Prestige 334W

802.11g Wireless Broadband Router with Firewall

Version 3.60
May 2004

Quick Start Guide

ZyXEL
Unleash Networking Power

1 Introducing the Prestige

The Prestige is a broadband sharing gateway with a built-in wireless LAN access point and four-port 10/100 Mbps switch that makes it easy for people to set up a small home/office network and share Internet access via a broadband (cable/DSL) modem. Key features of the Prestige include media bandwidth management, an embedded 802.11g wireless LAN security, firewall, VPN, content filtering, NAT and UPnP. See your *User's Guide* for more details on all Prestige features.

You should have an Internet account already set up and have been given most of the following information.

Internet Account Information

Your device's WAN IP Address (if given): _____		
DNS Server IP Address (if given): First _____, Second _____, Third _____		
Encapsulation:	(select one below):	
❍ **Ethernet**	Service Type: _____	
	Login Server IP Address: _____	
	User Name: _____	Password: _____
❍ **PPTP**	User Name: _____	Password: _____
	Your WAN IP Address: _____	PPTP Server IP Address: _____
	Connection ID (if required): _____	
❍ **PPPoE**	(PPPoE) Service Name: _____	
	User Name: _____	Password: _____

Procedure to View a Product's Certification(s)

1. Go to 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.

2 Hardware Installation

2.1 Rear Panel

LABEL	DESCRIPTION
LAN 10/100M	Use an Ethernet cable to connect at least one computer for initial Prestige configuration. These ports are auto-negotiating (can connect at 10 or 100Mbps) and auto-sensing (automatically adjust to the type of Ethernet cable you use (straight-through or crossover)).
WAN 10/100M	Connect your cable/DSL modem to this port with the cable that came with your modem.
POWER 9 VAC	Connect the end of the included power adaptor (use only this adapter) to this power socket.
After you've made the connections, connect the power cable to a power supply and look at the front panel LEDs.	
RESET	You only need to use this button if you've forgotten the Prestige's password. It returns the Prestige to the factory defaults (password is 1234, LAN IP address 192.168.1.1. See your *User's Guide* for details).

2.2 Front Panel LEDs

The **PWR** LED blinks while performing system testing and then stays on if the testing is successful. The **LAN**, and **WAN** LEDs turn on if they are properly connected.

LED	STATUS	COLOR	DESCRIPTION
PWR		Off	The Prestige is not receiving power.
	Amber	On	Power to the Prestige is too low
	Green	On	The Prestige is receiving power.
		Blinking	The Prestige is performing testing.
LAN 1- 4		Off	The LAN is not connected.
	Green	On	The Prestige has a successful 10Mb Ethernet connection.
		Blinking	The Prestige is sending/receiving data
	Amber	On	The Prestige has a successful 100Mb Ethernet connection.
		Blinking	The Prestige is sending/receiving data
WAN		Off	The WAN connection is not ready, or has failed.
	Green	On	The Prestige has a successful 10Mb WAN connection.
		Blinking	The Prestige is sending/receiving data
	Amber	On	The Prestige has a successful 100Mb Ethernet connection.
		Blinking	The Prestige is sending/receiving data

LED	STATUS	COLOR	DESCRIPTION
WLAN		Off	The WLAN connection is not ready, or has failed.
	Green	On	The Prestige has a successful WLAN connection.
		Blinking	The Prestige is sending/receiving data

3 Preparing Your Computer

Skip this section if your computer is already set up to accept a dynamic IP address. This is the default for most new computers.

The Prestige is already set up to assign your computer an IP address. Use this section to set up your computer to receive an IP address or assign it a static IP address in the 192.168.1.2 to 192.168.1.254 range with a subnet mask of 255.255.255.0. This is necessary to ensure that your computer can communicate with your Prestige.

Your computer must have an Ethernet card and TCP/IP installed. TCP/IP should already be installed on computers using Windows NT/2000/XP, Macintosh OS 7 and later operating systems.

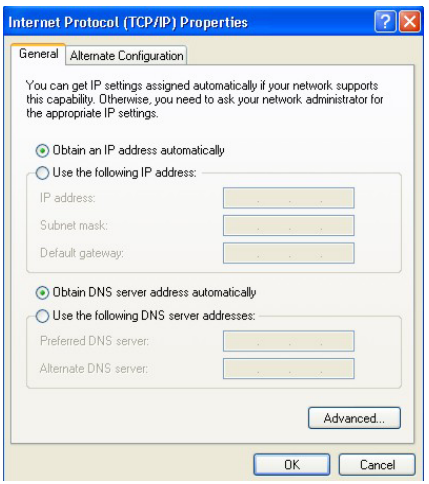
3.1 Windows 2000/NT/XP

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).

   - To have your computer assigned a dynamic IP address, click **Obtain an IP address automatically**.

   -To configure a static IP address, click **Use the following IP Address** and fill in the **IP address** (choose one from192.168.1.2 to 192.168.1.254), **Subnet mask** (255.255.255.0), and **Default gateway** (192.168.1.1) fields.
6. Click **Advanced**. Remove any previously installed gateways in the **IP Setting**s tab and click **OK** to go back to the **Internet Protocol TCP/IP Properties** screen.



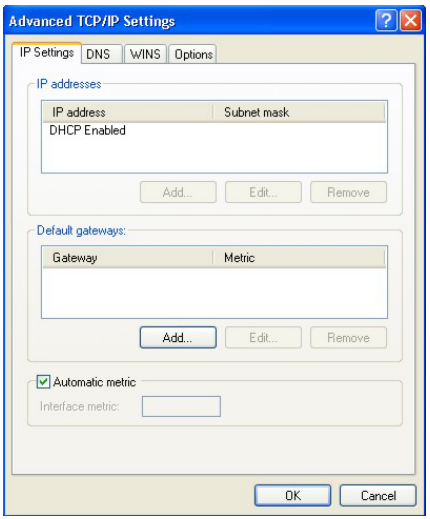
7. Click **Obtain DNS server address automatically** if you do not know your DNS server IP address(es).

   If you know your DNS server IP address(es), click **Use the following DNS server addresses**, and type them in the **Preferred DNS server** and **Alternate DNS server** fields.

   If you have more than two DNS servers, click **Advanced**, the **DNS** tab and then configure them using **Add**.

8. Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.

9. Click **OK** to close the **Local Area Connection Properties** window.



Checking Your Computer's IP Address

1. In the computer, click **Start**, (**All) Programs**, **Accessories** and then **Command Prompt**.
2. In the **Command Prompt** window, type "ipconfig" and then press **ENTER**. Your computer's IP address must be in the correct range (192.168.1.2 to 192.168.1.254) with subnet mask 255.255.255.0 in order to communicate with the Prestige.

Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

4 Configuring Your Prestige

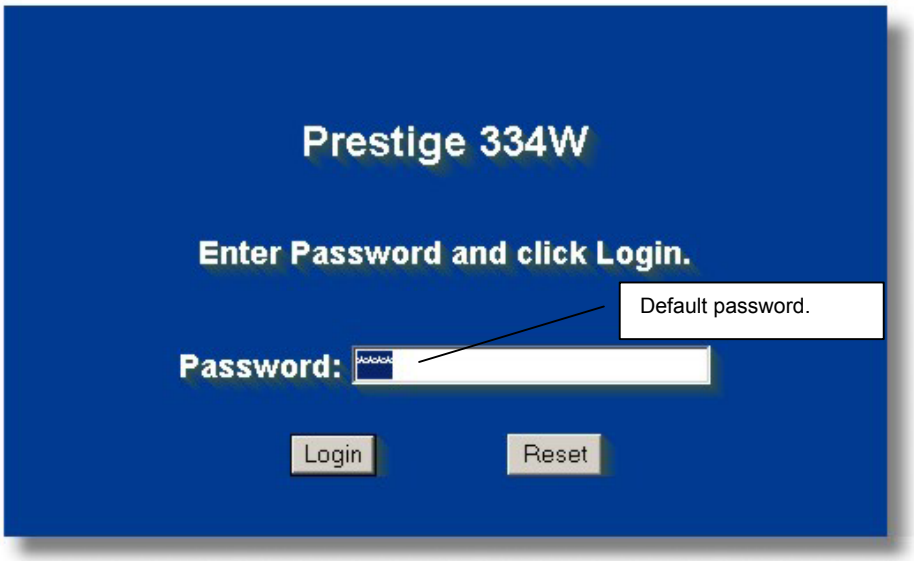
Choose one of these methods to access and configure the Prestige. This *Quick Start Guide shows* you how to use the web configurator setup wizard and bandwidth management wizard only. See your *User's Guide* for background information on all Prestige features and SMT configuration. Click the web configurator online help for screen-specific web help.

- Web Configurator
- SMT (System Management Terminal). Access the SMT via LAN or WAN using Telnet.

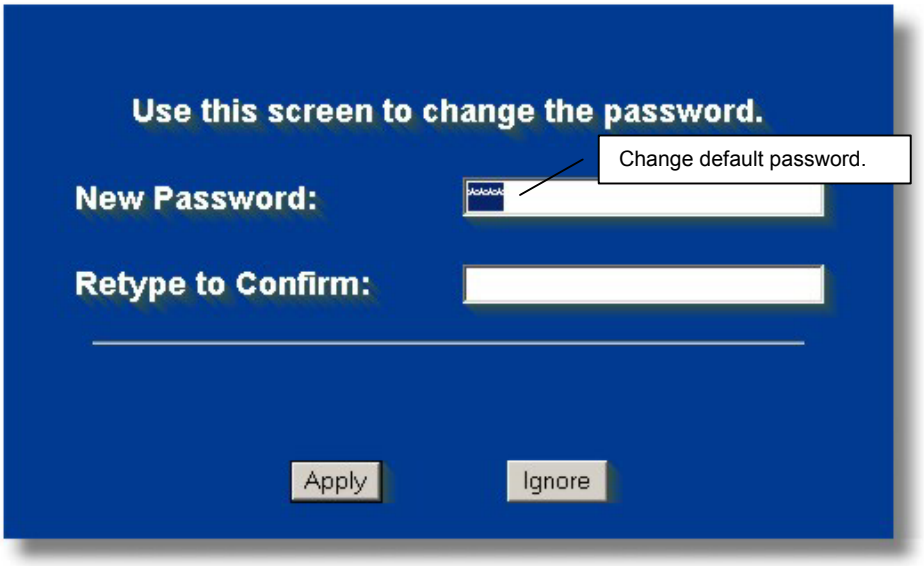
4.1 Accessing Your Prestige Via Web Configurator

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

Step 2. The default password ("1234") is already in the password field (in non-readable format). Click **Login** to proceed to a screen asking you to change your password. Click **Reset** to revert to the default password in the password field.

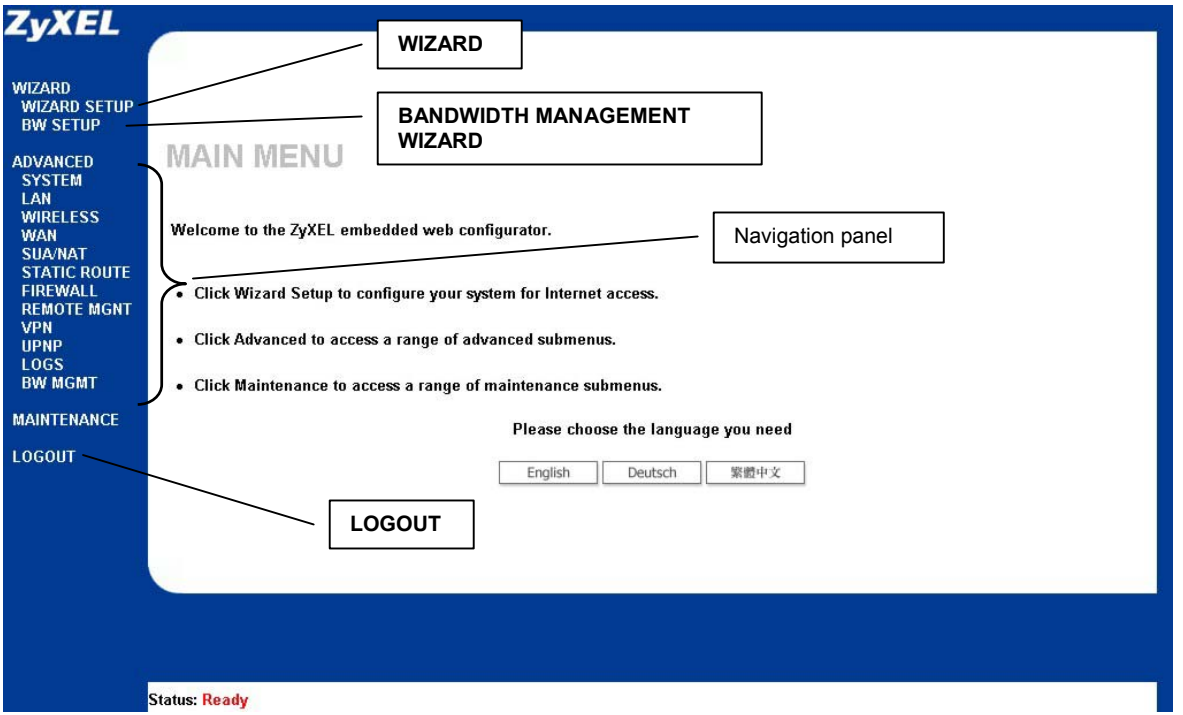


Step 3. It is highly recommended you change the default password! Enter a new password, retype it to confirm and click **Apply**; alternatively click **Ignore** to proceed to the main menu if you do not want to change the password now.



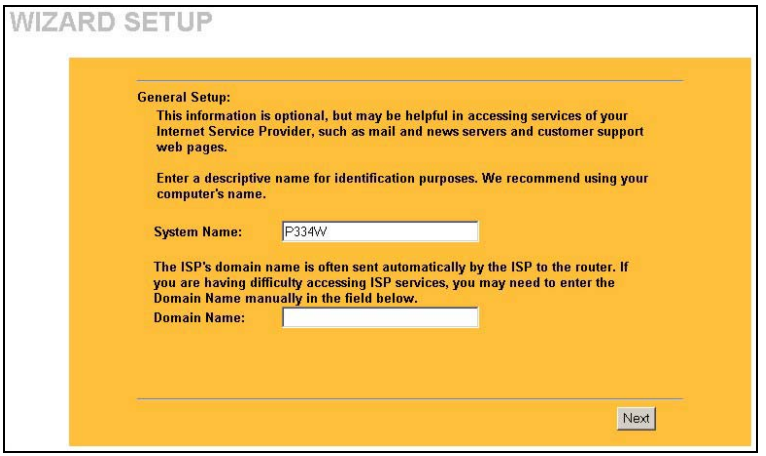
Step 4. You should now see the web configurator **MAIN MENU** screen.

- Click **WIZARD** to begin a series of screens to help you configure your Prestige for the first time.
- Click the **BM SETUP** to begin a series of screens to help you configure media bandwidth management on your Prestige.
- Click a link under **MAIN MENU** in the navigation panel to configure that Prestige feature.
- Click **MAINTENANCE** in the navigation panel to see Prestige performance statistics, upload firmware and back up, restore or upload a configuration file.
- Click **LOGOUT** when you have finished a Prestige management session. The Prestige automatically logs you out if it is left idle for five minutes; press **ENTER** to display the **Login** screen again and then log back in. This idle timeout timer is one of the many Prestige features that you may edit using the web configurator.



4.2 Internet Access Using the Wizard

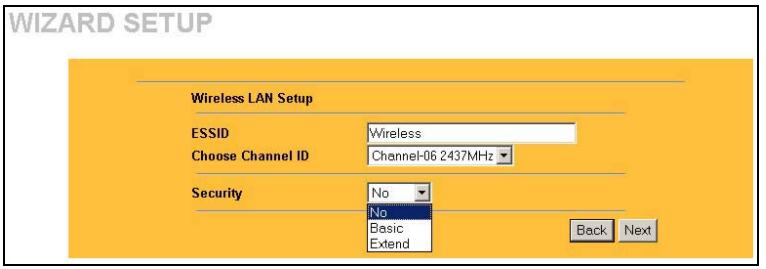
Step 1. Click **Wizard Setup** in the main menu to display the first wizard screen.



System Name is for identification purposes. Enter your computer's "Computer Name".

The **Domain Name** entry is what is propagated to the DHCP clients on the LAN. If you leave this blank, the domain name obtained by DHCP from the ISP is used. Click **Next** to continue.

Step 2. Use the second wizard screen to set up the wireless LAN.



ESSID is a unique name to identify the ZyAIR in the wireless LAN. Enter a descriptive name.

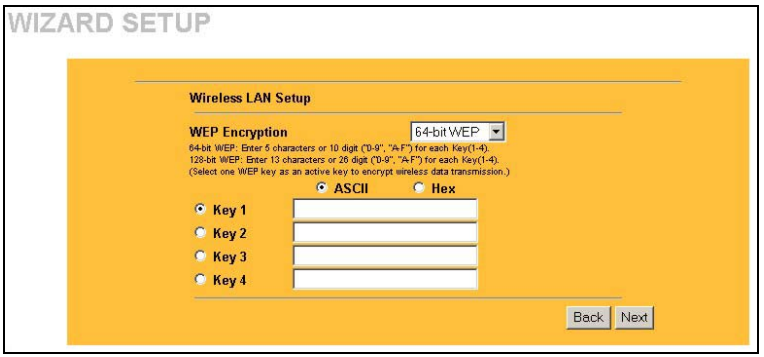
The range of radio frequencies used by IEEE 802.11b/g wireless devices is called a channel.
Choose a **Channel ID** from the drop-down list box.

The level of **Security** can be selected as none, basic or extended. Choose **No** security to have no wireless LAN security configured and proceed to the ISP Parameters for Internet Access screen (see step 5).
Choose **Basic** security if you want to configure **WEP Encryption** parameters (see step 3).
Choose **Extend** security to configure a **Pre-Shared Key** (see step 4).
The third screen varies depending on which security level you select.

Click **Next** to continue.

The wireless stations and ZyAIR must use the same ESSID, channel ID and WEP encryption key (if WEP is enabled) for wireless communication.

Step 3. If you choose **Basic**, you can setup WEP Encryption parameters.

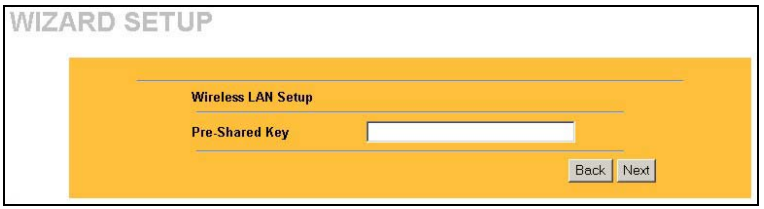


WEP (Wired Equivalent Privacy) encrypts data frames before transmitting over the wireless network.
Select either **64-bit** or **128-bit** from the **WEP Encryption** drop-down list box to activate WEP encryption.

Select **ASCII** or **HEX** WEP key input method and then follow the on-screen instructions to set up the WEP keys.

Click **Next** to proceed to the ISP Parameters for Internet Access screen.

Step 4. If you choose **Extend** security in the Wireless LAN Setup screen, you can set up a **Pre-Shared Key**.

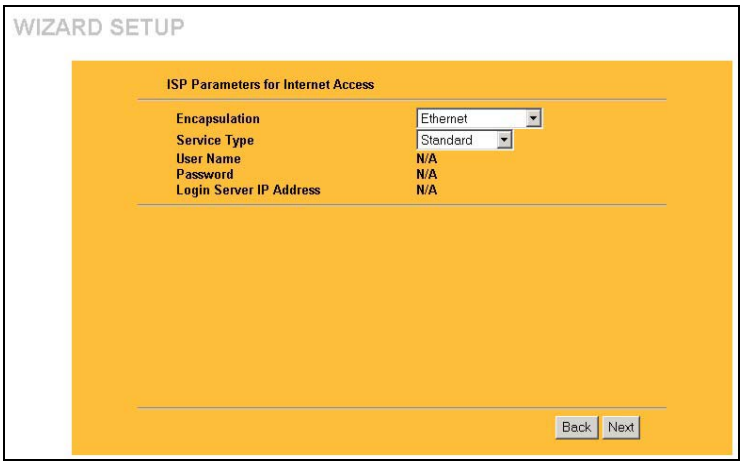


Pre-Shared Key

Type from 8 to 31 case-sensitive ASCII characters or from 16 to 62 hexadecimal ("0-9", "A-F") characters. You must precede a hexadecimal key with a "0x" (zero x), which is not counted as part of the 16 to 62-character range for the key.

Click **Next** to proceed to the ISP Parameters for Internet Access screen.

Step 5. This wizard screen has three variations depending on what encapsulation type you use. Use the information in *Internet Account Information* to fill in fields.



Choose **Ethernet** when the WAN port is used as a regular Ethernet. Choose from **Standard** or a RoadRunner version. You'll need **User Name**, **Password** and **Login Server IP Address** for some Roadrunner versions.

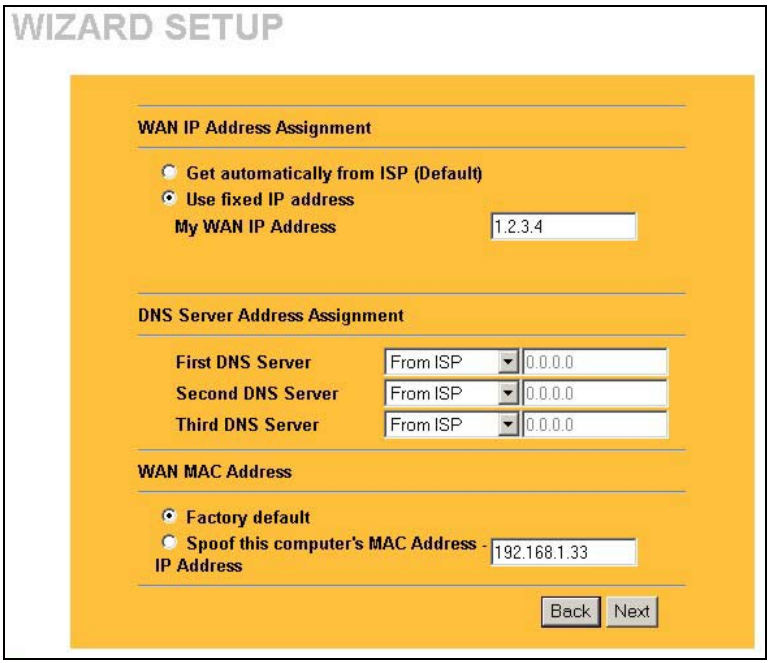
PPPoE or Point-to-Point Protocol over Ethernet (**PPP over Ethernet**) also functions as a dial-up connection. Therefore you'll also need a username and password and possibly the PPPoE service name.

Your ISP will give you all needed information.

Choose **PPTP** if your service provider uses a DSL terminator with PPTP login. You'll also need a user name, an associated password, the PPTP server IP address and possibly a connection ID/name.

Click **Next** to continue.

Step 6. This is the final wizard screen you need to configure. Fill in the fields and click **Next** to go to the last wizard screen.



WAN IP Address Assignment

Select **Get automatically from ISP** if your ISP did not assign you a fixed IP address. Select **Use fixed IP address** if the ISP assigned a fixed IP address and then enter your IP address.

DNS Server Address Assignment

Select **From ISP** if your ISP dynamically assigns DNS server information (and the Prestige's WAN IP address). The field to the right displays the (read-only) DNS server IP address that the ISP assigns. If you chose **From ISP**, but the Prestige has a fixed WAN IP address, **From ISP** changes to **None** after you click **Next**. If you chose **From ISP** for the second or third DNS server, but the ISP does not provide a second or third IP address, **From ISP** changes to **None** after you click **Next**.

Select **User-Defined** if you have the IP address of a DNS server. Enter the DNS server's IP address in the field to the right. If you chose **User-Defined**, but leave the IP address set to 0.0.0.0, **User-Defined** changes to **None** after you click **Next**. If you set a second choice to **User-Defined**, and enter the same IP address, the second **User-Defined** changes to **None** after you click **Next**.

Select **None** if you do not want to configure DNS servers. If you do not configure a system DNS server, you must use IP addresses when configuring VPN, DDNS and the timeserver.

WAN MAC Address

The WAN MAC address field allows users to configure the WAN port's MAC address by either using the factory default or cloning the MAC address from a computer on your LAN. Select **Factory Default** to use the factory assigned default MAC address. Alternatively, select **Spoof this Computer's MAC address - IP Address** and enter the IP address of the computer on the LAN whose MAC address you are cloning.

Click **Next** to continue.

Step 7. Click **Finish** to save and complete the wizard setup.

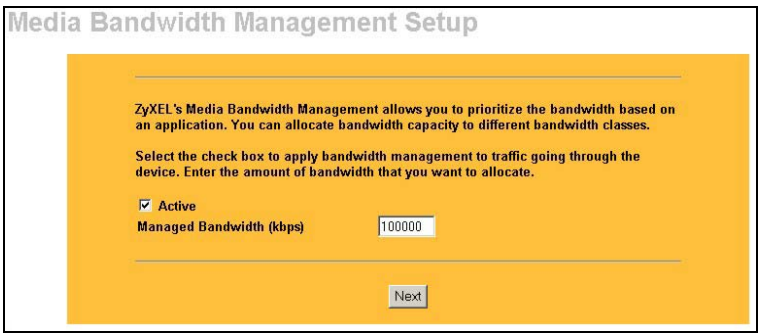
Note:

If you are currently using a Wireless PC card to access this router AND you made changes to the ESSID, then you will need to make the same changes to your Wireless PC card AFTER you click the **Finish** button.

Once the changes have been made to the Wireless PC card, you will be able to connect back to the router and continue the configuration process.

4.3 Using the Bandwidth Management Wizard

Step 1. Click **BM SETUP** in the main menu to display the first wizard screen.



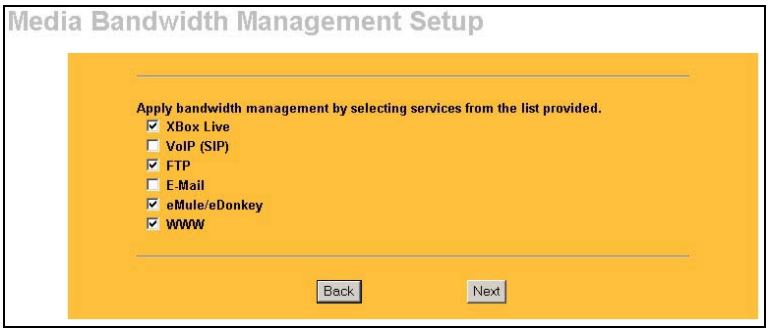
Select the **Active** check box to have the Prestige apply bandwidth management to traffic going out through the Prestige's WAN, LAN or WLAN port.

Enter the amount of **Managed Bandwidth** in kbps (2 to 100,000) that you want to allocate for traffic. 20 kbps to 20,000 kbps is recommended. The recommendation is to set this speed to be equal to or less than the speed of the broadband device connected to the WAN port.

For example, set the speed to 1000 Kbps (or less) if the broadband device connected to the WAN port has an upstream speed of 1000 Kbps.

Click **Next** to continue.

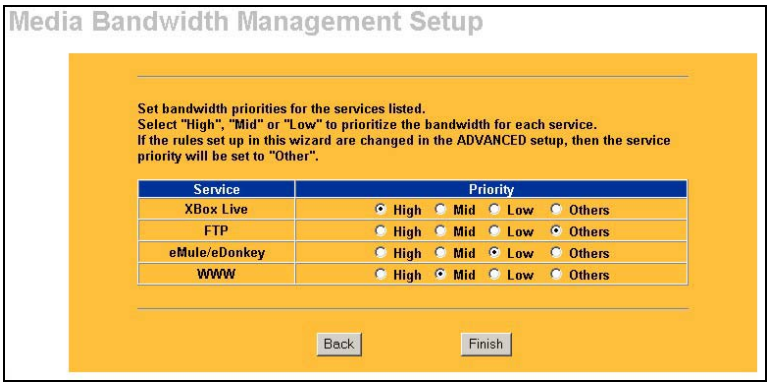
Step 2. Use the second wizard screen to select the services that you want to apply bandwidth management.



Apply bandwidth management by selecting services from the list provided.

Click **Next** to continue.

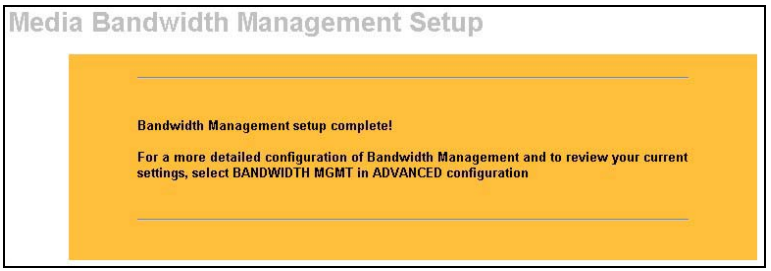
Step 3. The third wizard screen allows you to setup priorities for the services listed.



Select **High**, **Mid** or **Low** priority for each service to have your Prestige limit the bandwidth used by bandwidth-hungry applications (or individuals) by allocating the maximum bandwidth for WAN, LAN and WLAN traffic.
If the rules set up in this wizard are changed in the advanced setup, then the service priority will be set to **Other**.
The **Advanced Media Bandwidth Management** configuration screens allow you to edit set class configurations and edit these rules.

Click **Finish** to save and complete the wizard setup.

Step 4. This is the final wizard screen you need to configure. Fill in the fields and click **Next** to go to the last wizard screen.



Well done! You have finished configuration of Media Bandwidth Management using the Internet Access Wizard. You may now continue configuring your device.

Click any menu link in the navigation panel to access its configuration screen.

Click **MAINTENANCE** to see your system information, statistics, perform firmware and configuration file maintenance. Click **LOGOUT** to exit the web configurator. This is recommended for security reasons after you finish a management session. You need to log in again with your password after you log out.

4.4 Test Your Internet Connection

Launch your web browser and navigate to www.zyxel.com. You don't need a dial-up program such as Dial Up Networking. Internet access is just the beginning. Refer to the *User's Guide* for more detailed information on the complete range of Prestige features.

5 Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you turn on the Prestige.	Make sure that you have the correct power adapter connected to the Prestige and plugged in to an appropriate power source. Check all cable connections. If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.
Cannot access the Prestige from the LAN.	Check the cable connection between the Prestige and your computer or hub. Refer to the *Rear Panel* section for details. Ping the Prestige from a LAN computer. Make sure your computer Ethernet card is installed and functioning properly.
Cannot ping any computer on the LAN.	If the 10/100M LAN LEDs are off, check the cable connections between the Prestige and your LAN computers. Verify that the IP address and subnet mask of the Prestige and the LAN computers are in the same IP address range.
Cannot get a WAN IP address from the ISP.	The WAN IP is provided after the ISP verifies the MAC address, host name or user ID. Find out the verification method used by your ISP and configure the corresponding fields.
	If the ISP checks the WAN MAC address, you should clone the MAC address from a LAN computer. Click **WAN** and then the **MAC** tab, select **Spoof this Computer's MAC address - IP Address** and enter the IP address of the computer on the LAN whose MAC address you are cloning.
	If the ISP checks the host name, enter your computer's name (refer to the *Wizard Setup* section in the *User's Guide*) in the **System Name** field in the first screen of the **WIZARD**.
	If the ISP checks the user ID, click **WAN** and then the **ISP** tab. Check your service type, user name, and password.
Cannot access the Internet.	Check the Prestige's connection to the cable/DSL device. Check whether your cable/DSL device requires a crossover or straight-through cable.
	Click **WAN** to verify your settings.