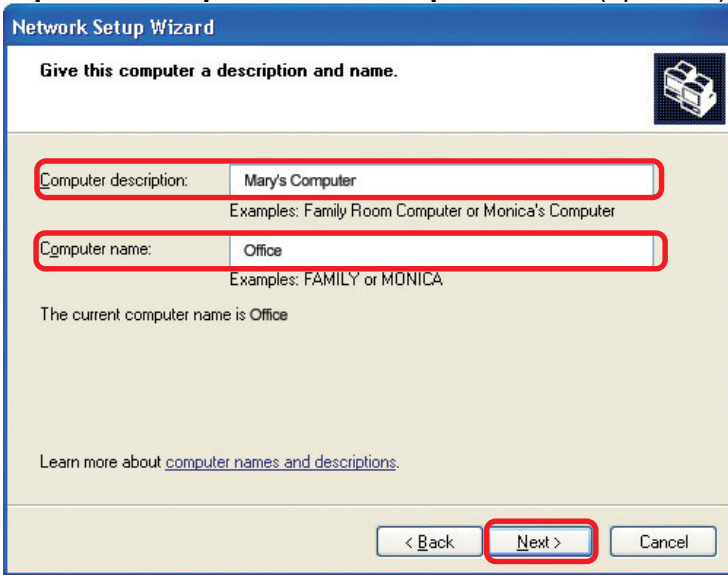


Networking Basics

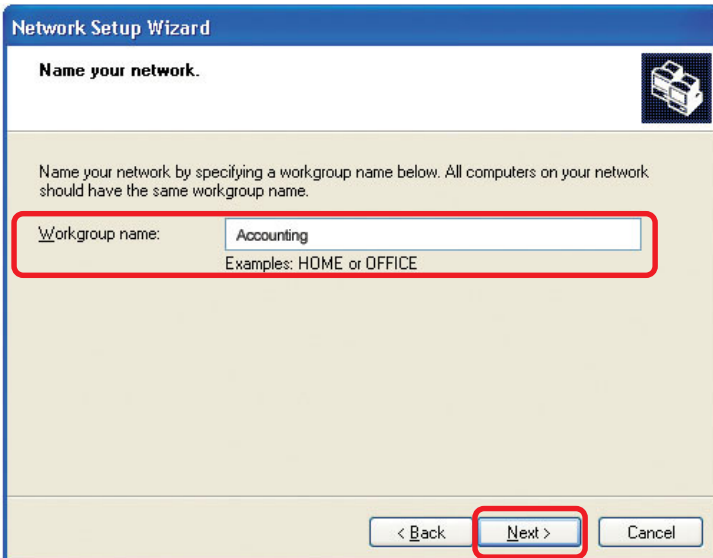
Enter a **Computer description** and a **Computer name** (optional.)



The screenshot shows the 'Network Setup Wizard' window with the title 'Give this computer a description and name.' The window contains two text input fields. The first field is labeled 'Computer description:' and contains the text 'Mary's Computer'. Below it, there are examples: 'Examples: Family Room Computer or Monica's Computer'. The second field is labeled 'Computer name:' and contains the text 'Office'. Below it, there are examples: 'Examples: FAMILY or MONICA'. Below the fields, it says 'The current computer name is Office'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red box.

Click **Next**

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

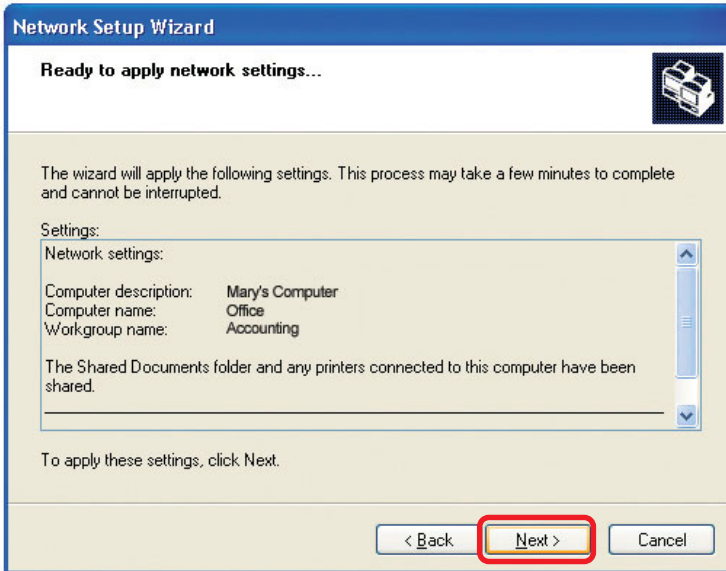


The screenshot shows the 'Network Setup Wizard' window with the title 'Name your network.' The window contains a text input field labeled 'Workgroup name:' with the text 'Accounting'. Below it, there are examples: 'Examples: HOME or OFFICE'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red box.

Click **Next**

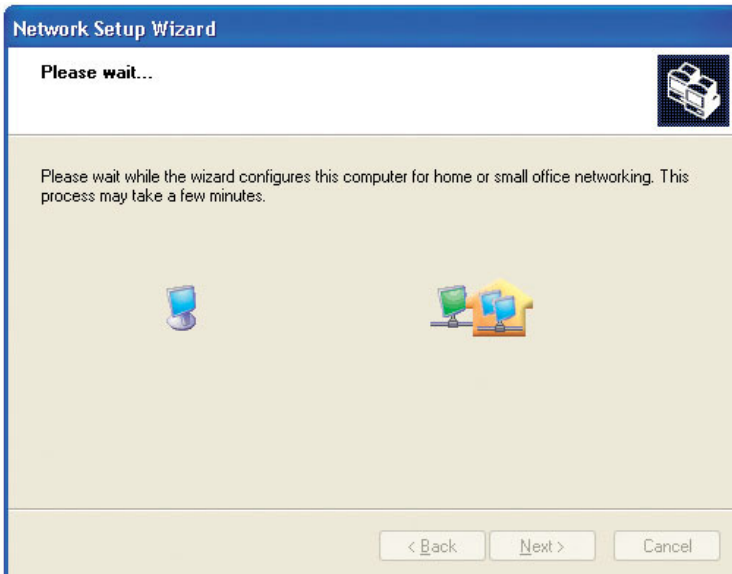
Networking Basics

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



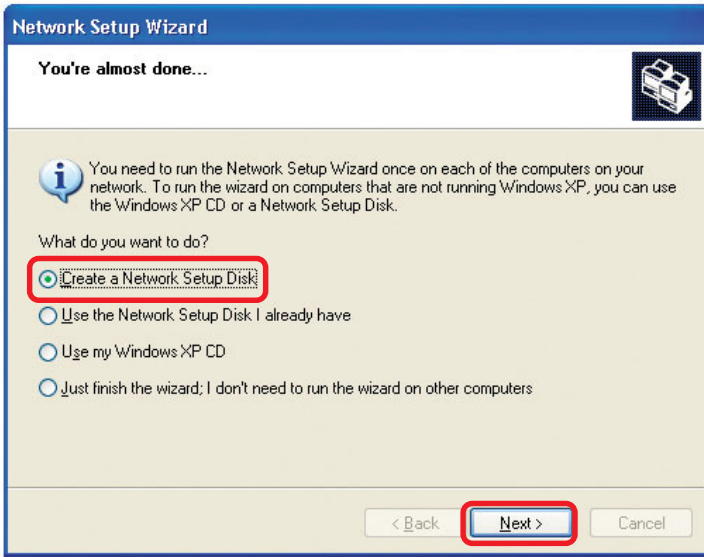
When the changes are complete, click **Next**.

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**.

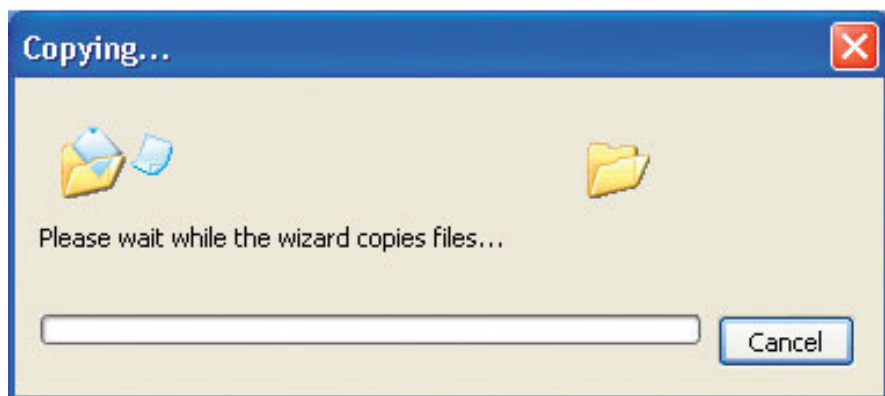


Insert a disk into the Floppy Disk Drive, in this case drive **A**.

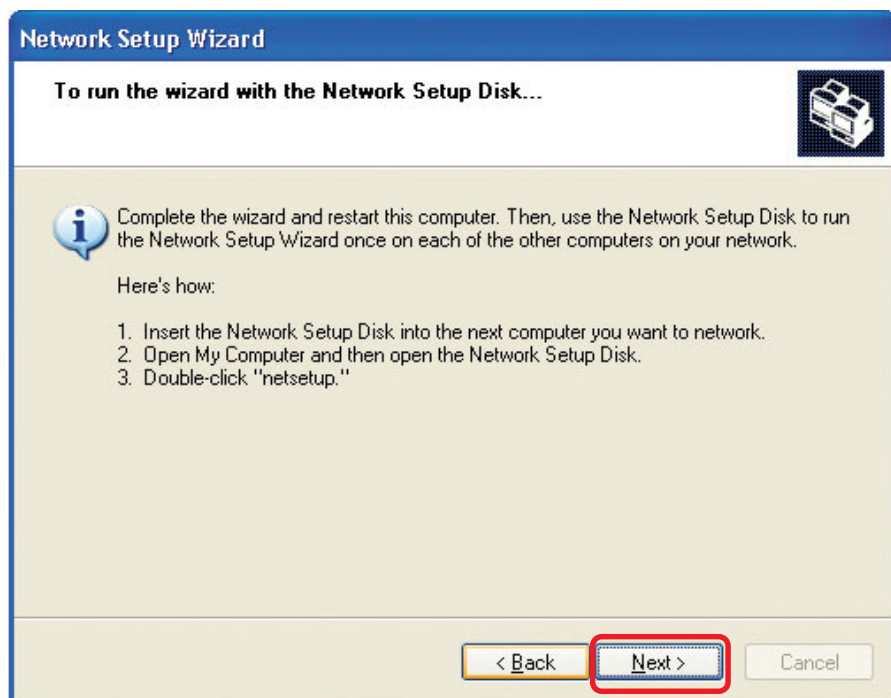


Click **Next**

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**.

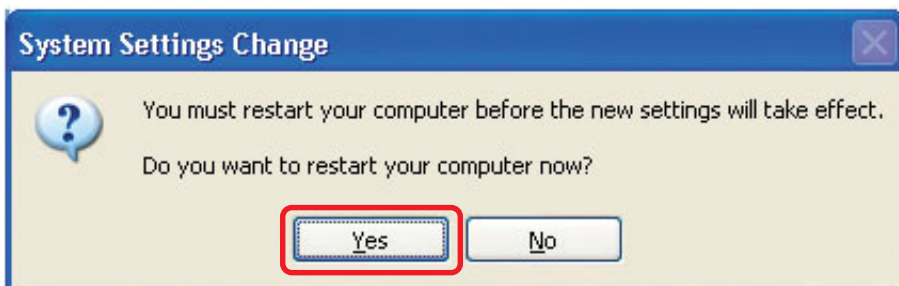


Networking Basics

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

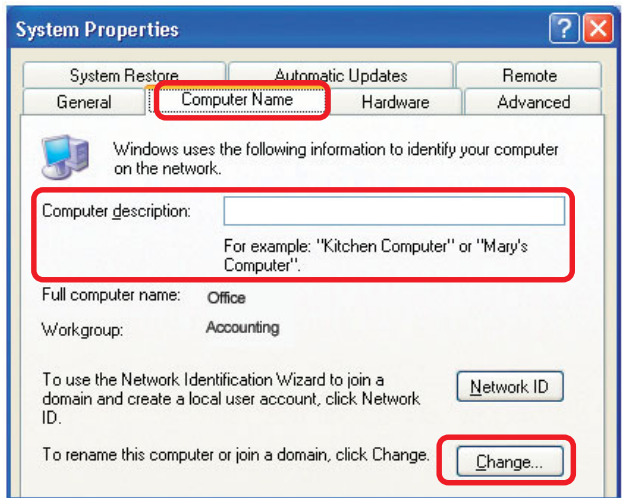
Naming your Computer

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.

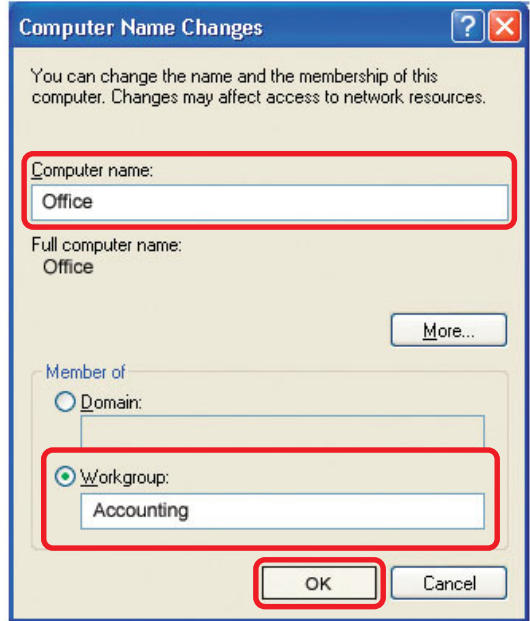


- You may enter a **Computer Description** if you wish; this field is optional.
- To rename the computer and join a domain, Click **Change**.

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**



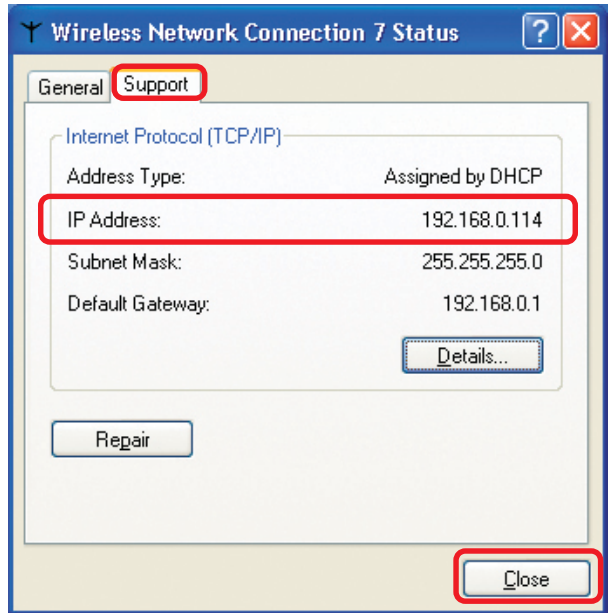
Networking Basics

Checking the IP Address in Windows XP

This window will appear.

- Click the **Support** tab

- Click **Close**

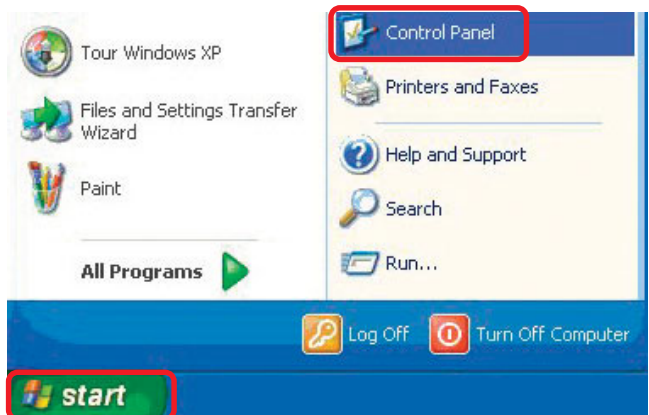


Assigning a Static IP Address in Windows XP/2000

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:

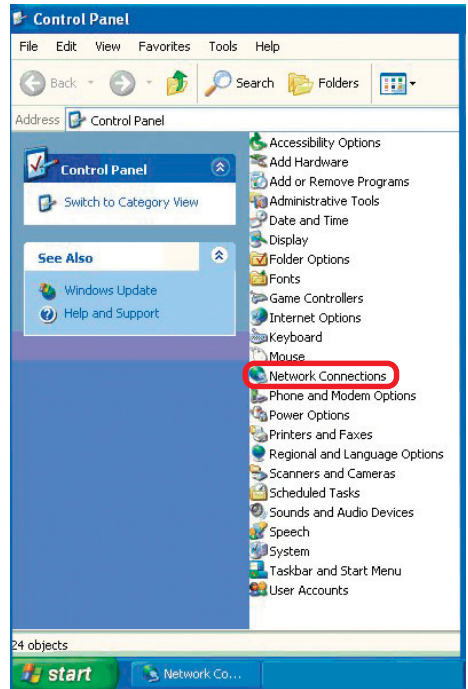
- Go to **Start**
- Double-click on **Control Panel**



Networking Basics

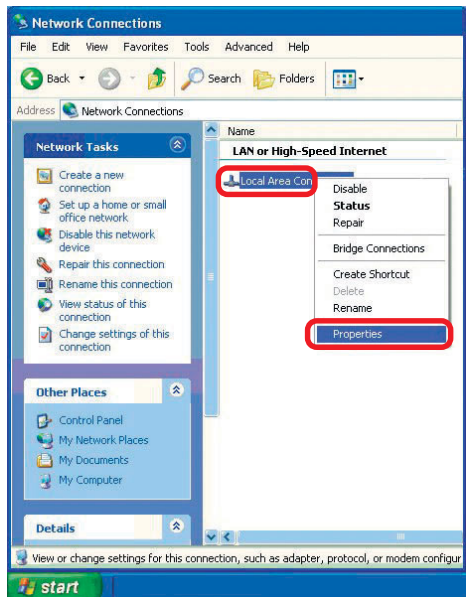
Assigning a Static IP Address in Windows XP/2000

- Double-click on **Network Connections**



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

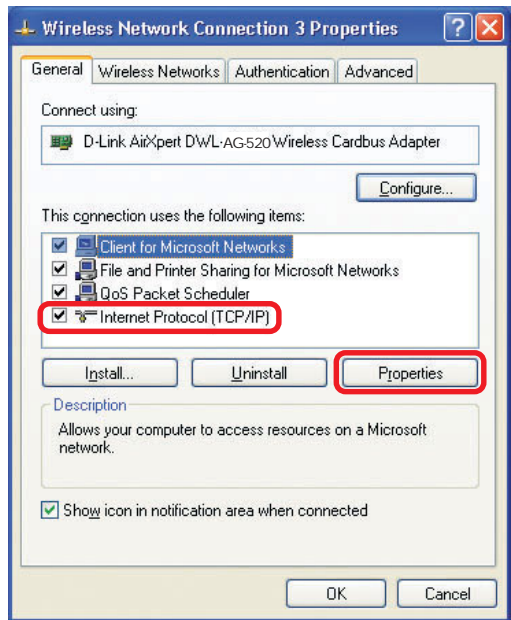
- Double-click on **Properties**



Networking Basics

Assigning a Static IP Address in Windows XP/2000

- Click on **Internet Protocol (TCP/IP)**
- Click **Properties**



- In the window below, select **Use the following IP address**. 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).

IP Address:

e.g., 192.168.0.2

Subnet Mask:

255.255.255.0

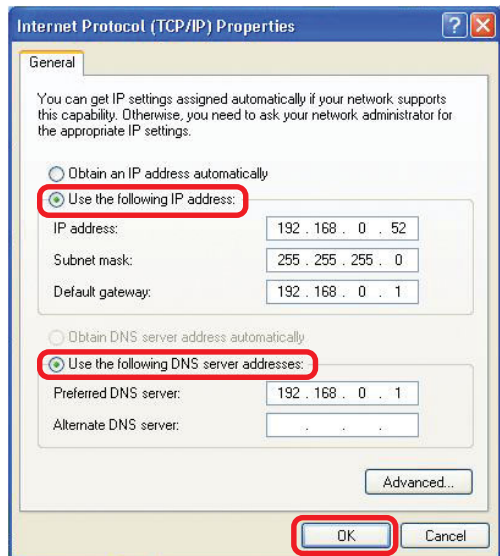
Default Gateway:

Enter the LAN IP address of the wireless router. (D-Link wireless routers have a LAN IP address of 192.168.0.1)

- Select **Use the following DNS server addresses**.

Enter the LAN IP address of the Wireless Router. (D-Link wireless routers have a LAN IP address of 192.168.0.1)

- Click **OK**

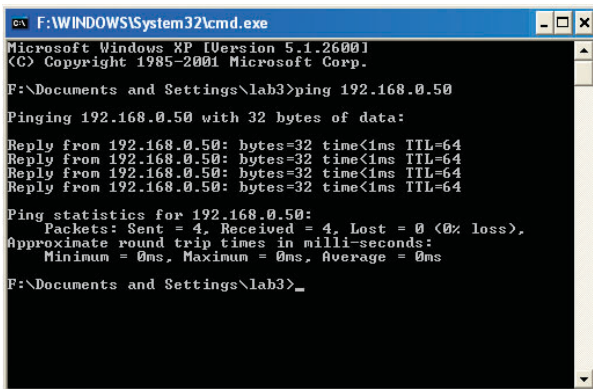


You have completed the assignment of a Static IP Address. (You do not need to assign a Static IP Address if you have a DHCP-capable Gateway/Router).

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.



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

F:\Documents and Settings\lab3>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

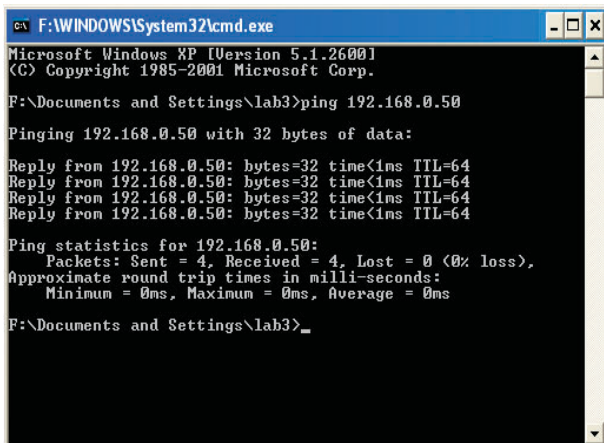
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64

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

F:\Documents and Settings\lab3>_
```

Checking the Wireless Connection by Pinging in Windows Me and 98SE

- 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.



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

F:\Documents and Settings\lab3>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64

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

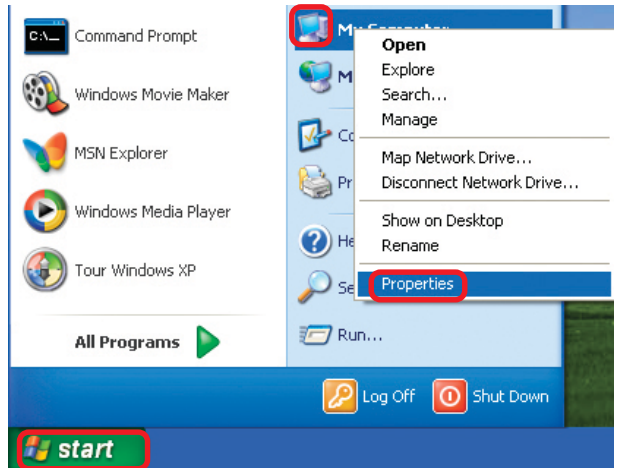
F:\Documents and Settings\lab3>_
```

Troubleshooting

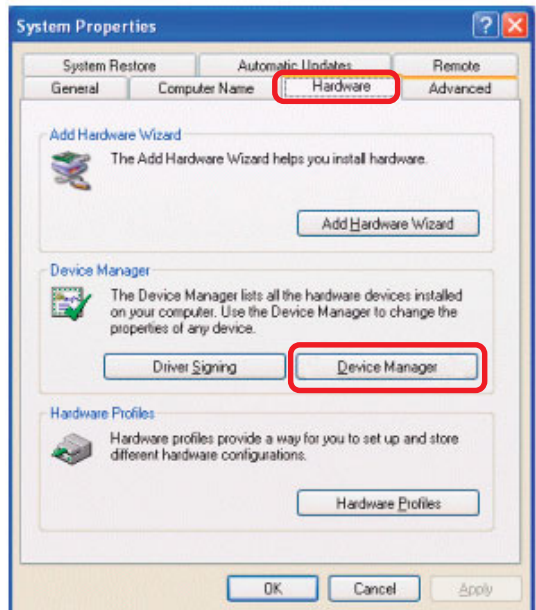
This chapter provides solutions to problems that can occur during the installation and operation of the DWL-AG520. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples).

1. Check that the drivers for the DWL-AG520 are installed properly.

- Go to **Start > My Computer > Properties**

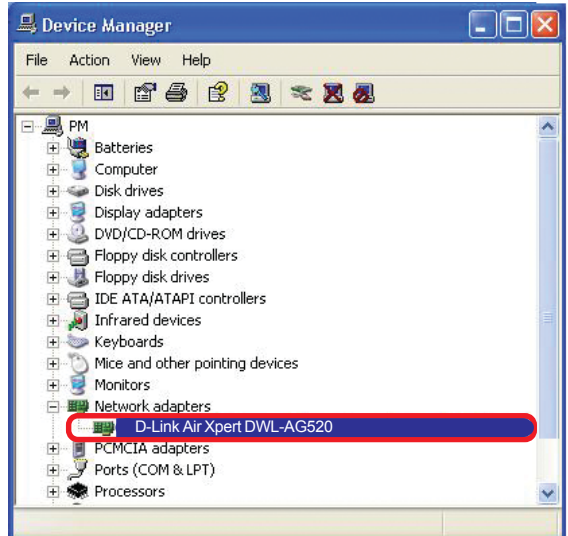


- Select the **Hardware Tab**
- Click **Device Manager**



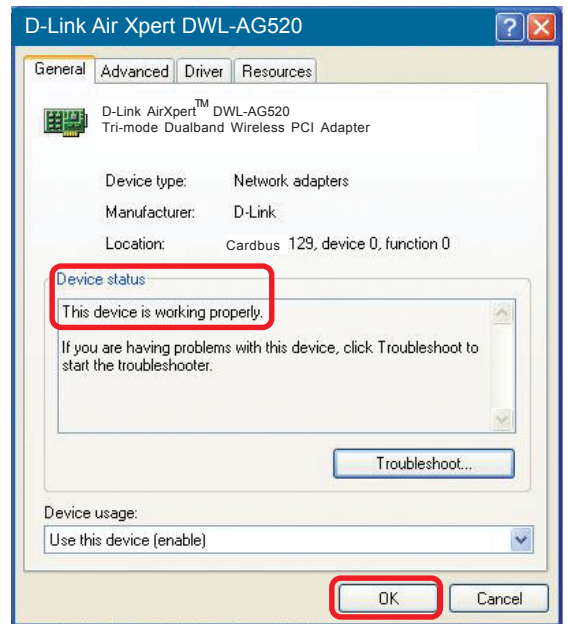
Troubleshooting

- Double-click on **Network Adapters**
- Right-click on **D-Link DWL-AG520 Wireless PCI Adapter**



- 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

2. I cannot connect to the Access Point or the wireless Router.

- Make sure that the SSID on the DWL-AG520 PCI adapter is exactly the same as the SSID on the Access Point or wireless Router.
- Move the DWL-AG520 and Access Point or wireless Router into the same room and then test the wireless connection.
- Disable all security settings. (WEP, MAC Address Control, AES)
- Make sure that the Access Point/Router is not locked down to a different frequency
- Turn off your Access Point and the computer with the DWL-AG520. Turn on the Access Point, and then turn on the computer with the DWL-AG520.
- Refresh the DWL-AG520 Utility

3. The DWL-AG520 Power and Link lights are not on.

- Check to see if the DWL-AG520 PCI adapter is firmly inserted into the PCI slot of your desktop computer.

4. I forgot my Encryption key.

- Reset the Access Point to its factory default settings and restore the DWL-AG520 Wireless PCI Adapter to the factory default settings.

5. The computer does not recognize the DWL-AG520 Wireless Adapter.

- Make sure that the DWL-AG520 Wireless Adapter is properly seated in the computer's PCI slot.
- If Windows does not detect the hardware upon insertion of the adapter, make sure to completely remove drivers that were previously loaded. To remove the drivers, do the following:

Troubleshooting

- A. Under **Tools**> select **Folder Options...**> select **View** > under **Hidden files and folders** > select **Show hidden files and folders**
- B. Uncheck **Hide extension for known file types** > click on **Apply**
- C. Search for previously loaded driver files. Remove these files from the **INF** and **SYSTEM32 (DRIVERS)** folders in the Windows directory. Note: Windows XP and Windows 2000 will rename **.inf** files that have not received WHQL certification into **oem.inf** files (e.g., **oem1.inf**).

6. The computer with the DWL-AG520 installed is unable to connect to the wireless network and/or the Internet.

- Check that the LED indicators for the broadband modem are indicating normal activity. If not, there may be a problem with the broadband connection.
- Check that the LED indicators on the wireless router are functioning properly. If not, check that the AC power and Ethernet cables are firmly connected.
- Check that the IP Address, subnet mask, gateway, and DNS settings are correctly entered for the network.
- In **Infrastructure** mode, make sure the same **Service Set Identifier (SSID)** is specified on the settings for the wireless clients and access points. The **SSID** factory default setting for the D-Link products is **default**. (Double-click on the WLAN icon in the taskbar. The **Link Info** screen will display the SSID setting).
- In **Ad-Hoc** mode, both wireless clients will need to have the same **SSID**. Please note that it might be necessary to set up one client to establish a **BSS (Basic Service Set)** and wait briefly before setting up other clients. This prevents several clients from trying to establish a **BSS** at the same time, which can result in multiple singular **BSSs** being established, rather than a single **BSS** with multiple clients associated to it.

Troubleshooting

- Check that the **Network Connection** for the wireless client is configured properly. Select **AP (Infrastructure)** when connecting to an access point and select **Ad-Hoc mode** when connecting without an access point. Double-click on the **WLAN icon** in the taskbar > click on **Configuration** to change the settings for the wireless adapter.
- If **Security** is enabled, make sure that the correct encryption keys are entered on both the DWL-AG520 and the access point. Double-click on the **WLAN** icon in the taskbar > click **Encryption**. Check to see that the key selected is set to the same key as other devices on the network.
- If **Turbo mode** is enabled, make sure that Turbo mode is enabled on all Turbo mode compatible devices in your network, in order to communicate.

7. How can I troubleshoot distance issues using the DWL-AG520.

- Move the DWL-AG520 and Access Point or wireless Router into the same room and then test the wireless connection.
- Change the channel of the Access Point.
- Move devices within the line of sight

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that
to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

If this device is going to be operated in 5.15 ~ 5.25GHz and the 5.25 to 5.35GHz frequency range, then it is restricted in indoor environment only.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

D-Link Air Xpert™ DWL-AG520

D-Link Offices

Australia

D-Link Australasia

Unit 16, 390 Eastern Valley Way, Roseville, NSW 2069 Australia
TEL: 61-2-9417-7100 FAX: 61-2-9417-1077
TOLL FREE (Australia): 1800-177100
TOLL FREE (New Zealand): 0800-900900
URL: www.dlink.com.au
E-MAIL: support@dlink.com.au & info@dlink.com.au
Level 1, 434 St. Kilda Road, Melbourne, Victoria 3004 Australia
TEL: 61-3-9281-3232 FAX: 61-3-9281-3229 MOBILE: 0412-660-064

Canada

D-Link Canada

2180 Winston Park Drive, Oakville, Ontario, L6H 5W1 Canada
TEL: 1-905-829-5033 FAX: 1-905-829-5095 BBS: 1-965-279-8732
TOLL FREE: 1-800-354-6522 URL: www.dlink.ca
FTP: [ftp.dlinknet.com](ftp://ftp.dlinknet.com) E-MAIL: techsup@dlink.ca

Chile

D-Link South America

Isidora Goyechea 2934 of 702, Las Condes, Santiago, Chile, S. A.
TEL: 56-2-232-3185 FAX: 56-2-232-0923 URL: www.dlink.cl
E-MAIL: ccasassu@dlink.cl & tsilva@dlink.cl

China

D-Link China

2F, Sigma Building, 49 Zhichun Road, Haidan District, 100080 Beijing, China
TEL: 86-10-88097777 FAX: 86-10-88096789 URL: www.dlink.com.cn
E-MAIL: liweii@digitalchina.com.cn

Denmark

D-Link Denmark

Naverland 2, DK-2600 Glostrup, Copenhagen, Denmark
TEL: 45-43-969040 FAX: 45-43-424347 URL: www.dlink.dk
E-MAIL: info@dlink.dk

Egypt

D-Link Middle East

7 Assem Ebn Sabet Street, Heliopolis, Cairo, Egypt
TEL: 20-2-635-6176 FAX: 20-2-635-6192 URL: www.dlink-me.com
E-MAIL: support@dlink-me.com & fateen@dlink-me.com

Finland

D-Link Finland

Thlli-ja Pakkahuone Katajanokanlaituri 5, FIN- 00160 Helsinki
TEL: 358-9-622-91660 FAX: 358-9-622-91661 URL: www.dlink-fi.com

France

D-Link France

Le Florilege #2, Allee de la Fresnerie, 78330 Fontenay le Fleury, France
TEL: 33-1-3023-8688 FAX: 33-1-3023-8689 URL: www.dlink-france.fr
E-MAIL: info@dlink-france.fr

D-Link Air Xpert™ DWL-AG520

Germany	D-Link Central Europe/D-Link Deutschland GmbH Schwalbacher Strasse 74, D-65760 Eschborn, Germany TEL: 49-6196-77990 FAX: 49-6196-7799300 URL: www.dlink.de BBS: 49-(0) 6192-971199 (analog) BBS: 49-(0) 6192-971198 (ISDN) INFO: 00800-7250-0000 (toll free) HELP: 00800-7250-4000 (toll free) REPAIR: 00800-7250-8000 E-MAIL: info@dlink.de
India	D-Link India Plot No.5, Kurla-Bandra Complex Rd., Off Cst Rd., Santacruz (E), Bombay, 400 098 India TEL: 91-22-652-6696 FAX: 91-22-652-8914 URL: www.dlink-india.com E-MAIL: service@dlink.india.com
Italy	D-Link Mediterraneo Srl/D-Link Italia Via Nino Bonnet n. 6/b, 20154, Milano, Italy TEL: 39-02-2900-0676 FAX: 39-02-2900-1723 URL: www.dlink.it E-MAIL: info@dlink.it
Japan	D-Link Japan 10F, 8-8-15 Nishi-Gotanda, Shinagawa-ku, Tokyo 141, Japan TEL: 81-3-5434-9678 FAX: 81-3-5434-9868 URL: www.d-link.co.jp E-MAIL: kida@d-link.co.jp
Netherlands	D-Link Benelux Fellenoord 1305611 ZB, Eindhoven, the Netherlands TEL: 31-40-2668713 FAX: 31-40-2668666 URL: www.d-link-benelux.n
Norway	D-Link Norway Waldemar Thranesgt. 77, 0175 Oslo, Norway TEL: 47-22-991890 FAX: 47-22-207039
Russia	D-Link Russia Michurinski Prospekt 49, 117607 Moscow, Russia TEL: 7-095-737-3389 & 7-095-737-3492 FAX: 7-095-737-3390 URL: www.dlink.ru E-MAIL: vl@dlink.ru
Singapore	D-Link International 1 International Business Park, #03-12 The Synergy, Singapore 609917 TEL: 65-774-6233 FAX: 65-774-6322 E-MAIL: info@dlink.com.sg URL: www.dlink-intl.com
South Africa	D-Link South Africa 102 – 106 Witchhazel Avenue, Einstein Park 2, Block B, Highveld Technopark, Centurion, South Africa TEL: 27 (0) 12-665-2165 FAX: 27 (0) 12-665-2186 URL: www.d-link.co.za E-MAIL: attie@d-link.co.za

D-Link Air Xpert™ DWL-AG520

Spain

D-Link Iberia

C/Sabino De Arana, 56 Bajos, 08028 Barcelona, Spain
TEL: 34 93 4090770 FAX: 34 93 4910795 URL: www.dlinkiberia.es
E-MAIL: info@dlinkiberia.es

Sweden

D-Link Sweden

P. O. Box 15036, S-167 15 Bromma, Sweden
TEL: 46-(0) 8-564-61900 FAX: 46-(0) 8-564-61901 E-MAIL: info@dlink.se
URL: www.dlink.se

Taiwan

D-Link Taiwan

2F, No. 119 Pao-Chung Rd, Hsin-Tien, Taipei, Taiwan
TEL: 886-2-2910-2626 FAX: 886-2-2910-1515 URL: www.dlinktw.com.tw
E-MAIL: dssqa@tsc.dlinktw.com.tw

Turkey

D-Link Middle East

Deniz Bilgisayar, Buyukdere Cad. Naci Kasim Sk., No. 5 Mecidiyekoy,
Istanbul, Turkey
TEL: 90-212-213-3400 FAX: 90-212-213-3420
E-MAIL: smorovati@dlink-me.com

U.A.E.

D-Link Middle East

CHS Aptec (Dubai), P.O. Box 33550 Dubai U.A.E.
TEL: 971-4-366-885 FAX: 971-4-355-941 E-MAIL: Wxavier@dlink-me.com

U.K.

D-Link Europe

4th Floor, Merit House, Edgware Road, Colindale, London NW9 5AB United
Kingdom
TEL: 44 (0) 20-8731-5555 FAX: 44 (0) 20-8731-5511
BBS: 44 (0) 181-235-5511
URL: www.dlink.co.uk E-MAIL: info@dlink.co.uk

U.S.A.

D-Link U.S.A.

53 Discovery Drive, Irvine, CA 92618, USA
TEL: 1-949-788-0805 FAX: 1-949-753-7033
BBS: 1-949-455-1779 & 1-949-455-9616
INFO: 1-800-326-1688 URL: www.dlink.com
E-MAIL: tech@dlink.com & support@dlink.com