

# **Prestige 2602R Series**

ADSL VoIP IAD

## **Quick Start Guide**

Version 3.40  
7/2005

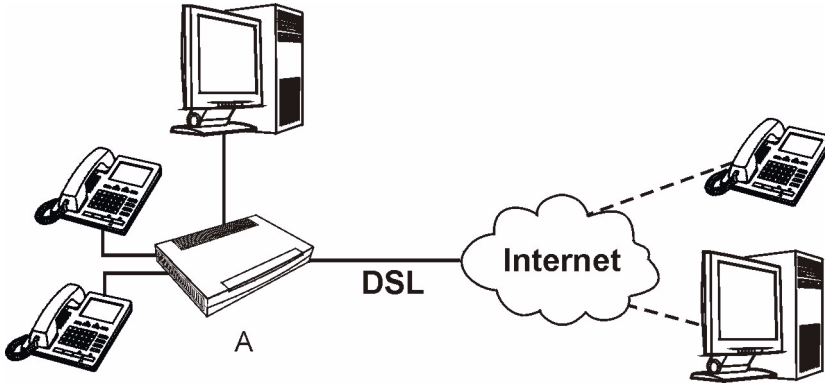
The logo for ZyXEL, featuring the word "ZyXEL" in a bold, blue, italicized sans-serif font. The "Z" and "y" are lowercase, while "XEL" are uppercase. The letters are slanted to the right.

## Overview

The Prestige P2602R ADSL VoIP IAD (Integrated Access Device) is an ADSL router with two phone ports for Voice over IP (VoIP) calls.

See the User's Guide for more information on all features.

The following figure shows your Prestige (A) connected to the Internet.

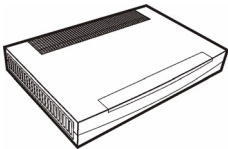


## 1 Hardware Connections

You need the following before you start:

**Note:** You may need your Internet access and voice account information.

**Prestige**



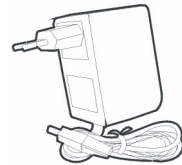
**Computer**



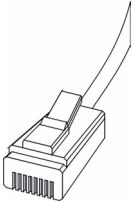
**Telephone**



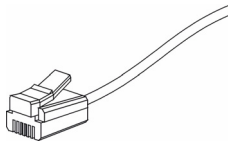
**Power Adaptor**



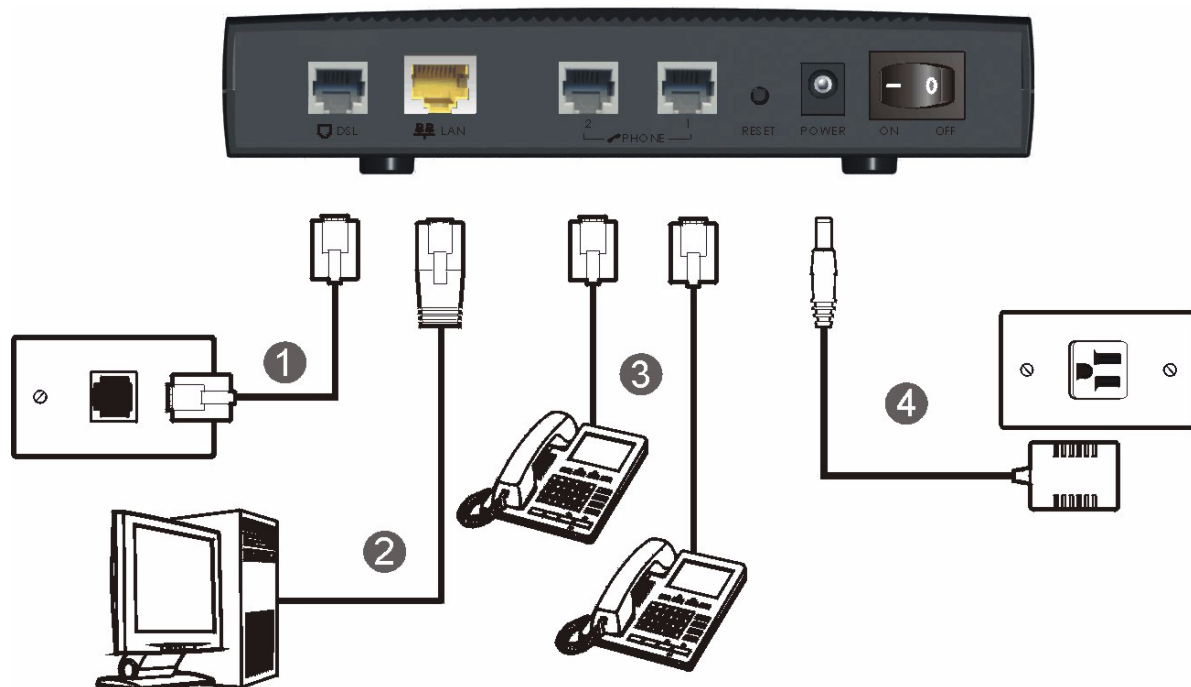
**Ethernet Cable**



**Telephone Cable**



Do the following to make hardware connections for initial setup.



- 1 **DSL:** Connect the Prestige to a telephone jack using the included telephone wire.
- 2 **LAN:** Use an Ethernet cable to connect a computer or external hub to the **LAN** port for initial configuration and/or Internet access.
- 3 **Phone 1-2:** Connect one or more analog telephones to these ports using telephone wires. These are FXS (Foreign Exchange Station) ports.
- 4 **POWER:** Use the included power adaptor to connect this power socket to an appropriate power source.

After you've made the connections, set the power switch to the "ON" side to turn on the Prestige.

The **PWR/SYS** LED flashes during system startup and stays on after the system self-tests are successful. The **LAN** and **DSL/PPP** LEDs turn on if the **LAN** and **DSL** ports are properly connected (they flash when sending or receiving data). See your User's Guide for detailed LED descriptions.

## 2 Initial Configuration

You may configure the Prestige for Internet access in any *one* of these ways:

- **Zero Configuration**

• **Web Configurator Internet Access Wizard**

You will need your Internet access information such as user name and password if given by your ISP.

ISP INFORMATION	ENCAPSULATION METHOD YOU ARE USING
None	RFC1483 in bridged mode with a dynamic IP address or ENET ENCAP with a dynamic IP address
An IP address only	RFC1483 in routing mode with a static IP address
A user name and password (and an IP address)	PPPoA or PPPoE encapsulation (with a static IP address)
An IP address, subnet mask and a gateway IP address	ENET ENCAP with a static IP address

## 2.1 Zero Configuration

Launch your web browser and navigate to any web site (for example, [www.zyxel.com](http://www.zyxel.com)). The Prestige automatically detects and configures your Internet connection. This may take about two minutes.



If you have a **PPPoE** or **PPPoA** connection, a screen displays prompting you to enter your Internet account information. Enter the username, password and/or service name exactly as provided. Click **Apply**.

Your PPPoE login username and password are wrong.

Enter the system password and username and password exactly as your ISP assigned them.

System Password

User Name

Password

**Note:** Zero Configuration can only automatically configure the device for Internet access if you are using **PPPoE**, **PPPoA** or **ENET ENCAP** encapsulation with a dynamically-assigned IP address from your ISP.

If you're not using these Internet access settings, then use the web configurator **Internet Access Wizard** to manually configure the device.

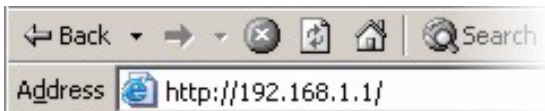
If you want to set up a SIP account for VoIP calls, you should also configure the voice configuration wizard screen (see [Section 2.2.2 on page 6](#)) or the **Voice** screen under **Advanced Setup**.

After the Prestige automatically detected and configured the Internet connection, if you connect the Prestige to another DSL line with different VPI and VCI, zero configuration will not work and you need to reset the Prestige to the factory defaults or manually configure the Prestige for Internet access.

## 2.2 Web Configurator Internet Access Wizard

### 2.2.1 Accessing the Web Configurator

1 Launch your web browser. Enter "192.168.1.1" as the web site address.

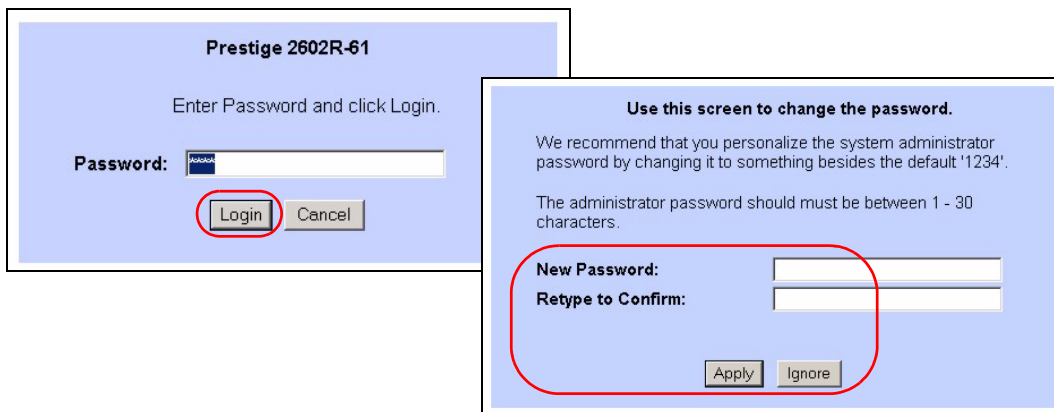


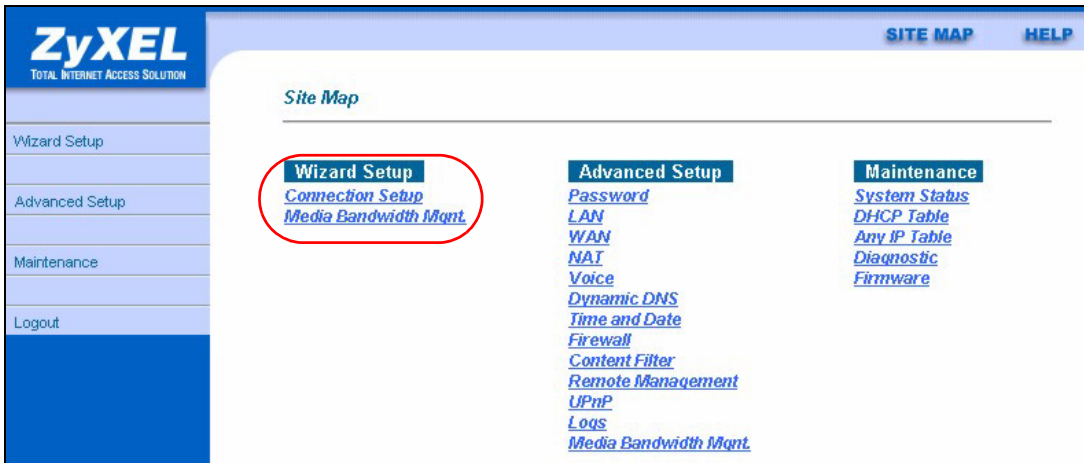
**Note:** If you do not see the next screens, then please read [Section 3.1 on page 12](#).

2 Click **Login**.

3 Type a new password (retype it to confirm) and click **Apply**. Otherwise click **Ignore**. You then see the main web configurator screen.

4 In the **Site Map** screen, click **Connection Setup**.





## 2.2.2 Internet Access Setup

1 Configure the Internet access settings in this step. The wizard screens vary depending on the **Mode** and **Encapsulation** you chose in the first wizard screen.

### RFC 1483

- A) Select **Routing** if your ISP gave you an IP address and allows multiple computers to share an Internet account. Otherwise, select **Bridge**. Then select **RFC 1483**.
- B) Click **Next**.
- C) If you select **Routing**, enter the IP address given by your ISP.
- D) If you select **Routing**, select **SUA Only** when you have one public IP address, **Full Feature** when you have more than one public IP address (for translation) or **None** to disable NAT.
- E) Click **Next**.

Wizard Setup - ISP Parameters for Internet Access

Mode:  (A)

Encapsulation:  (A)

Multiplex:

Virtual Circuit ID

VPI:

VCI:

(B)

Wizard Setup - ISP Parameters for Internet Access

IP Address:  (C)

Network Address Translation:  (D)

(E)

## ENET ENCAP

- A) Select **Routing**, then **ENET ENCAP**.
- B) Click **Next**.
- C) If your ISP gave you an IP address, subnet mask and a gateway address, select **Static IP address** and enter them. Otherwise, select **Obtain IP Address Automatically**.
- D) Select **SUA Only** if you have one public IP address, **Full Feature** if you have more than one public IP address (for translation) or **None** to disable NAT.
- E) Click **Next**.

*Wizard Setup - ISP Parameters for Internet Access*

Mode:  (A)

Encapsulation:  (A)

Multiplex:

Virtual Circuit ID  
 VPI:   
 VCI:

(B)

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*Wizard Setup - ISP Parameters for Internet Access*

IP Address  
 Obtain an IP Address Automatically (C)  
 Static IP Address  
 IP Address:   
 Subnet Mask:   
 ENET ENCAP Gateway:

Network Address Translation  
 (D)

(E)

## PPPoE

- A) Select **Routing**, then **PPPoE**.
- B) Click **Next**.
- C) Enter the service name, username and password given by your ISP.
- D) If your ISP gave you an IP address, select **Static IP address** and enter it. Otherwise, select **Obtain IP Address Automatically**.
- E) Select **Nailed-Up Connection** to have your connection up all the time. Otherwise, select **Connect on Demand** and specify an idle time-out period (in seconds) in the **Max. Idle Timeout** field.
- F) Select **SUA Only** if you have one public IP address, **Full Feature** if you have more than one public IP address (for translation) or **None** to disable NAT.
- G) Click **Next**.

*Wizard Setup - ISP Parameters for Internet Access*

Mode:  (A)

Encapsulation:  (A)

Multiplex:

Virtual Circuit ID  
 VPI:   
 VCI:

(B)

---

*Wizard Setup - ISP Parameters for Internet Access*

Service Name:  (C)

User Name:  (C)

Password:  (C)

IP Address  
 Obtain an IP Address Automatically (D)  
 Static IP Address

Connection  
 Connect on Demand: Max Idle Timeout:  sec  
 Nailed-Up Connection (E)

Network Address Translation  
 (F)

(G)

**PPPoA**

A) Select **Routing** if your ISP allows multiple computers to share an Internet account. Otherwise, select **Bridge**. Then select **PPPoA**.

B) Click **Next**.

C) Enter the username and password given by your ISP.

D) If your ISP gave you an IP address, select **Static IP address** and enter it. Otherwise, select **Obtain IP Address Automatically**.

E) Select **Nailed-Up Connection**

to have your connection up all the time.

Otherwise, select **Connect on Demand** and specify an idle time-out period (in seconds) in the **Max. Idle Timeout** field.

F) If you select **Routing**, select **SUA Only** when you have one public IP address, **Full Feature** when you have more than one public IP address (for translation) or **None** to disable NAT.

G) Click **Next**.

**2 Voice Configuration:** Fill in the fields with information from your voice service provider. Leave the default settings in fields for which no information was provided (except if otherwise specified).

**Note:** You should have a voice account already set up.

This screen configures SIP account 1. Use the **VoIP** screens to configure SIP account 2.



- A) Select the **Active** check box.
- B) If you have a SIP account like [1234@VoIP-provider.com](mailto:1234@VoIP-provider.com), “1234” would be the SIP Number and “VoIP-provider.com” would be the SIP Service Domain.
- C) Enter the SIP server IP address. Enter the SIP server port number, if not given, leave it set to the default.
- D) If you have no registrar server information, copy what you entered in the **SIP Server Address/Port** fields.
- E) Enter your SIP account user name and password given by your voice service provider.
- F) If you want to show identification information when you make VoIP calls, select **Send Caller ID**.
- G) Click **Next**.

**Wizard Setup - Voice Configuration** SIP Account :SIP1

**SIP Settings**

Active  **A**

SIP Number  **B**

SIP Local Port  (1024-65535)

SIP Server Address  **C**

SIP Server Port  (1024-65535) **C**

REGISTER Server Address  **D**

REGISTER Server Port  (1024-65535) **D**

SIP Service Domain

**Authentication**

User-ID  **E**

Password

**Caller ID**

Send Caller ID **F**

**G**

3 Verify your LAN, WAN and SIP settings and click **Save Settings**.

4 The Prestige automatically tests the connection to the computer(s) connected to the LAN port. To test the connection from the Prestige to the ISP, click **Start Diagnose**. Otherwise click **Return to Main Menu** to go back to the main screen.

**Wizard Setup - ISP Parameters for Internet Access**

**WAN Information:**

Mode: **Routing**

Encapsulation: **PPPoE**

Multiplexing: **LLC**

VPI/VCI: **0/35**

Service Name:

User Name: **user@isp.com**

Password: **\*\*\*\*\***

IP Address: **Obtain an IP Address Automatically**

Network Address Translation: **SUA Only**

Connect on Demand: **Max Idle Timeout 0 sec.**

**Voice Information:**

Active: **Yes**

SIP Number: **ChangeMe**

SIP Local Port: **5060**

SIP Server Address: **192.168.1.33**

SIP Server Port: **5060**

REGISTER Server Address: **192.168.1.33**

REGISTER Server Port: **5060**

SIP Service Domain: **192.168.1.33**

Authentication User-ID: **ChangeMe**

Authentication Password: **\*\*\*\*\***

Caller ID: **Send Caller ID**

**LAN Information:**

IP Address: **192.168.1.1**

IP Mask: **255.255.255.0**

DHCP: **ON**

Client IP Pool Starting Address: **192.168.1.33**

Size of Client IP Pool: **32**

**Wizard Setup - ISP Parameters for Internet Access**

Your DSL Gateway is now configured. Your device is capable of testing your DSL service. The individual tests are listed below. Click "Start Diagnose" button if you want to test; otherwise, click "Return to Main Menu" button.

Connection Type	Test	Result
<b>LAN connections</b>	Test your Ethernet Connection	<b>PASS</b>
<b>WAN connections</b>	Test ADSL synchronization	N/A
	Test ADSL(ATM OAM) loopback test	N/A
	Test PPP/PPPoE server connection	N/A
	Ping default gateway	N/A
<b>Voice connections</b>	Test Voice Registration	N/A

### 2.2.3 Media Bandwidth Management

1 Click **Media Bandwidth Mgmt.** in the **Site Map** screen to open the wizard screen.

A) Select **Active** to have the Prestige control the bandwidth allocated to traffic going out through the Prestige's WAN or LAN port.

B) Select the services for which you want to manage bandwidth.

C) Click **Next**.

2 The Prestige automatically creates the bandwidth class for each service you select.

A) Select **High, Mid** or **Low** priority to control the distribution of bandwidth to selected services.

A service with High priority is given as much bandwidth as it needs.

If you select services as having the same priority, then bandwidth is divided equally amongst those services.

Services not specified in bandwidth management are allocated bandwidth after all specified services receive their bandwidth requirements. If the rules set up in this wizard are changed in the advanced setup, then the service priority will be set to **Others**.

B) Click **Finish**.

Service	Priority
XBox Live	<input checked="" type="radio"/> High <input type="radio"/> Mid <input type="radio"/> Low <input type="radio"/> Others
VoIP (SIP)	<input checked="" type="radio"/> High <input type="radio"/> Mid <input type="radio"/> Low <input type="radio"/> Others

## 2.3 Speed Dial Configuration

Click **Voice** in the navigation panel and then **Speed Dial** to display the following screen.

Speed dial provides shortcuts for dialing frequently used (VoIP) phone numbers.

You can use speed dial entries for peer-to-peer calls or SIP numbers that use letters.

- A) Select a speed dial key combination.
- B) Enter the SIP number of the party you will call and a name to identify them.
- C) Select **Use Proxy** if calls to this party use your SIP account.  
Select **Non-Proxy (Use IP or URL)** if calls to this party use a different SIP server or go directly to the callee's VoIP phone (peer-to-peer). Enter the SIP server's or the party's IP address or domain name.
- D) Click **Add**.

**Speed Dial Phone Book**

Speed Dial	SIP Number	Name	Destination	Delete	Edit
#01	52824	test	172.21.3.29	Delete	Edit
#02				Delete	Edit
#03				Delete	Edit
#04				Delete	Edit
#05				Delete	Edit
#06				Delete	Edit
#07				Delete	Edit
#08				Delete	Edit
#09				Delete	Edit
#10				Delete	Edit

Push Button to Clear Phone Book  
Clear

## 2.4 Make Calls Through the Internet

When the **VoIP** LED turns on, your SIP account is registered successfully. Dial a numerical SIP number (like "12345" for example) on your phone's keypad.

Use speed dial entries for peer-to-peer calls or SIP numbers that use letters. Dial the speed dial entry on your telephone's keypad.

Use your voice service provider's dialing plan to call regular telephone numbers.

## 3 Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you connect the Prestige's power.	<p>Make sure that you have the correct power adaptor connected to the Prestige and an appropriate power source. Make sure that the power source is turned on. Check all cable connections.</p> <p>If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.</p>

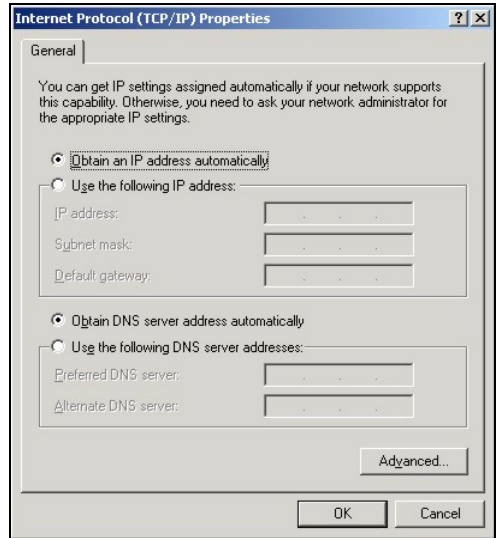
PROBLEM	CORRECTIVE ACTION
<p>Cannot access the Prestige from my computer.</p>	<p>Check the cable connection from your computer to the Prestige.</p> <p>Make sure your computer's IP address is in the same subnet as the Prestige's IP address (see <a href="#">Section 3.1 on page 12</a>).</p> <p>Make sure your computer's Ethernet adapter is installed and functioning properly.</p> <p>If the Prestige's IP address has changed, then enter the new one as the URL.</p> <p>Use Internet Explorer 6.0 and later or Netscape Navigator 7.0 and later with JavaScript enabled.</p> <p>Make sure you enter the password correctly (the field is case sensitive).</p> <p>If you've changed the Prestige's password and forgotten it, use the <b>RESET</b> button. Press the button in for about 10 seconds (or until the <b>PWR/SYS</b> LED starts to blink), then release it. It returns the Prestige to the factory defaults (password is 1234, LAN IP address 192.168.1.1 etc.).</p>
<p>Cannot access the Internet.</p>	<p>Verify the Internet connection settings in the wizard. Make sure you entered the correct user name and password if you are using PPPoE or PPPoA.</p>
<p>There is no dial tone.</p>	<p>Check the telephone connections.</p> <p>You can test the telephone wire by using it to connect a telephone to a regular telephone outlet and checking for a dial tone.</p>
<p>Cannot make voice calls.</p>	<p>Make sure you have the wizard screens properly configured.</p> <p>You can also check the Prestige's IP addresses and VoIP status in the <b>Maintenance Status</b> screen.</p> <p>If the VoIP settings are correct, use speed dial to make peer-to-peer calls. If you can make a call using speed dial, there may be something wrong with the SIP server, contact your voice service provider.</p>
<p>Cannot call from one of the Prestige's phone ports to the other phone port.</p>	<p>You cannot use a phone connected to the Prestige to call the SIP number of one of the Prestige's SIP accounts.</p> <p>You can just press "####" on your phone's keypad to call the Prestige's other phone port.</p>

### 3.1 Set Up Your Computer's IP Address

This section shows you how to set your Windows NT/2000/XP computer to automatically get an IP address. This ensures that your computer can with your Prestige. Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

- 1 In Windows XP, click **start, Control Panel**. In Windows 2000/NT, click **Start, Settings, Control Panel**.
- 2 In Windows XP, click **Network Connections**. In Windows 2000/NT, click **Network and Dial-up Connections**.
- 3 Right-click **Local Area Connection** and then click **Properties**.
- 4 Select **Internet Protocol (TCP/IP)** (under the **General** tab in Win XP) and click **Properties**.

- 5 The **Internet Protocol TCP/IP Properties** screen opens (the **General tab** in Windows XP).
- 6 Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** options.
- 7 Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.
- 8 Click **Close (OK** in Windows 2000/NT) to close the **Local Area Connection Properties** window.
- 9 Close the **Network Connections** screen.



## Viewing Your Product's Certifications

- 1 Go to [www.zyxel.com](http://www.zyxel.com).
- 2 Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
- 3 Select the certification you wish to view from this page.