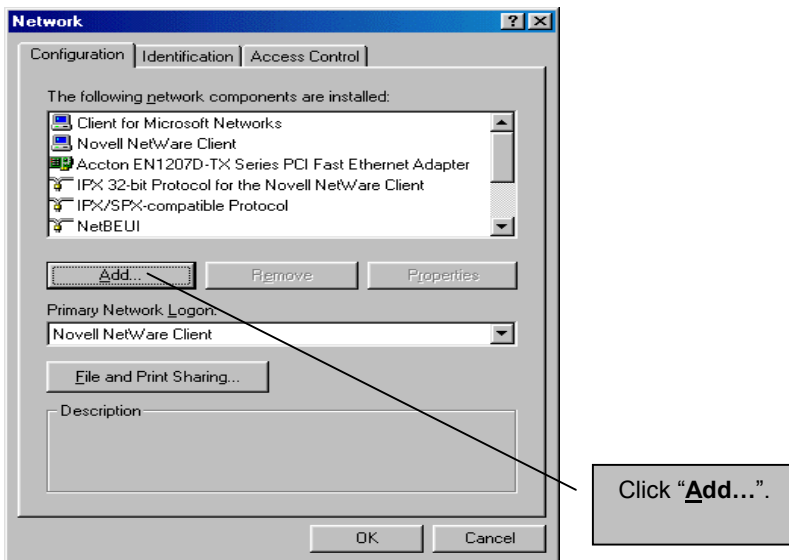


## 2.2 Install a VPN Adapter

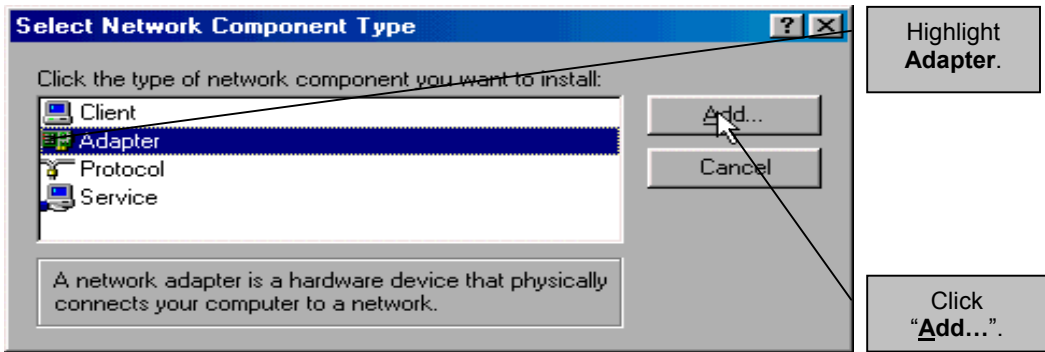
This section shows you how to install a VPN Adapter. Be sure to have your Windows installation CD handy and follow the steps below.

**Step 1.** Click **Start**, then **Settings** and then **Control Panel**. Double-click on the **Network** icon.

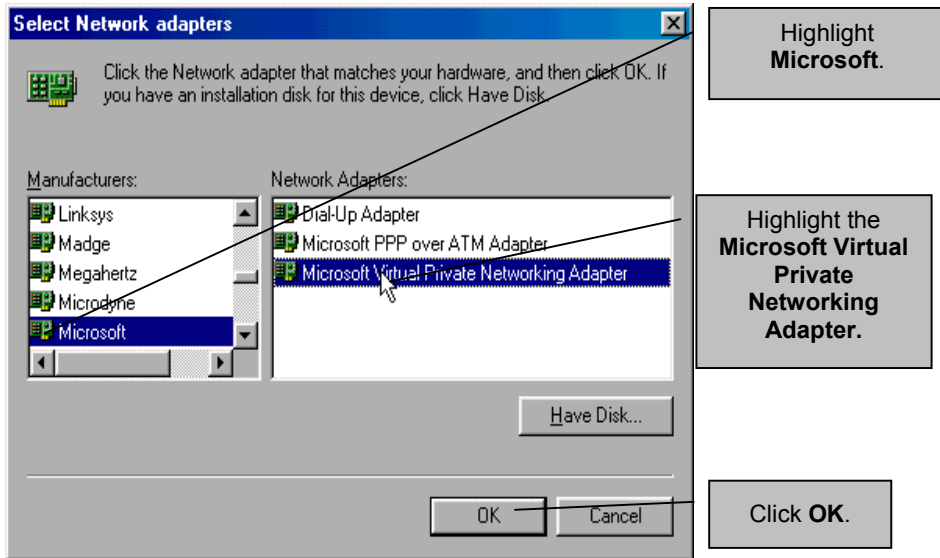
**Step 2.** This screen lists the components currently installed on your computer.



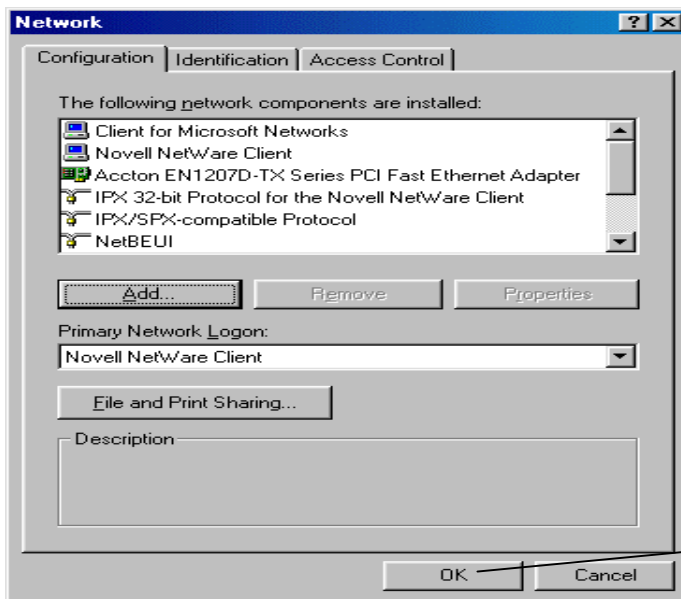
**Step 3.** Choose the type of network component you want to install.



**Step 4.** Choose the adapter that matches your hardware.



**Step 5.** This screen lists the components currently installed on your computer.



**Step 6.** Insert your Windows installation CD and follow the on-screen instructions.

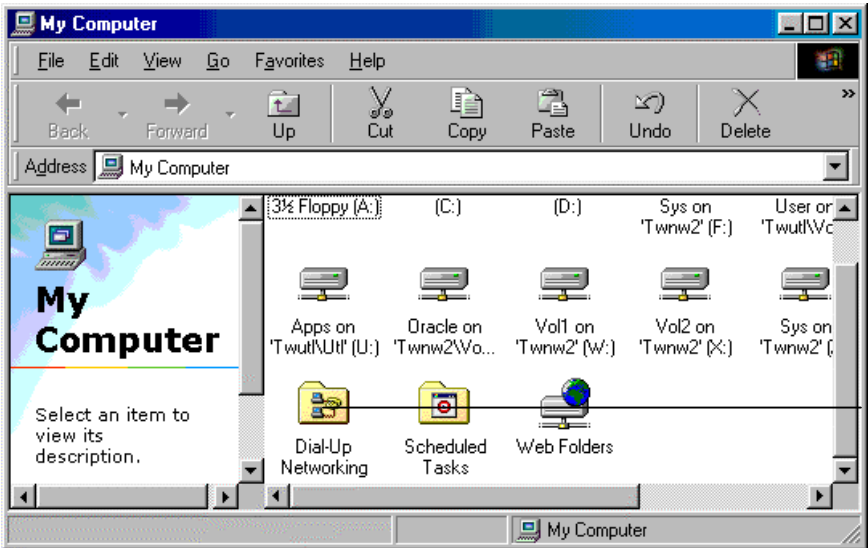
**Step 7.** If you have Windows 98 then you need to update your VPN adapter by downloading the VPNUPD98.EXE file directly from the Microsoft web site.

## 2.3 Create a new PPPoE Connection

**Step 1.** Make sure you have the information requested in the table below.

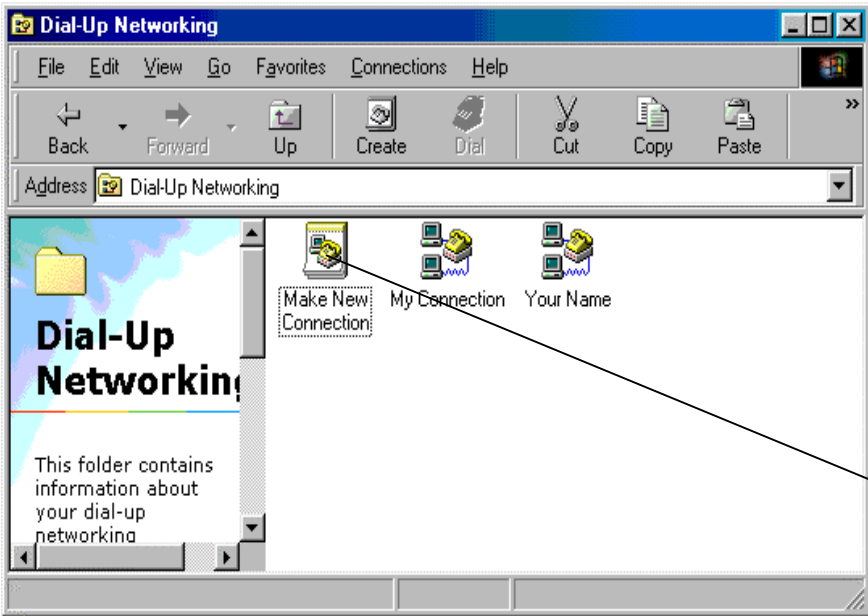
DESCRIPTION	FILL IN THE FIELDS BELOW
User Name	
Password	
Servicename	
Host name/IP address	

**Step 2.** Get to this window by following **Step 1** in **Section 2.1** above.



Double-click on the **Dial-Up Networking** icon.

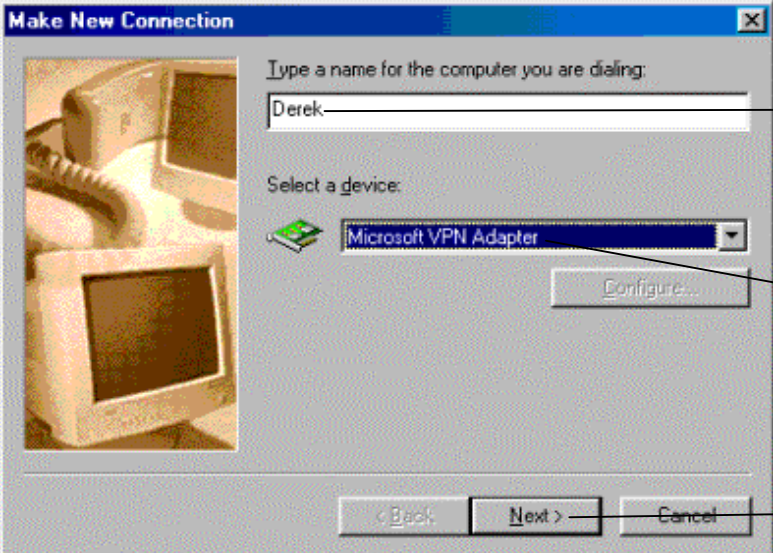
**Step 3.** This screen shows the contents of **Dial-Up Networking**.



Double-click on the **Make New Connection** icon.



**Step 4.** Type in a name for this connection.



Type a name for the computer you are dialing:  
Derek

Select a device:  
Microsoft VPN Adapter

Configure...

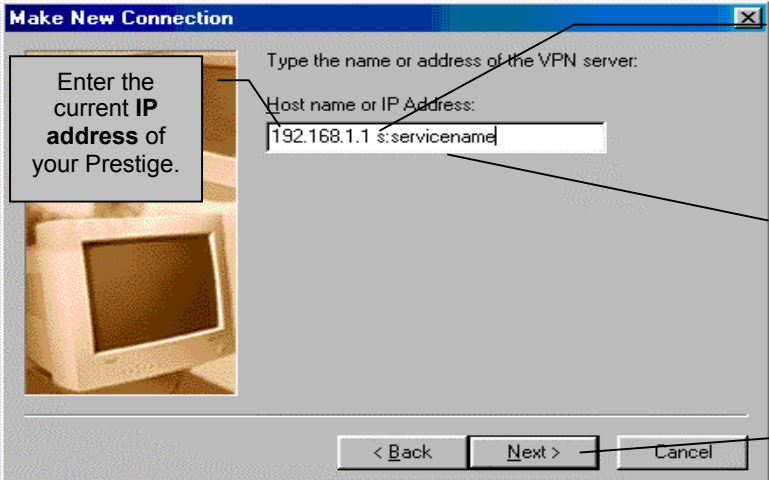
< Back Next > Cancel

Name this connection for identification purposes.

Highlight **Microsoft VPN Adapter**.

Click **Next >**.

**Step 5.** Specify the Host name or IP Address of the VPN server



Type the name or address of the VPN server:  
Host name or IP Address:  
192.168.1.1 s:servicename

< Back Next > Cancel

Enter the current **IP address** of your Prestige.

Type "s:".

Enter the **service name** if provided by your ISP.

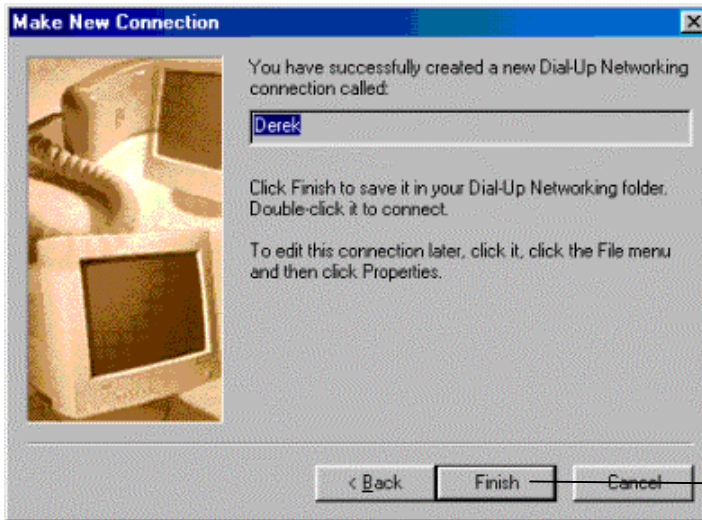
Click **Next >**.

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**Using the "s:" notation tells the Prestige that a PPPoE call is requested. This notation is required even if you do not have a servicename.**

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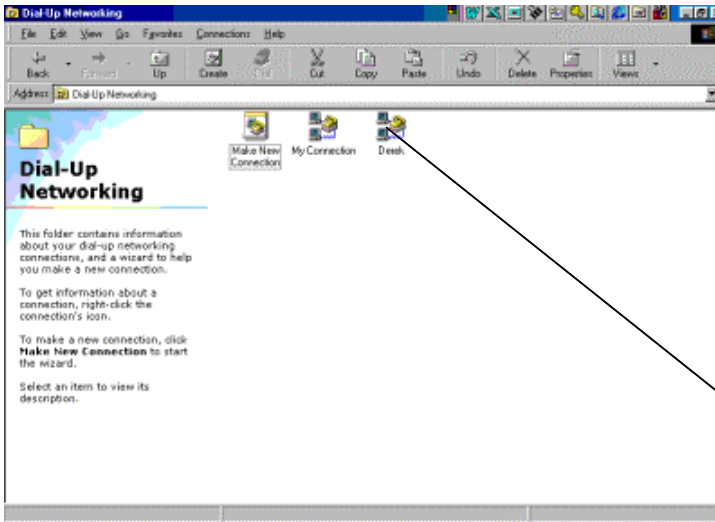
**Step 6.** This screen saves your new **Dial-Up Networking** connection.



Click **Finish**.

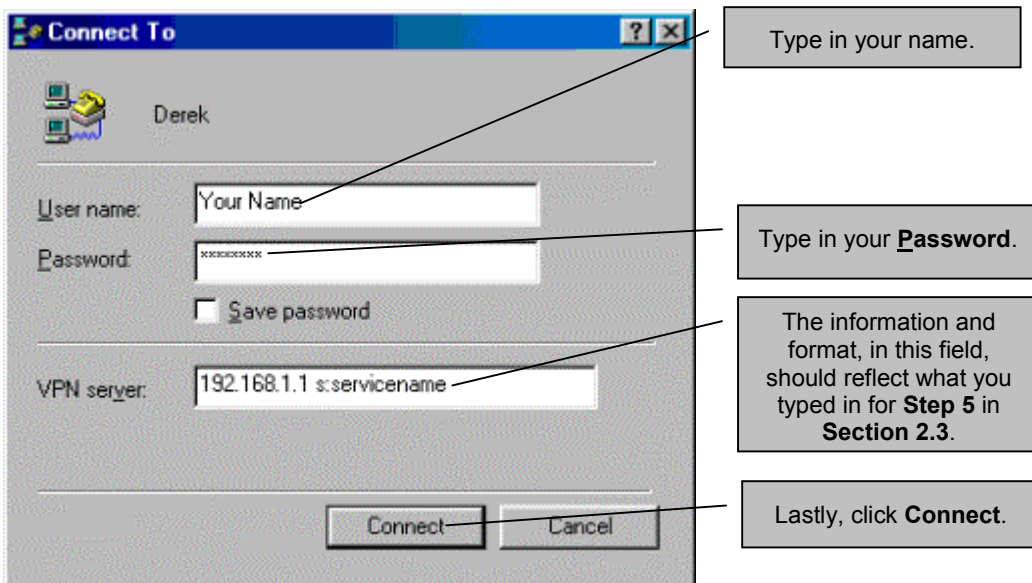
## 2.4 Connect to your ISP

**Step 1.** From your computer desktop double-click on the **My Computer** icon, double-click on the **Dial-Up Networking** icon and then double-click on the icon that you named in **Section 2.3, Step 4**.

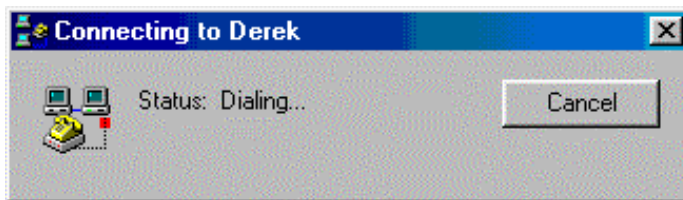


Double-click on **your new connection** icon.

**Step 2.** The **VPN server** field should reflect the **IP address** and the **service name** you entered when you created the connection in **Step 5, Section 2.3** above. Click **Connect** to access the Internet.



**Step 3.** This screen shows your Prestige connecting to the Internet.



**Congratulations, you can now access the Internet using your Prestige! Visit [www.zyxel.com](http://www.zyxel.com) to test your connection and discover more exciting products from ZyxEL.**



# Chapter 3

## Troubleshooting

*This section covers potential problems and possible remedies.*

PROBLEM	CORRECTIVE ACTION
None of the LEDs are on when I turn the Prestige on.	<p>Check the connection between the AC adapter and the Prestige.</p> <p>If the error persists, you may have a hardware problem. In this case you should contact technical support (see next page).</p>
My initialization of the PVC connection failed.	<p>Ensure that the cable is connected properly from the ADSL port to the wall jack. The ADSL LED on the front panel of the Prestige should be on. Reboot the Prestige. If you still have problems, you may need to call your ISP.</p>
I can't ping the Prestige.	<p>Check the Ethernet LEDs on the front panel. The LED should be on for a port that has a station connected. If it is off, check the cables between your Prestige and your computer.</p>
	<p>Verify that the IP address (and the subnet mask) is consistent between the Prestige and the workstation(s).</p>
I can't connect to an ISP.	<p>Verify your login name, password and your servicename (if you have one) with your ISP.</p>



# Customer Support

When you contact your customer support representative please have the following information ready:

- ◆ Prestige Model and serial number.
- ◆ Warranty Information.
- ◆ Date you received your Prestige.
- ◆ Brief description of the problem and the steps you took to solve it.

Method	EMAIL – Support	Telephone	Web Site	Regular Mail
Region	EMAIL – Sales	Fax	FTP Site	
Worldwide	<a href="mailto:support@zyxel.com.tw">support@zyxel.com.tw</a>	+886-3-578-3942	<a href="http://www.zyxel.com">www.zyxel.com</a>	ZyXEL Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, HsinChu, Taiwan.
	<a href="mailto:support@europe.zyxel.com">support@europe.zyxel.com</a>		<a href="http://www.europe.zyxel.com">www.europe.zyxel.com</a>	
North America	<a href="mailto:sales@zyxel.com.tw">sales@zyxel.com.tw</a>	+886-3-578-2439	<a href="ftp://ftp.europe.zyxel.com">ftp.europe.zyxel.com</a>	ZyXEL Communications Inc., 1650 Miraloma Avenue, Placentia, CA 92870, U.S.A.
	<a href="mailto:support@zyxel.com">support@zyxel.com</a>	+1-714-632-0882 800-255-4101	<a href="http://www.zyxel.com">www.zyxel.com</a>	
Scandinavia	<a href="mailto:sales@zyxel.com">sales@zyxel.com</a>	+1-714-632-0858	<a href="ftp://ftp.zyxel.com">ftp.zyxel.com</a>	ZyXEL Communications A/S, Columbusvej 5, 2860 Soeborg, Denmark.
	<a href="mailto:support@zyxel.dk">support@zyxel.dk</a>	+45-3955-0700	<a href="http://www.zyxel.dk">www.zyxel.dk</a>	
Austria	<a href="mailto:sales@zyxel.dk">sales@zyxel.dk</a>	+45-3955-0707	<a href="ftp://ftp.zyxel.dk">ftp.zyxel.dk</a>	ZyXEL Communications Services GmbH., Thaliastrasse 125a/2/2/4, A-1160 Vienna, Austria.
	<a href="mailto:support@zyxel.at">support@zyxel.at</a>	0810-1-ZyXEL 0810-1-99935	<a href="http://www.zyxel.at">www.zyxel.at</a>	
Germany	<a href="mailto:sales@zyxel.at">sales@zyxel.at</a>	+43-1-4948678	<a href="ftp://ftp.zyxel.at">ftp.zyxel.at</a> Note: for Austrian users with *.at domain only!	ZyXEL Deutschland GmbH., Adenauerstr. 20/A4, D-52146 Wuerselen, Germany.
	<a href="mailto:support@zyxel.de">support@zyxel.de</a>	+49-2405-6909-0 0180-5213247 Tech Support hotline 0180-5099935 RMA/Repair hotline	<a href="http://www.zyxel.de">www.zyxel.de</a>	
	<a href="mailto:sales@zyxel.de">sales@zyxel.de</a>	+49-2405-6909-99	<a href="ftp://ftp.europe.zyxel.com">ftp.europe.zyxel.com</a>	