

Using the Configuration Menu (continued)

Advanced > Performance > 802.11g (continued)

CTS Mode-

CTS (Clear To Send) is a function used to minimize collisions among wireless devices on a wireless local area network (LAN). CTS will make sure the wireless network is clear before a wireless client attempts to send wireless data. Enabling CTS will add overhead and may lower wireless throughput.

None- CTS is typically used in a pure 802.11g environment. If CTS is set to "None" in a mixed mode environment populated by 802.11b clients, wireless collisions may occur frequently.

Always- CTS will always be used to make sure the wireless LAN is clear before sending data.

Auto- CTS will monitor the wireless network and automatically decide whether to implement CTS based on the amount of traffic and collisions that occurs on the wireless network.

802.11g only mode- Select this mode to restrict your network to only those devices that employ the 802.11g standard. Enabling this mode will ensure that you maintain the highest connectivity rate, unhampered by any connection to an 802.11b device.

Administrator Login Name-

user (lower case) is the **default** login name for the user ac-

User Login Name-

admin (lower case) is the **default** login name for the admin account. The admin account has read/write access to the router.

Admin Password-

The **default** setting is blank - no password. To change the password, enter and confirm the new password.

User Password-

The **default** setting is blank - no password. To change the password, enter and confirm the new password.

Tools > Admin

The screenshot shows the configuration page for the D-Link DI-774 router. The page title is "D-Link Building Networks for People" and "AirXpert AG 802.11g Tri-Mode Dualband Wireless Router". The navigation tabs are Home, Advanced, Tools, Status, and Help. The "Tools" tab is selected. The page content is titled "Administrator Settings" and "Administrators can change their login password." There are two sections for password changes: "Administrator (The Login Name is 'admin')" and "User (The Login name is 'user')". Each section has a "New Password" field and a "Confirm Password" field. Below these is a "Remote Management" section with radio buttons for "Enabled" and "Disabled", and fields for "IP Address" and "Port" (set to 8080). At the bottom right are "Apply", "Cancel", and "Help" buttons.

Using the Configuration Menu (continued)

Tools> Admin (continued)

Remote Management

Remote Management allows the DI-774 to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform “Administrator” tasks. This feature enables you to perform “Administrator” tasks from the remote (Internet) host.

IP Address: Internet IP Address of the computer that has access to the Router. It is not recommended that you set the IP Address to * (star), because this allows any Internet IP Address to access the Router, which could result in a loss of security for your network. If you elect to enable **Remote Management**, make sure to enter the IP Address of the remote computer allowed to configure the DI-774.

Port: For security purposes, select a separate port number used to access the Router. (The following is an example only; you may use a different port number.)

Example: <http://x.x.x.x:8080> where x.x.x.x is the WAN IP Address of the Router and 8080 is the port used for the Web-Management interface.

Tools > Time

The screenshot shows the D-Link DI-774 web interface. The top navigation bar includes 'Home', 'Advanced', 'Tools' (selected), 'Status', and 'Help'. The main content area is titled 'Time' and contains the following settings:

- Local Time:** Apr/01/2002 00:17:53
- Time Zone:** (GMT-08:00) Pacific Time (US & Canada)
- Default NTP Server:** (optional)
- Set the Time:** Year: 2002, Month: Apr, Day: 01, Hour: 00, Minute: 17, Second: 53. A 'Set Time' button is present.
- Daylight Saving:** Disabled (radio button selected). Start: Jan 01, End: Jan 01.

At the bottom right of the configuration area are three buttons: 'Apply' (green checkmark), 'Cancel' (orange X), and 'Help' (red plus).

Time settings-

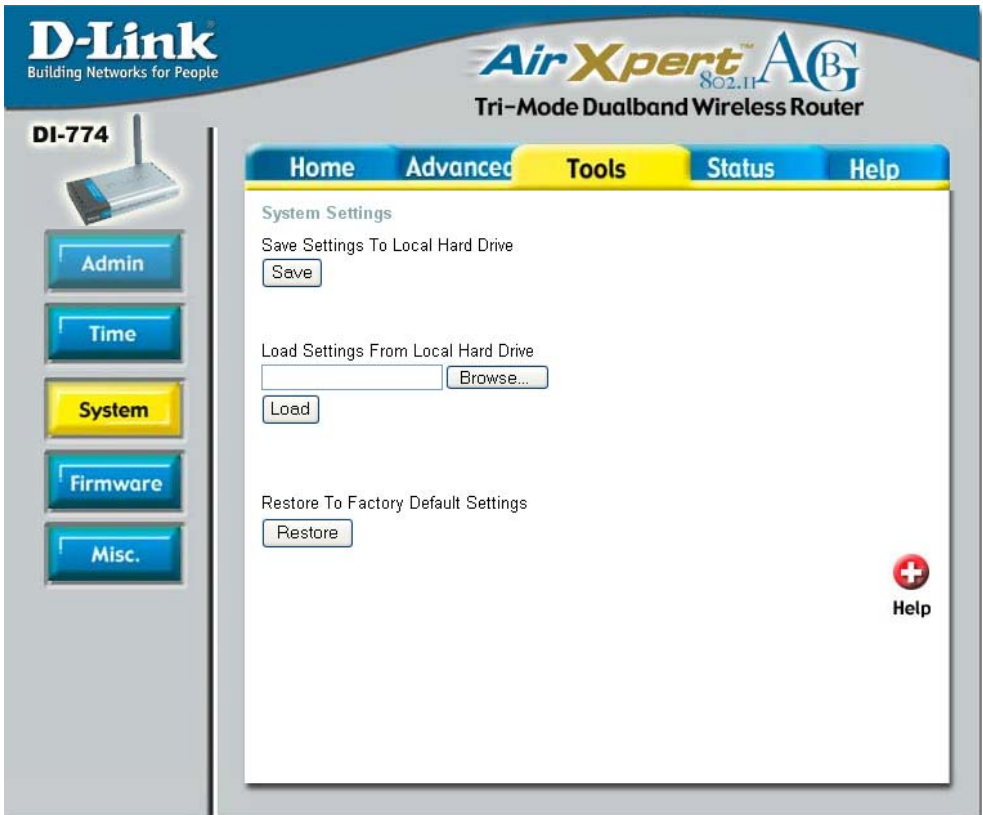
In this window you can choose the **time zone**; **set the time**; and **enable** or **disable** *Daylight Savings Time*.

Default NTP Server-

NTP is short for *Network Time Protocol*. NTP synchronizes computer clock times in a network of computers. This field is optional.

Using the Configuration Menu (continued)

Tools > System



System Settings

Save Settings to Local Hard Drive-

Click **Save** to save the current settings to the local Hard Drive

Load Settings from Local Hard Drive-

Click **Browse** to find the settings, then click **Load**

Restore to Factory Default Settings-

Click **Restore** to restore the factory default settings

Using the Configuration Menu (continued)

Tools > Firmware

The screenshot shows the web interface of a D-Link DI-774 router. The top navigation bar includes 'Home', 'Advanced', 'Tools' (highlighted), 'Status', and 'Help'. The left sidebar contains buttons for 'Admin', 'Time', 'System', 'Firmware' (highlighted), and 'Misc.'. The main content area is titled 'Firmware Upgrade' and contains the following text: 'There may be new firmware for your DI-774 to improve functionality and performance. [Click here to check for an upgrade on our support site.](#) To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Apply button below to start the firmware upgrade.' Below this text, it displays 'Current Firmware Version: 0.01' and 'Firmware Date: Tue, 18 Mar 2003'. There is an empty text input field followed by a 'Browse...' button. At the bottom right, there are three buttons: 'Apply' (with a green checkmark icon), 'Cancel' (with a red X icon), and 'Help' (with a red plus icon).

Firmware Upgrade-

Click on the link in this screen to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

Browse-

After you have downloaded the new firmware, click **Browse** in this window to locate the firmware update on your hard drive. Click **Apply** to complete the firmware upgrade.

Using the Configuration Menu (continued)

Tools > Misc

The screenshot shows the configuration page for a D-Link DI-774 router. The page is titled "Tools > Misc" and has a navigation bar with "Home", "Advanced", "Tools", "Status", and "Help". The "Tools" tab is selected. The page contains several sections:

- Ping Test:** A section with a description: "Ping Test is used to send 'Ping' packets to test if a computer is on the Internet." It includes a text input field for "Host Name or IP address" and a "Ping" button.
- Restart Device:** A section with the description: "Reboots the DI-774." It includes a "Reboot" button.
- Block WAN Ping:** A section with the description: "When you 'Block WAN Ping', you are causing the public WAN IP address on the DI-774 to not respond to ping commands. Pinging public WAN IP addresses is a common method used by hackers to test whether your WAN IP address is valid." It includes a radio button for "Enabled" (selected) and a radio button for "Disabled".
- UPNP Settings:** A section with a radio button for "Enabled" (selected) and a radio button for "Disabled".
- Gaming Mode:** A section with a radio button for "Enabled" (selected) and a radio button for "Disabled".
- VPN Pass-Through:** A section with the description: "Allows VPN connections to work through the DI-774." It includes radio buttons for "PPTP" (selected) and "IPSec" (selected), and radio buttons for "Enabled" (selected) and "Disabled".
- Dynamic DNS:** A section with a radio button for "Enabled" (selected) and a radio button for "Disabled". It includes text input fields for "Server Address", "Host Name", "Username", and "Password".

At the bottom right of the page, there are three icons: a green checkmark, a red X, and a red plus sign, with the labels "Apply", "Cancel", and "Help" respectively.

DDNS-
Dynamic Domain Name System is a method to keep domain names linked to changing IP Addresses. In this way, changing IP Addresses (e.g., via DHCP) will not interfere with network connectivity.

Ping Test-

The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to Ping, and click **Ping**

Restart Device-

Click **Reboot** to restart the DI-774

Block WAN Ping-

If you choose to block WAN Ping, the WAN IP Address of the DI-774 will not respond to pings. Blocking the Ping may provide some extra security from hackers.

Discard Ping from WAN side-

Click **Enabled** to block the WAN ping

VPN Pass Through-

The DI-774 supports VPN (Virtual Private Network) pass-through for both PPTP (Point-to-Point Tunneling Protocol) and IPSec (IP Security). Once VPN pass-through is enabled, there is no need to open up virtual services. Multiple VPN connections can be made through the DI-774. This is useful when you have many VPN clients on the LAN network.

PPTP- select **Enabled** or **Disabled**

IPSec- select **Enabled** or **Disabled**

DDNS-

Fill in the required fields to use the Dynamic Domain Name Service (DDNS) feature.

Using the Configuration Menu (continued)

Status > Device Info

The screenshot shows the 'Status > Device Info' page for a D-Link DI-774 router. The interface includes a navigation menu with 'Home', 'Advanced', 'Tools', 'Status', and 'Help'. The 'Status' tab is selected. The page displays the following information:

- Device Information:** Firmware Version: 0.01, Tue, 18 Mar 2003
- LAN:** MAC Address: 00-11-22-33-44-55, IP Address: 192.168.0.1, Subnet Mask: 255.255.255.0, DHCP Server: Enabled
- WAN:** MAC Address: 00-11-22-33-44-55, Connection: DHCP Client (Disconnected), IP Address: 0.0.0.0, Subnet Mask: 0.0.0.0, Default Gateway: 0.0.0.0, DNS: (empty)
- Wireless 802.11g:** MAC Address: 00-03-2F-12-34-56, SSID: default, Channel: 1, WEP: Disabled
- Wireless 802.11a:** MAC Address: 00-80-C8-2A-24-F1, SSID: default, Channel: 52, Turbo Mode: Disabled, WEP: Disabled

Device Information- This screen displays information about the DI-774

Status > Log

The screenshot shows the 'Status > Log' page for a D-Link DI-774 router. The interface includes a navigation menu with 'Home', 'Advanced', 'Tools', 'Status', and 'Help'. The 'Status' tab is selected. The page displays the following information:

- View Log:** View Log displays the activities occurring on the DI-774. Click on Log Settings for advance features.
- Log Settings:** First Page, Last Page, Previous, Next, Clear, Log Settings, Help
- Log Entries:**

Time	Message	Source/Destination	Note
Apr/01/2002 00:24:02	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:24:01	DHCP Discover		
Apr/01/2002 00:24:00	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:59	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:54	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:52	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:52	DHCP Discover		
Apr/01/2002 00:23:50	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:48	Wireless PC connected		00-40-05-B7-56-8F
Apr/01/2002 00:23:48	DHCP Discover		

View Log-

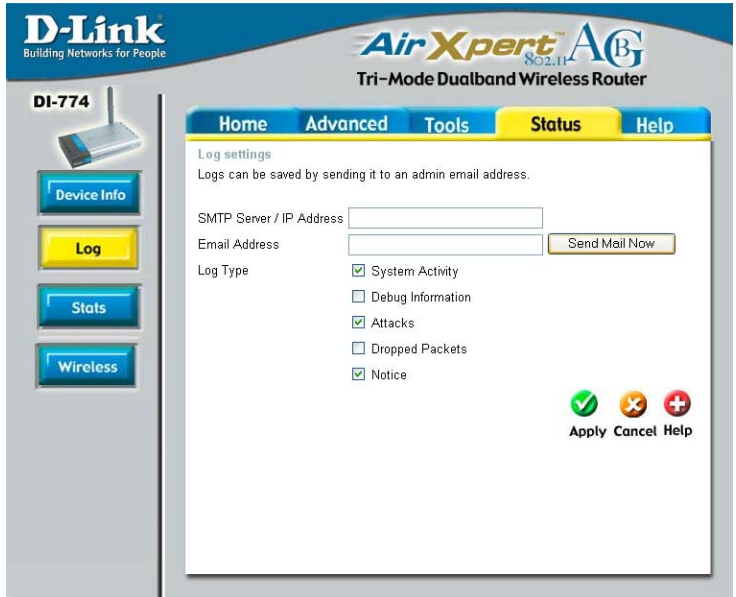
This screen displays the activity on the DI-774

Log Settings-

For advanced features, click on **Log Settings**

Using the Configuration Menu (continued)

Status > Log > Log Settings



SMTP Server/ IP Address-

Enter the proper SMTP Server information or the IP Address

Email Address-

Enter the email address of the recipient who will receive the email logs.

Log Type-

The administrator can specify which surveillance they want to log. Check mark the box for specific activities.

Using the Configuration Menu (continued)

Status > Stats

The screenshot shows the configuration interface for a D-Link DI-774 router. The page title is "Air Xpert 802.11n AG Tri-Mode Dualband Wireless Router". The navigation tabs are "Home", "Advanced", "Tools", "Status", and "Help", with "Status" selected. On the left sidebar, there are buttons for "Device Info", "Log", "Stats" (highlighted in yellow), and "Wireless". The main content area is titled "Traffic Statistics" and includes a sub-header "Traffic Statistics display Receive and Transmit packets passing through the DI-774." Below this are "Refresh" and "Reset" buttons. A table displays traffic statistics for WAN, LAN, WIRELESS 11g, and WIRELESS 11a, with columns for "Receive" and "Transmit". A "Help" icon is visible in the top right corner of the content area.

	Receive	Transmit
WAN	0 Packets	114 Packets
LAN	4769 Packets	5973 Packets
WIRELESS 11g	94 Packets	1019 Packets
WIRELESS 11a	0 Packets	1559 Packets

Traffic Statistics-

Displays the receive and transmit packets that are passing through the DI-774. Click on **Refresh**, for the most recent information. Click **Reset** to reset the counters back to zero.

Status > Wireless

The screenshot shows the configuration interface for a D-Link DI-774 router, specifically the "Status > Wireless" section. The page title is "Air Xpert 802.11n AG Tri-Mode Dualband Wireless Router". The navigation tabs are "Home", "Advanced", "Tools", "Status", and "Help", with "Status" selected. On the left sidebar, there are buttons for "Device Info", "Log", "Stats", and "Wireless" (highlighted in yellow). The main content area is titled "Connected Wireless Client List" and includes a sub-header "The Wireless Client table below displays Wireless clients Connected to the AP (Access Point)." Below this is a table with columns for "Connected Time", "MAC Address", and "Mode". A "Help" icon is visible in the top right corner of the content area.

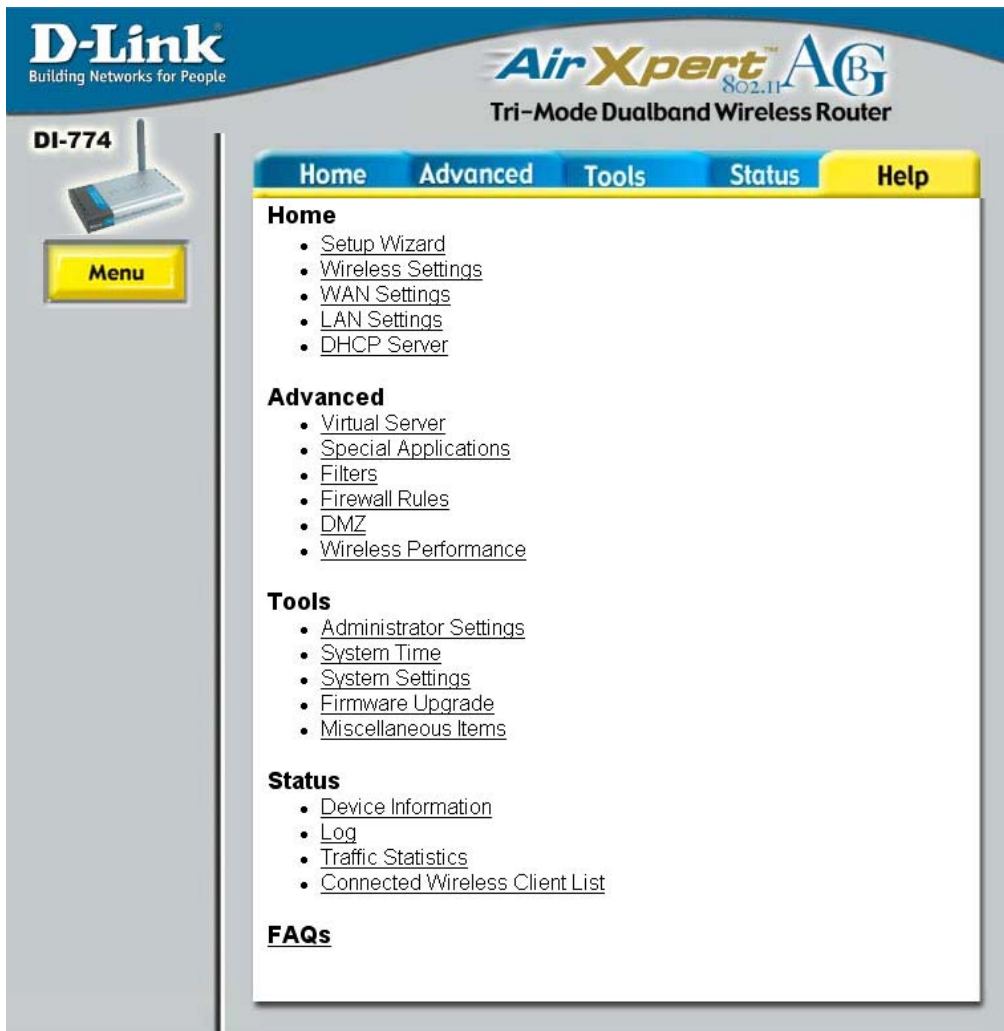
Connected Time	MAC Address	Mode
Apr/01/2002 00:25:24	00-40-05-B7-56-8F	2.4 GHz
Apr/01/2002 00:23:06	00-90-4B-B0-FD-84	2.4 GHz

Connected Wireless Client List-

Displays the wireless clients that are connected to the Access Point function of the DI-774.

Using the Configuration Menu (continued)

Help



D-Link
Building Networks for People

AirXpert™ AG
802.11
Tri-Mode Dualband Wireless Router

DI-774

Menu

Home **Advanced** **Tools** **Status** **Help**

Home

- [Setup Wizard](#)
- [Wireless Settings](#)
- [WAN Settings](#)
- [LAN Settings](#)
- [DHCP Server](#)

Advanced

- [Virtual Server](#)
- [Special Applications](#)
- [Filters](#)
- [Firewall Rules](#)
- [DMZ](#)
- [Wireless Performance](#)

Tools

- [Administrator Settings](#)
- [System Time](#)
- [System Settings](#)
- [Firmware Upgrade](#)
- [Miscellaneous Items](#)

Status

- [Device Information](#)
- [Log](#)
- [Traffic Statistics](#)
- [Connected Wireless Client List](#)

FAQs

Help-

Displays the complete **Help** menu. For help at anytime, click the **Help** tab in the Configuration menu.

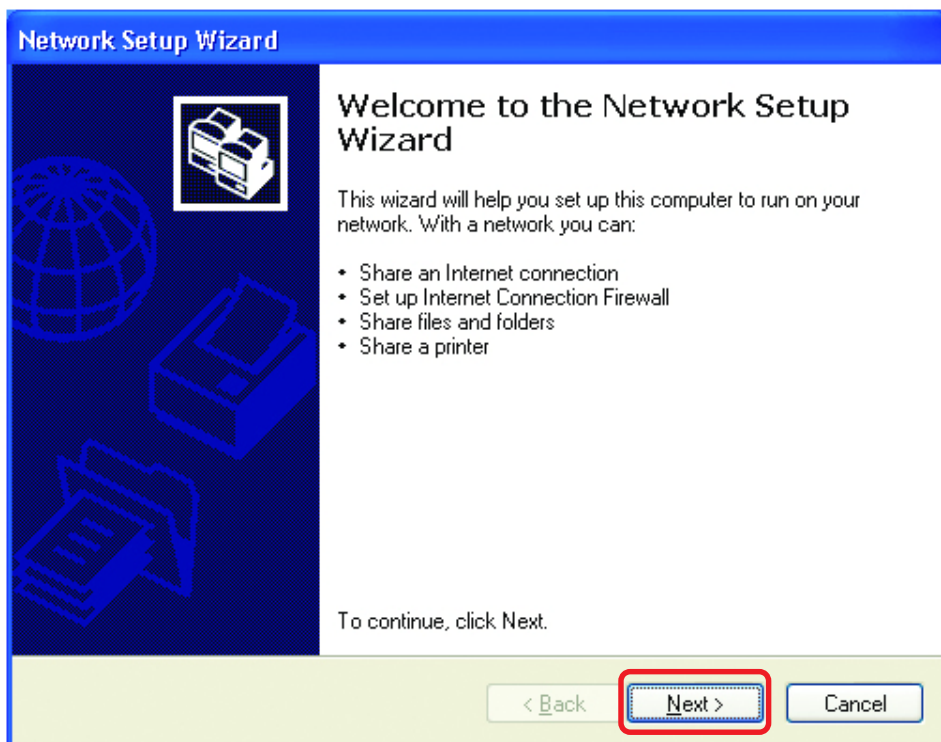
Networking Basics

Using the Network Setup Wizard in Windows XP

In this section you will learn how to establish a network at home or work, using **Microsoft Windows XP**.

Note: Please refer to websites such as <http://www.homenethelp.com> and <http://www.microsoft.com/windows2000> for information about networking computers using Windows 2000, ME or 98.

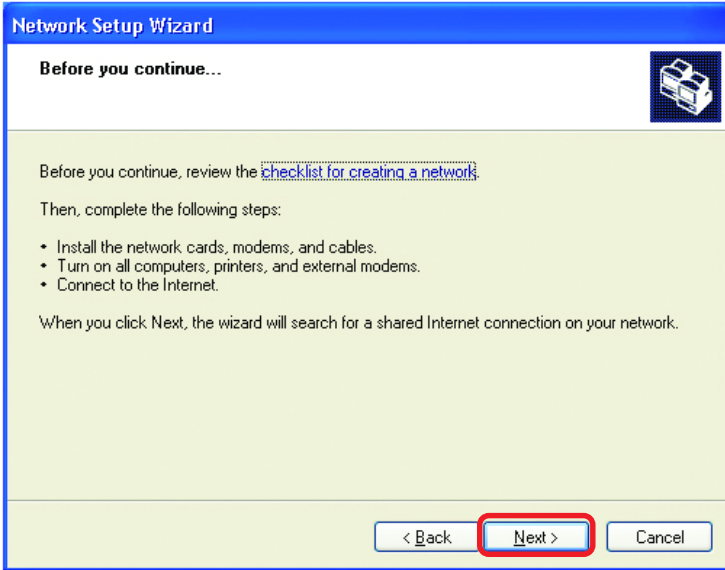
Go to **Start>Control Panel>Network Connections**
Select **Set up a home or small office network**



When this screen appears, **Click Next**.

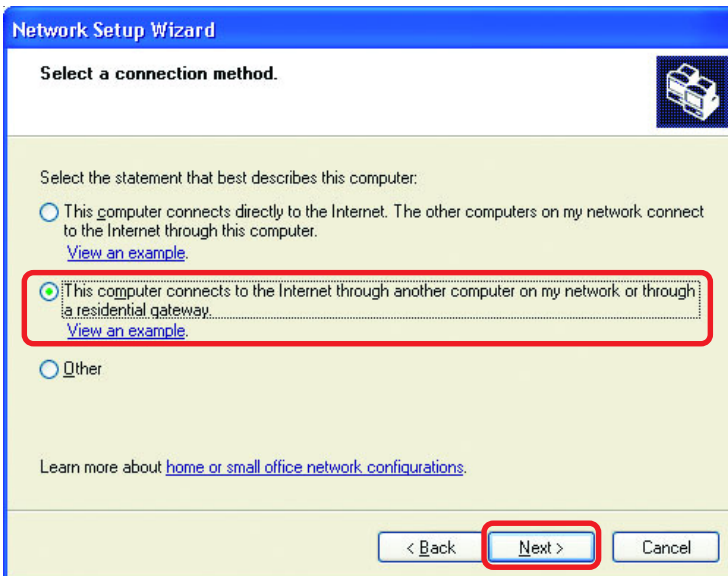
Networking Basics

Please follow all the instructions in this window:



Click **Next**

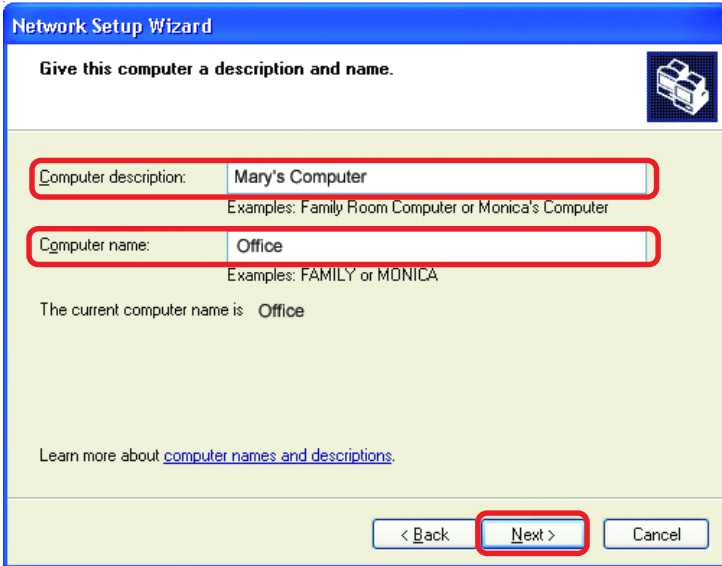
In the following window, select the best description of your computer. If your computer connects to the internet through a gateway/router, select the second option as shown.



Click **Next**

Networking Basics

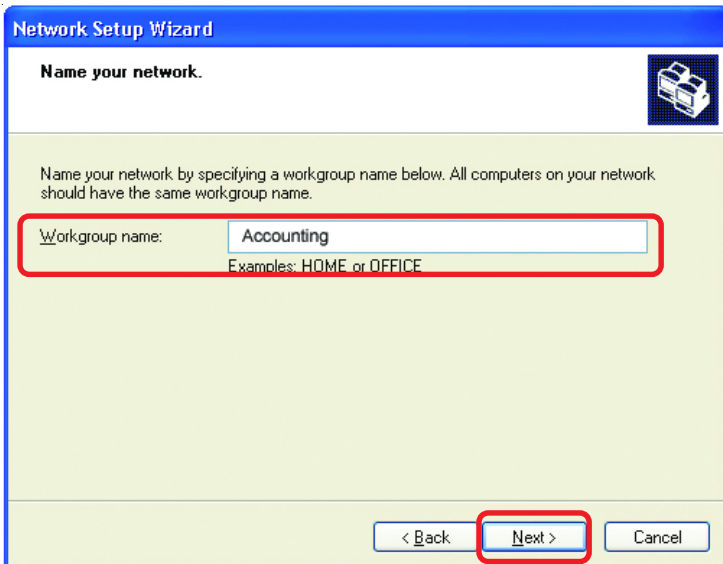
Enter a **Computer description** and a **Computer name** (optional.)



The screenshot shows the 'Network Setup Wizard' dialog box with the title 'Give this computer a description and name.' The dialog has a blue header and a light green body. At the top right is a printer icon. Below the title is a text input field for 'Computer description:' containing 'Mary's Computer', with examples 'Family Room Computer or Monica's Computer' below it. Below that is a text input field for 'Computer name:' containing 'Office', with examples 'FAMILY or MONICA' below it. A line of text states 'The current computer name is Office'. At the bottom left is a link: 'Learn more about [computer names and descriptions](#).' At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

Click **Next**

Enter a **Workgroup** name. All computers on your network should have the same **Workgroup** name.

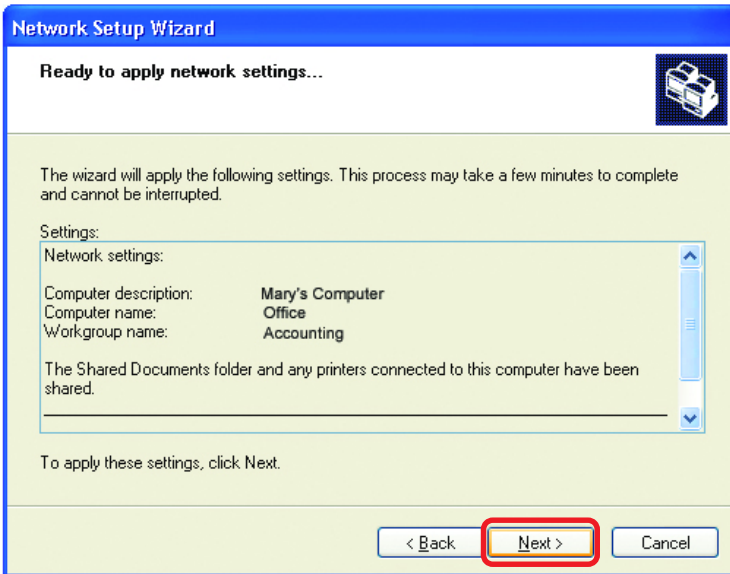


The screenshot shows the 'Network Setup Wizard' dialog box with the title 'Name your network.' The dialog has a blue header and a light green body. At the top right is a printer icon. Below the title is a text input field for 'Workgroup name:' containing 'Accounting', with examples 'HOME or OFFICE' below it. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

Click **Next**

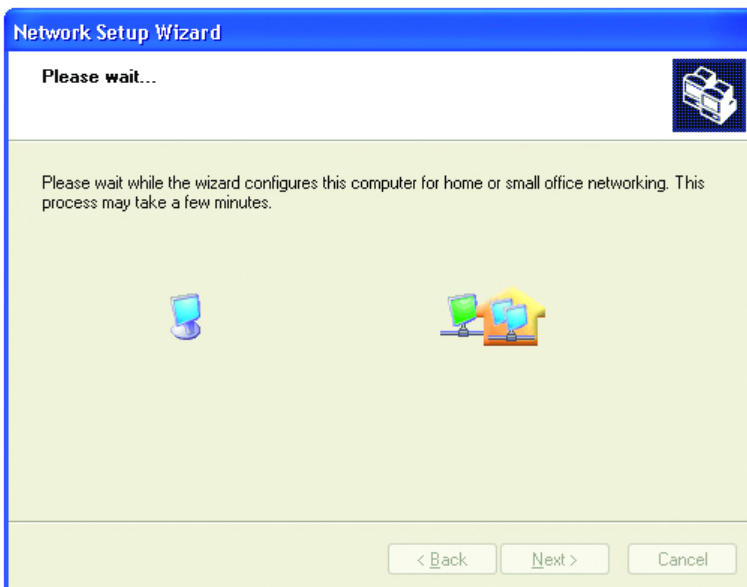
Networking Basics

Please wait while the **Network Setup Wizard** applies the changes.



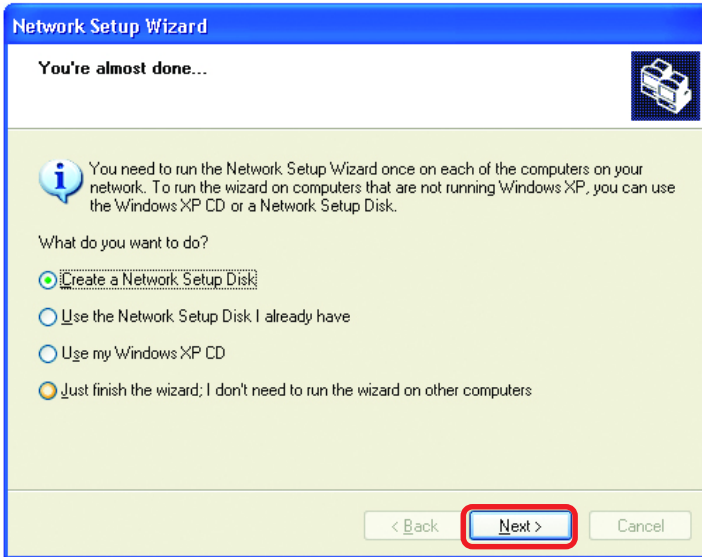
When the changes are complete, click **Next**.

Please wait while the **Network Setup Wizard** configures the computer. This may take a few minutes.



Networking Basics

In the window below, select the option that fits your needs. In this example, **Create a Network Setup Disk** has been selected. You will run this disk on each of the computers on your network. Click **Next**.



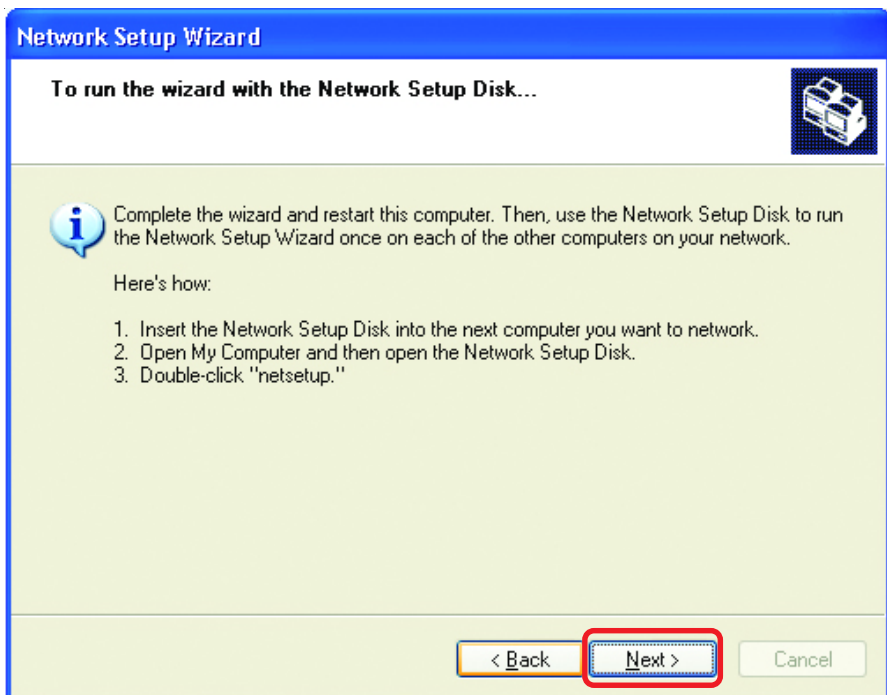
Insert a disk into the Floppy Disk drive, in this case drive A.



Networking Basics

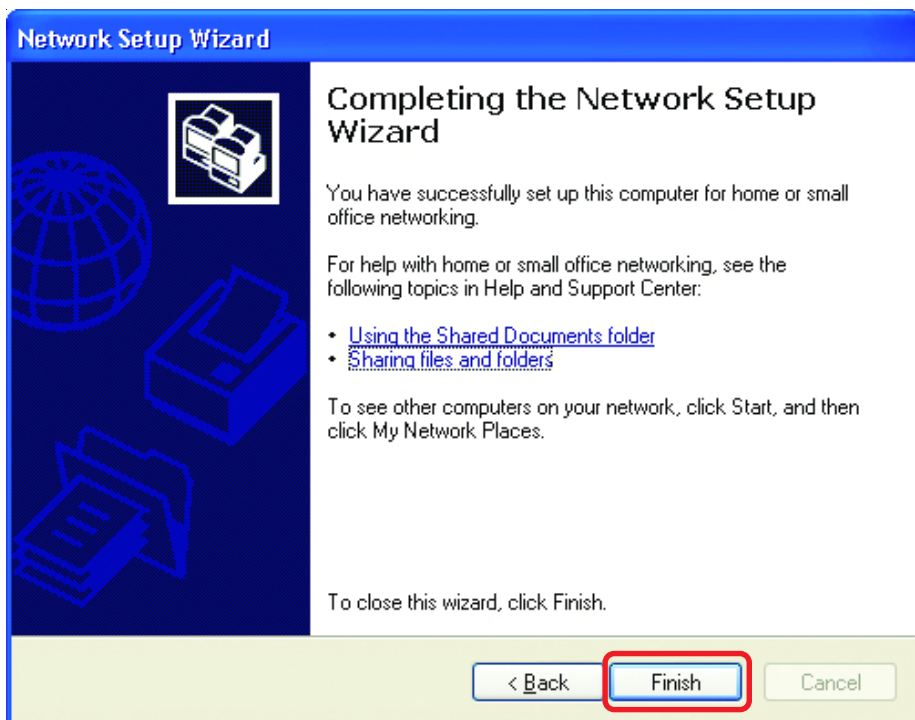


Please read the information under **Here's how** in the screen below. After you complete the **Network Setup Wizard** you will use the **Network Setup Disk** to run the **Network Setup Wizard** once on each of the computers on your network. To continue click **Next**.

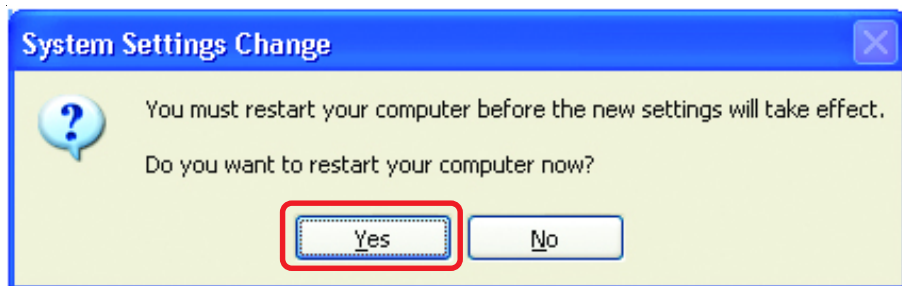


Networking Basics

Please read the information on this screen, then click **Finish** to complete the **Network Setup Wizard**.



The new settings will take effect when you restart the computer. Click **Yes** to restart the computer.



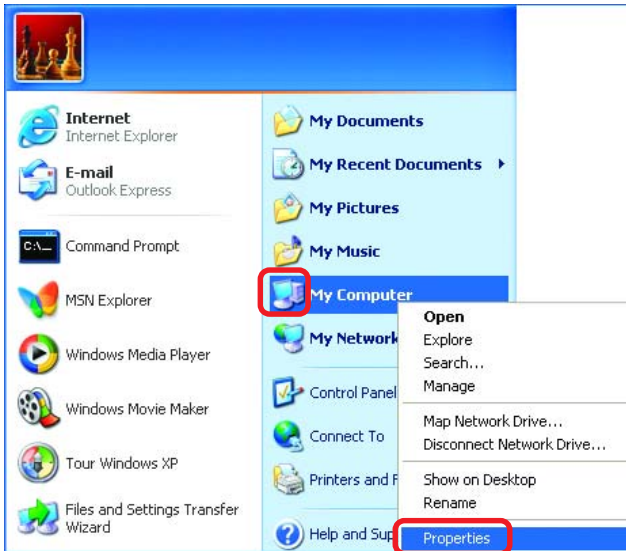
You have completed configuring this computer. Next, you will need to run the **Network Setup Disk** on all the other computers on your network. After running the **Network Setup Disk** on all your computers, your new wireless network will be ready to use.

Networking Basics

Naming your Computer

To name your computer, please follow these directions: In **Windows XP**:

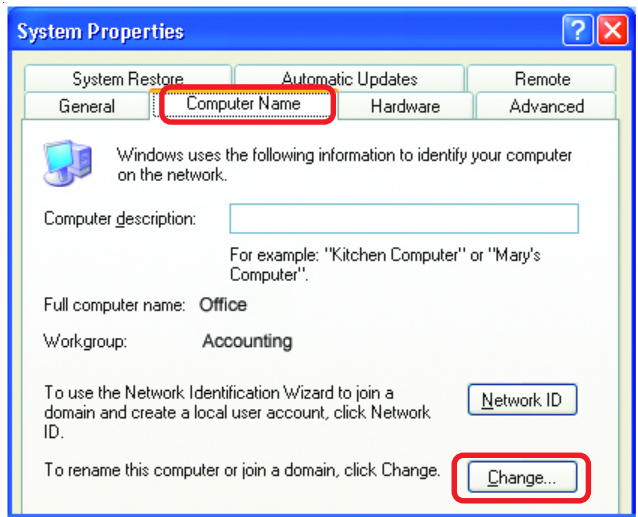
- Click **Start** (in the lower left corner of the screen)
- **Right-click** on **My Computer**
- Select **Properties** and click



- Select the **Computer Name Tab** in the System Properties window.

- You may enter a **Computer Description** if you wish; this field is optional.

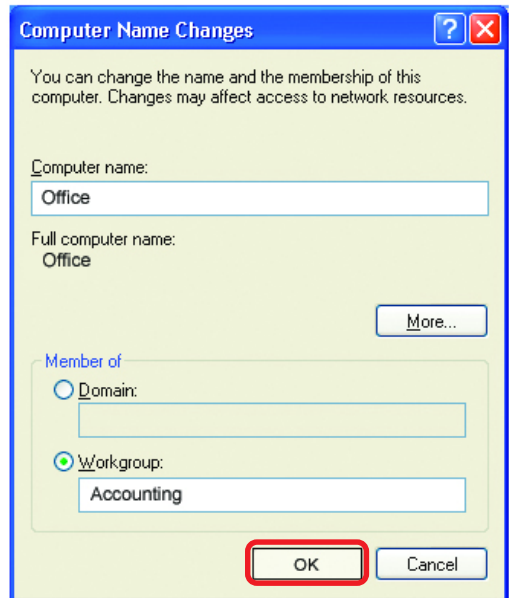
- To rename the computer and join a domain, Click **Change**.



Networking Basics

Naming your Computer

- In this window, enter the **Computer name**
- Select **Workgroup** and enter the name of the **Workgroup**
- All computers on your network must have the same **Workgroup** name.
- Click **OK**



Checking the IP Address in Windows XP

The wireless adapter-equipped computers in your network must be in the same IP Address range (see Getting Started in this manual for a definition of IP Address Range.) To check on the IP Address of the adapter, please do the following:

- Right-click on the **Local Area Connection icon** in the task bar
- Click on **Status**



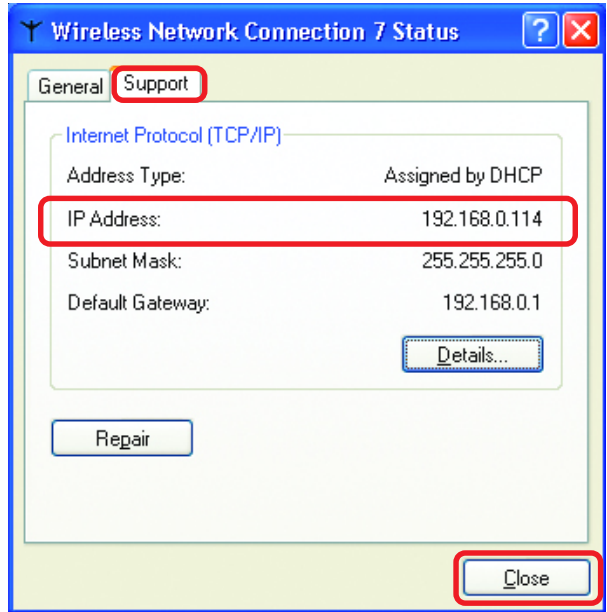
Networking Basics

Checking the IP Address in Windows XP

This window will appear.

- Click the **Support** tab

- Click **Close**



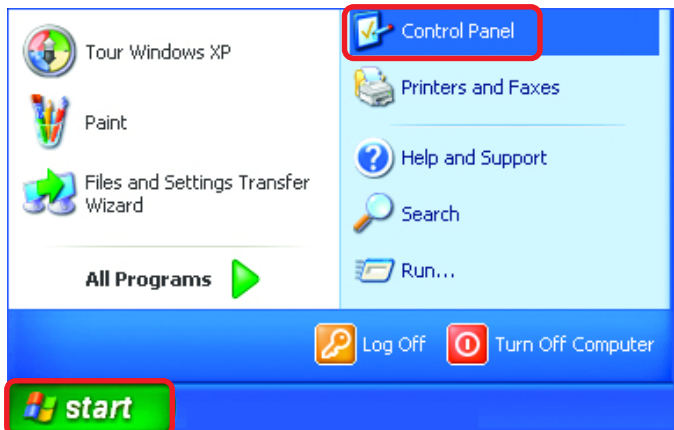
Assigning a Static IP Address in Windows XP/2000

Note: Residential Gateways/Broadband Routers will automatically assign IP Addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable Gateway/Router you will not need to assign Static IP Addresses.

If you are not using a DHCP capable Gateway/Router, or you need to assign a Static IP Address, please follow these instructions:

- Go to **Start**

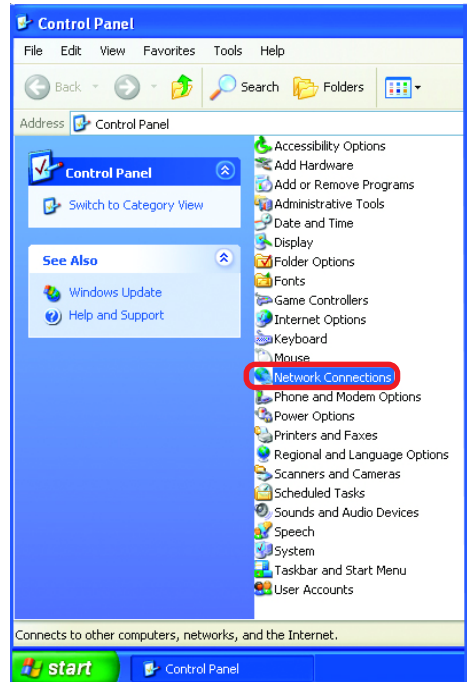
- Double-click on **Control Panel**



Networking Basics

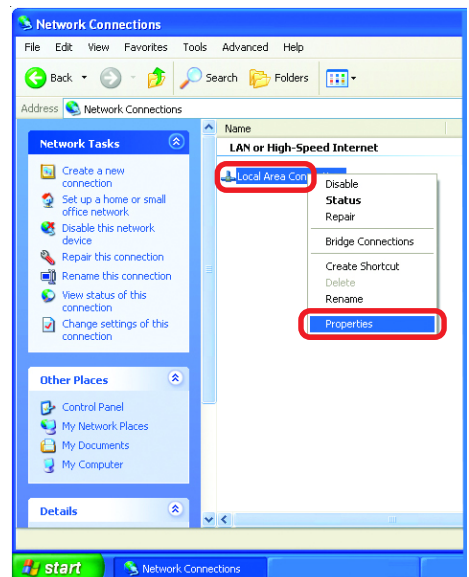
Assigning a Static IP Address in Windows XP/2000

- Double-click on **Network Connections**



- Right-click on **Local Area Connections**

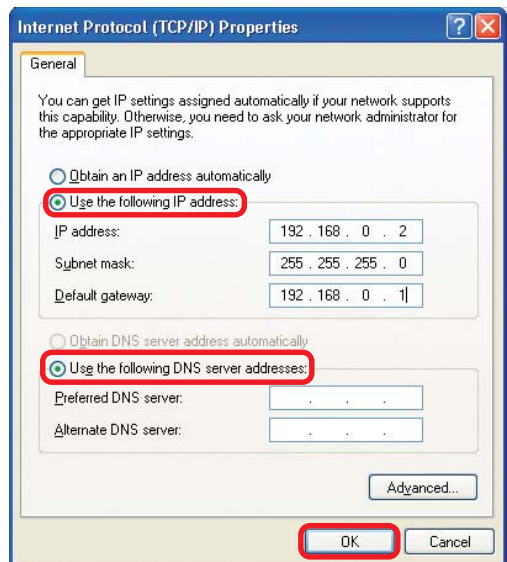
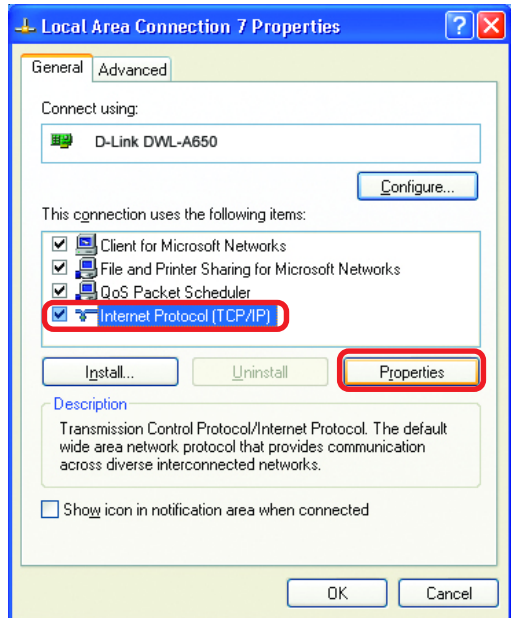
- Double-click on **Properties**



Networking Basics

Assigning a Static IP Address in Windows XP/2000

- Click on **Internet Protocol (TCP/IP)**
- Click **Properties**
- Input your **IP address and subnet mask**. (The IP Addresses on your network must be within the same range. For example, if one computer has an IP Address of 192.168.0.2, the other computers should have IP Addresses that are sequential, like 192.168.0.3 and 192.168.0.4. The subnet mask must be the same for all the computers on the network.)
- Enter the **IP Address of the Default Gateway** (in this case it is **192.168.0.1** for the **DI-774**)
- Input your **DNS server address**.



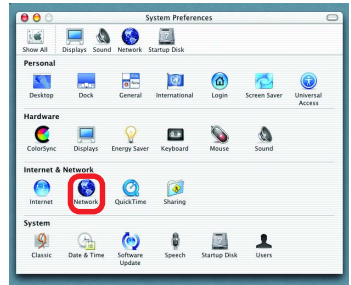
The DNS server address will be supplied by your ISP (Internet Service Provider). If the DNS Server address is not available from your ISP, you may input 192.168.0.1 in this field.

- Click **OK**

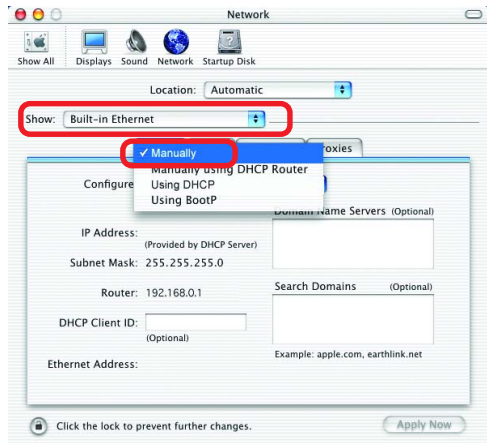
Networking Basics

Assigning a Static IP Address with Macintosh OS X

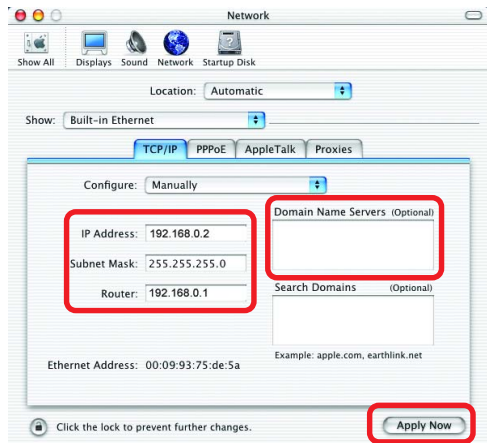
- Go to the **Apple Menu** and select **System Preferences**
- Click on **Network**



- Select **Built-in Ethernet** in the **Show** pull-down menu
- Select **Manually** in the **Configure** pull-down menu



- Input the **Static IP Address**, the **Subnet Mask** and the **Router IP Address** in the appropriate fields
- Input the **Domain Name Server** address. Your ISP (Internet Service Provider) will provide the IP address of the DNS Server. If the DNS Server address is not available from your ISP, you may input 192.168.0.1 in this field.

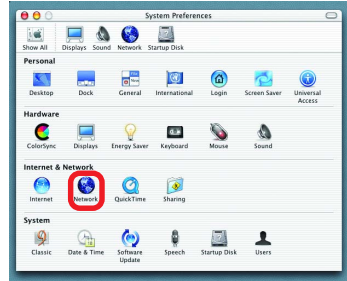


- Click **Apply Now**

Networking Basics

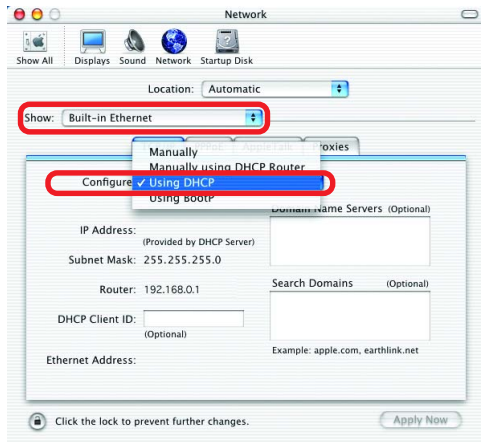
Selecting a Dynamic IP Address with Macintosh OS X

- Go to the **Apple Menu** and select **System Preferences**



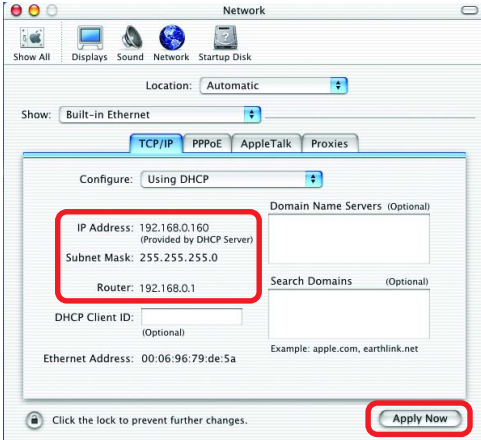
- Click on **Network**

- Select **Built-in Ethernet** in the **Show** pull-down menu



- Select **Using DHCP** in the **Configure** pull-down menu

- Click **Apply Now**

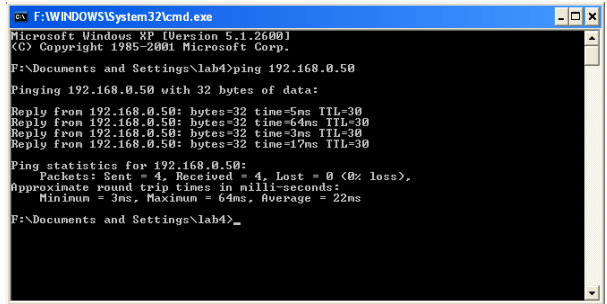


- The **IP Address**, **Subnet mask**, and the **Router's IP Address** will appear in a few seconds

Networking Basics

Checking the Wireless Connection by Pinging in Windows XP and 2000

- Go to **Start > Run >** type **cmd**. A window similar to this one will appear. Type **ping xxx.xxx.xxx.xxx**, where **xxx** is the **IP Address** of the Wireless Router or Access Point. A good wireless connection will show four replies from the Wireless Router or Access Point, as shown.



```
F:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\lab4>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

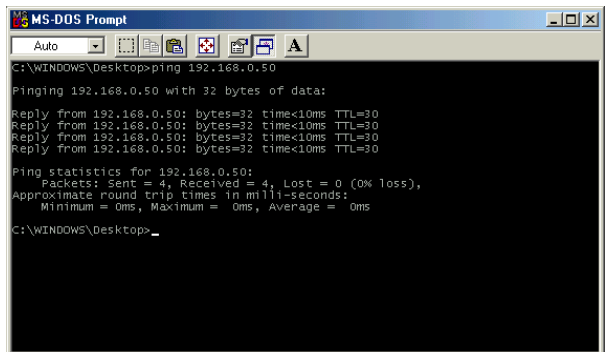
Reply from 192.168.0.50: bytes=32 time=5ms TTL=30
Reply from 192.168.0.50: bytes=32 time=64ms TTL=30
Reply from 192.168.0.50: bytes=32 time=3ms TTL=30
Reply from 192.168.0.50: bytes=32 time=17ms TTL=30

Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 64ms, Average = 22ms

F:\Documents and Settings\lab4>_
```

Checking the Wireless Connection by Pinging in Windows Me and 98

- Go to **Start > Run >** type **command**. A window similar to this will appear. Type **ping xxx.xxx.xxx.xxx** where **xxx** is the **IP Address** of the Wireless Router or Access Point. A good wireless connection will show four replies from the wireless router or access point, as shown.



```
MS-DOS Prompt
Auto
C:\WINDOWS\Desktop>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30

Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\WINDOWS\Desktop>_
```


Troubleshooting

This Chapter provides solutions to problems that can occur during the installation and operation of the DI-774 Wireless Broadband Router. We cover various aspects of the network setup, including the network adapters. Please read the following if you are having problems.

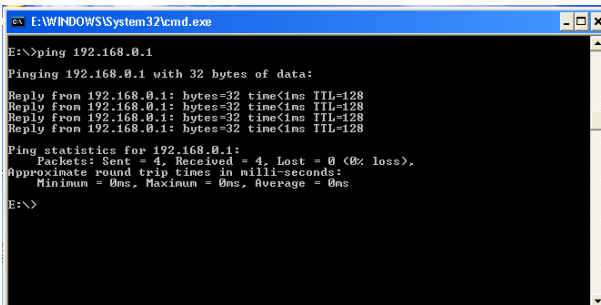
Note: *It is recommended that you use an Ethernet connection to configure the DI-774 Wireless Broadband Router.*

1. The computer used to configure the DI-774 cannot access the Configuration menu.

- Check that the **Ethernet LED** on the DI-774 is **ON**. If the **LED** is not **ON**, check that the cable for the Ethernet connection is securely inserted.
- Check that the Ethernet Adapter is working properly. Please see item 3 (**Check that the drivers for the network adapters are installed properly**) in this **Troubleshooting** section to check that the drivers are loaded properly.
- Check that the **IP Address** is in the same range and subnet as the DI-774. Please see **Checking the IP Address in Windows XP** in the **Networking Basics** section of this manual.

Note: *The IP Address of the DI-774 is 192.168.0.1. All the computers on the network must have a unique IP Address in the same range, e.g., 192.168.0.x. Any computers that have identical IP Addresses will not be visible on the network. They must all have the same subnet mask, e.g., 255.255.255.0*

- Do a **Ping test** to make sure that the DI-774 is responding. Go to **Start>Run>Type Command>Type ping 192.168.0.1**. A successful ping will show four replies.



```
E:\WINDOWS\System32\cmd.exe
E:\>ping 192.168.0.1
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128

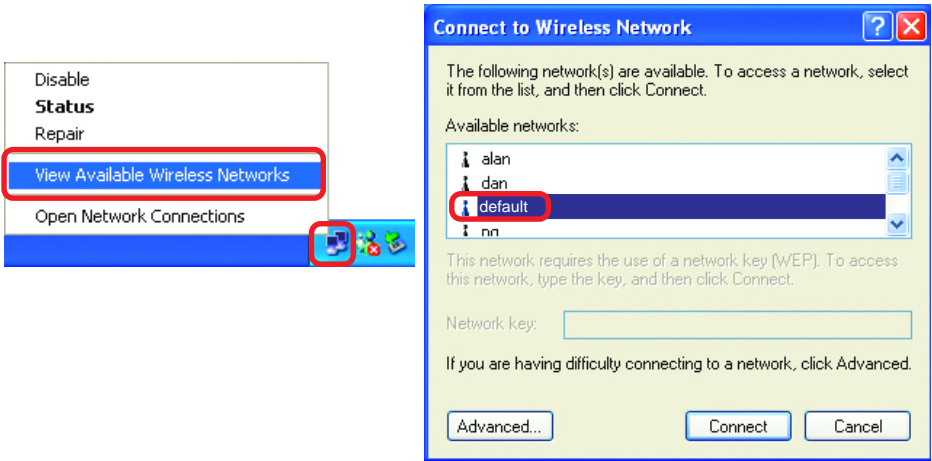
Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
E:\>
```

Note: If you have changed the default IP Address, make sure to ping the correct IP Address assigned to the DI-774.

Troubleshooting

2. The wireless client cannot access the Internet in the Infrastructure mode.

Make sure the wireless client is associated and joined with the correct Access Point. To check this connection: **Right-click** on the **Local Area Connection icon** in the taskbar > select **View Available Wireless Networks**. The **Connect to Wireless Network** screen will appear. Please make sure you have selected the correct available network, as shown in the illustrations below.

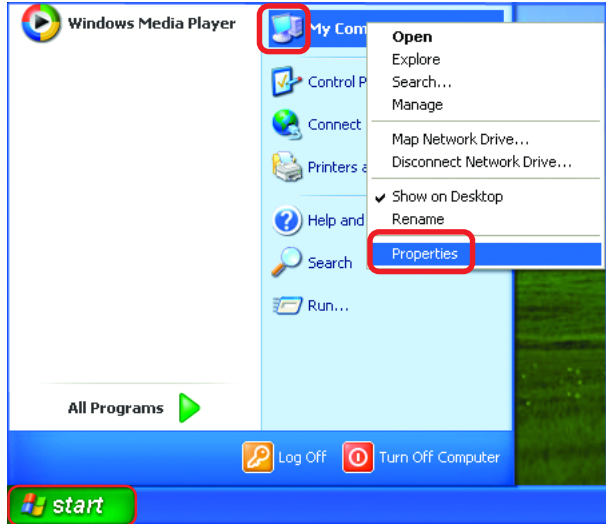


- Check that the **IP Address** assigned to the wireless adapter is within the same **IP Address range** as the access point and gateway. (Since the DI-774 has an IP Address of 192.168.0.1, wireless adapters must have an IP Address in the same range, e.g., 192.168.0.x. Each device must have a unique IP Address; no two devices may have the same IP Address. The subnet mask must be the same for all the computers on the network.) To check the **IP Address** assigned to the wireless adapter, **double-click** on the **Local Area Connection icon** in the taskbar > select the **Support** tab and the **IP Address** will be displayed. (Please refer to **Checking the IP Address** in the **Networking Basics** section of this manual.)
- If it is necessary to assign a **Static IP Address** to the wireless adapter, please refer to the appropriate section in **Networking Basics**. If you are entering a **DNS Server address** you must also enter the **Default Gateway Address**. (Remember that if you have a **DHCP-capable** router, you will not need to assign a **Static IP Address**. See **Networking Basics: Assigning a Static IP Address**.)

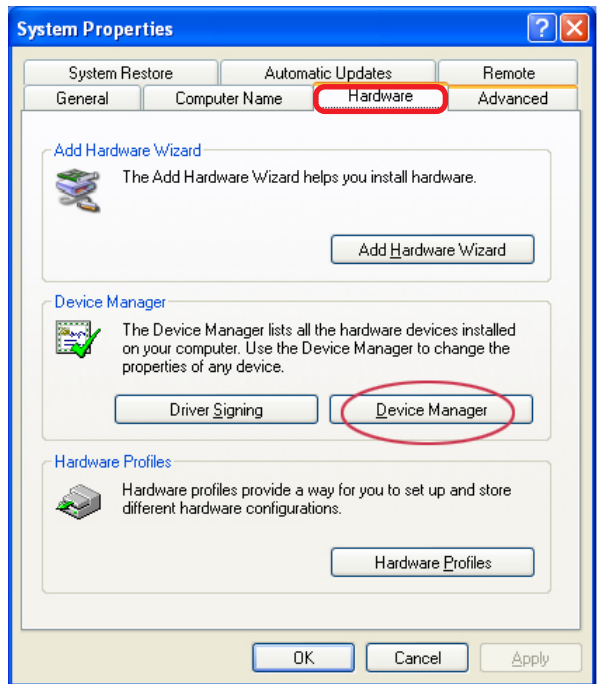
Troubleshooting

3. Check that the drivers for the network adapters are installed properly.

You may be using different network adapters than those illustrated here, but this procedure will remain the same, regardless of the type of network adapters you are using.



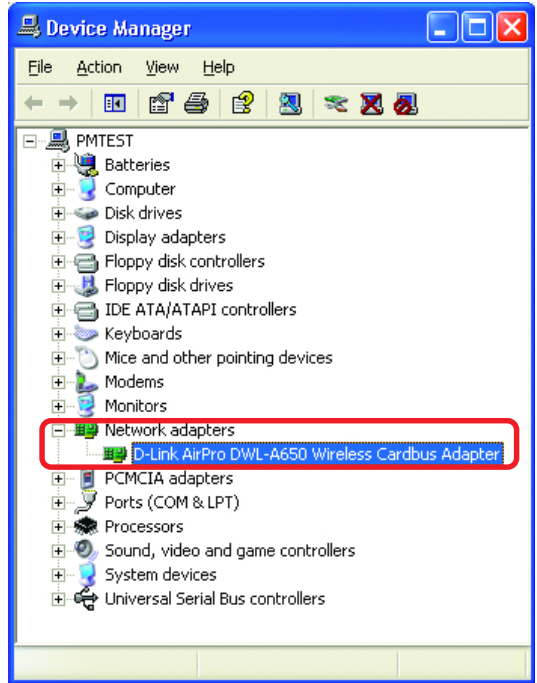
- Select the Hardware Tab



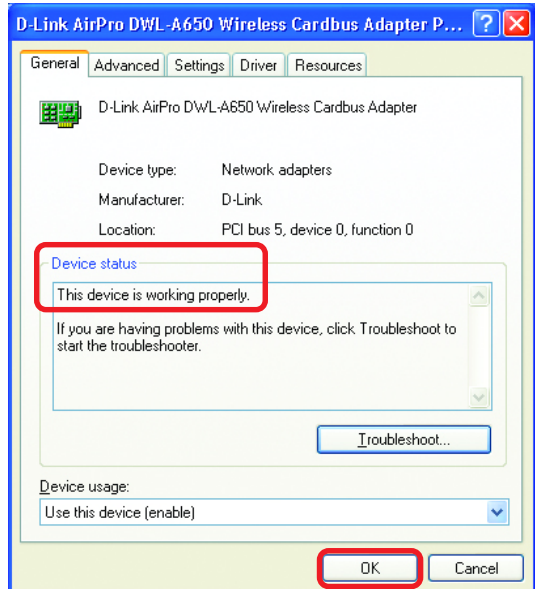
- Click Device Manager

Troubleshooting

- Double-click on **Network Adapters**
- Right-click on **D-Link AirPro DWL-A650 Wireless Cardbus Adapter** (In this example, the DWL-A650 is used; you may be using another network adapter, but the procedure will remain the same.)
- Select **Properties** to check that the drivers are installed properly



- Look under **Device Status** to check that the device is working properly



- Click **OK**

Troubleshooting

4. What variables may cause my wireless products to lose reception?

D-Link products let you access your network from virtually anywhere you want. However, the positioning of the products within your environment will affect the wireless range. Please refer to **Installation Considerations** in the **Wireless Basics** section of this manual for further information about the most advantageous placement of your D-Link wireless products.

5. Why does my wireless connection keep dropping?

- Antenna Orientation- Try different antenna orientations for the DI-774. Try to keep the antenna at least 6 inches away from the wall or other objects.
- If you are using 2.4GHz cordless phones, X-10 equipment or other home security systems, ceiling fans, and lights, your wireless connection will degrade dramatically or drop altogether. Try changing the Channel on your Router, Access Point and Wireless adapter to a different Channel to avoid interference.
- Keep your product away (at least 3-6 feet) from electrical devices that generate RF noise, like microwaves, Monitors, electric motors, etc.

6. Why can't I get a wireless connection?

To establish a wireless connection, while enabling Encryption on the DI-774, you must also enable encryption on the wireless client.

- For 802.11a, the Encryption settings are: 64, 128 or 152 bit. Make sure that the encryption bit level is the same on the Router and the Wireless Client.
- For 802.11g, the Encryption settings are: 64, 128, or 152 bit. Make sure that the encryption bit level is the same on the Router and the Wireless Client.

Make sure that the SSID on the Router and the Wireless Client are exactly the same. If they are not, wireless connection will not be established. Please note that there are two separate SSIDs for 802.11a and 802.11g. The default SSID for both 802.11a and 802.11g is **default**.

Troubleshooting

7. Resetting the DI-774 to Factory Default Settings

After you have tried other methods for troubleshooting your network, you may choose to **Reset** the DI-774 to the factory default settings. Remember that D-Link *Air Xpert* products network together, out of the box, at the factory default settings.



To hard-reset the D-Link *Air Xpert* DI-774 to Factory Default Settings, please do the following:

- Locate the **Reset** button on the back of the DI-774
- Use a paper clip to press the **Reset** button
- Hold for about 10 seconds and then release
- After the DI-774 reboots (this may take a few minutes) it will be reset to the factory **Default** settings