Enabling the Demilitarized Zone (DMZ)

The DMZ feature allows you to specify one computer on your network to be placed outside of the firewall. This may be necessary if the firewall is causing problems with an application such as a game or video conferencing application. Use this feature on a temporary basis. The computer in the DMZ is NOT protected from hacker attacks.

Note: If your ISP subscription provides you with additional public (WAN) IP addresses, additional computers can be placed outside the firewall provided each computer uses a different public (WAN) IP.

To put a computer in the DMZ, enter the last digits of its IP address in the IP field and select "Enable". Click "Apply Changes" for the change to take effect.

Using the Web-Based Advanced User Interface

WAN Ping Blocking

Computer hackers use what is known as "pinging" to find potential victims on the Internet. By pinging a specific IP address and receiving a response from the IP address, a hacker can determine that something of interest might be there. The Router can be set up so it will not respond to an ICMP ping from the outside. This heightens the level of security of your Router.

To turn off the ping response, select "Block ICMP Ping" **(1)** and click "Apply Changes". The Router will not respond to an ICMP ping.

Utilities Tab

This screen lets you manage different parameters of the Router and perform certain administrative functions.

Restarting the Router

Sometimes it may be necessary to restart or reboot the Router if it begins working improperly. Restarting or rebooting the Router will NOT delete any of your configuration settings.

Restarting the Router to Restore Normal Operation

1. Click the "Restart Router" button.

    Utilities > Restart Router

    Sometimes it may be necessary to Restart or Reboot the Router if it begins working improperly. Restarting or Rebooting the Router will not delete any of your configuration settings. Click the "Restart Router" button below to Restart the Router.

    Restart Router

2. The following message will appear. Click "OK".

    Microsoft Internet Explorer

    Do you really want to reset the Device?

    OK   Cancel

3. The following message will appear. Restarting the Router can take up to 25 seconds. It is important not to turn off the power to the Router during the restart.

    Microsoft Internet Explorer

    It may take some time to complete this process and restart the system. Please don't turn off the Device before the process is complete.

    OK

4. A 25-second countdown will appear on the screen. When the countdown reaches zero, the Router will be restarted. The Router's home page should appear automatically. If not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

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Restoring Factory Default Settings

Using this option will restore all of the settings in the Router to the factory (default) settings. It is recommended that you back up your settings before you restore all of the defaults.

1. Click the "Restore Defaults" button.

2. The following message will appear. Click "OK".

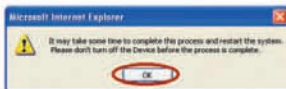3. The following message will appear. Restoring the defaults includes restarting the Router. It can take up to 25 seconds. It is important not to turn the power to the Router off during the restart.
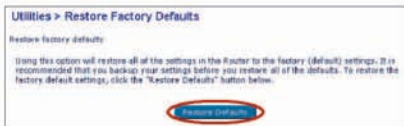

4. A 25-second countdown will appear on the screen. When the countdown reaches zero, the Router's defaults will be restored. The Router's home page should appear automatically. If it does not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

Saving a Current Configuration

You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed. It is recommended that you back up your current configuration before performing a firmware update.

Utilities > Save/Backup current settings

You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed. It is recommended that you backup your current configuration before performing a firmware update.
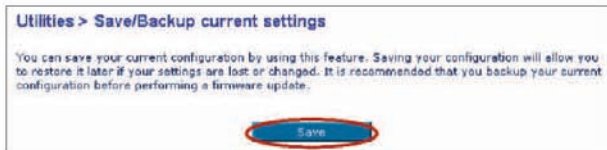
Save

1. Click "Save". A window called "File Download" will open. Click "Save".
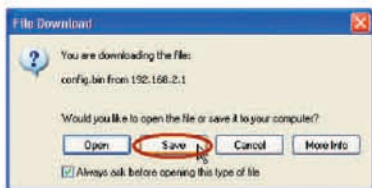
2. A window will open that allows you to select the location where you want to save the configuration file. Select a location. You can name the file anything you want, or use the default name "Config". Be sure to name the file so you can locate it yourself later. When you have selected the location and name of the file, click "Save".
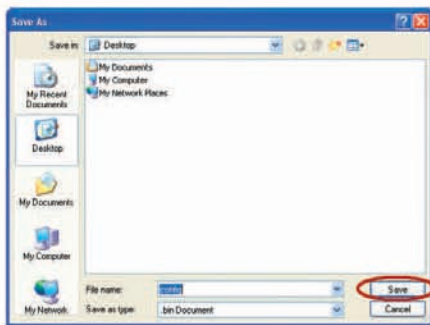
3. When the save is complete, you will see the following window. Click "Close".

The configuration is now saved.
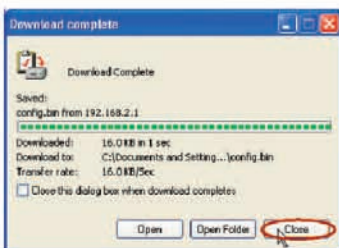
Restoring a Previous Configuration

This option will allow you to restore a previously saved configuration.

1. Click "Browse". A window will open that allows you to select the location of the configuration file. All configuration files end with a ".bin". Locate the configuration file you want to restore and double-click on it.
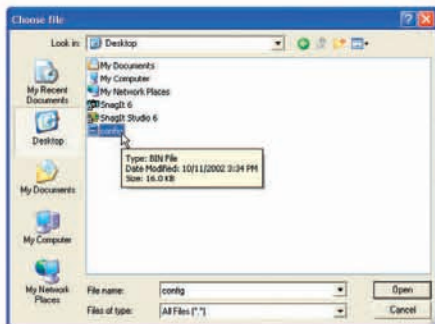
2. You will be asked if you want to continue. Click "OK".
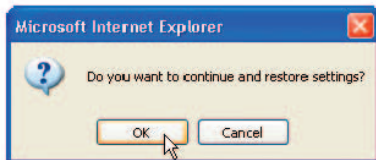
3. A reminder window will appear. It will take up to 35 seconds for the configuration restoration to complete. Click "OK".


4. A 35-second countdown will appear on the screen. When the countdown reaches zero, the Router's configuration will be restored. The Router's home page should appear automatically. If not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

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Updating the Firmware

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain feature improvements and fixes to problems that may exist. When Belkin releases new firmware, you can download the firmware from the Belkin update website and update your Router's firmware to the latest version.

Searching for a New Version of Firmware

From **http://www.belkin.com/support/downloads.asp,** type in the Belkin part number "F5D7230-4" on the "Search" field. Click "Search".

From the results page, click "F5D7230-4 Firmware update - North America".
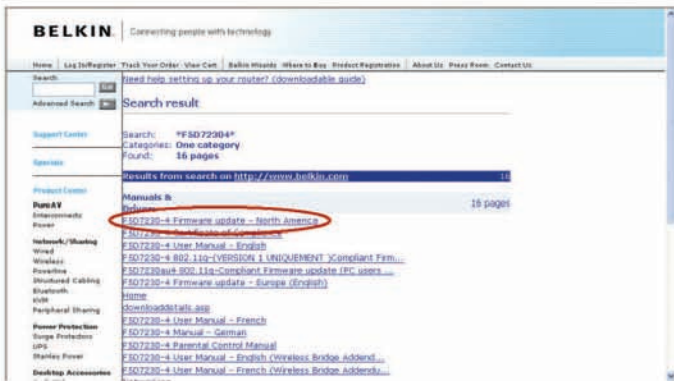
Downloading a New Version of Firmware

You will now be taken to the download page of "F5D7230-4 Firmware update - North America".
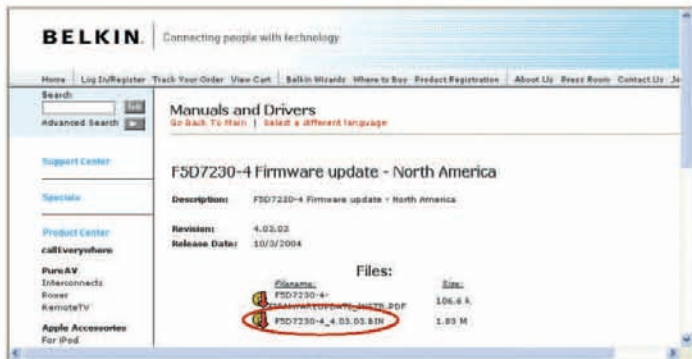
1. To download the new version of firmware, click the download logo ().

2. A window will open that allows you to select the location where you want to save the firmware file. Select a location. You can name the file anything you want, or use the default name. Be sure to save the file in a place where you can locate it yourself later. **Note:** We suggest saving this to your desktop to make it easy to locate the file. When you have selected the location, click "Save".
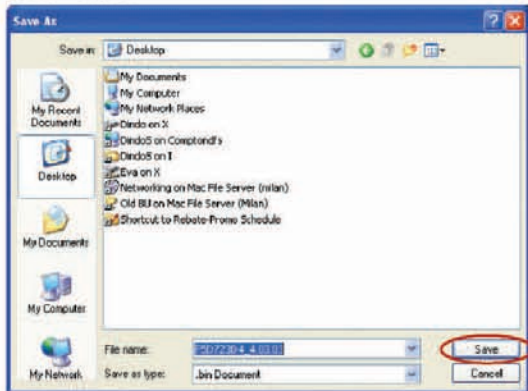
3. When the save is complete, you will see the following window. Click "Close".
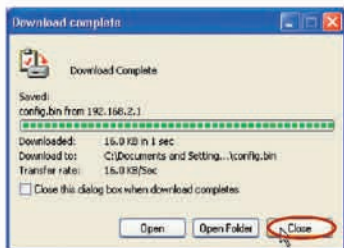
The download of the firmware is complete. To update the firmware, follow the next steps in "Updating the Router's Firmware".

Updating the Router's Firmware

1. In the "Firmware Update" page, click "Browse". A window will open that allows you to select the location of the firmware update file.

2. Browse to the firmware file you downloaded. Select the file by double-clicking on the file name.

Using the Web-Based Advanced User Interface

3. The "Update Firmware" box will now display the location and name of the firmware file you just selected. Click "Update".

Utilities > Firmware Update

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain improvements and fixes to problems that may have existed. Click the link below to see if there is a new firmware update available for this Router.

NOTE: Please backup your current settings before updating to a new version of firmware. Click Here to go to the Save/Backup current settings page.

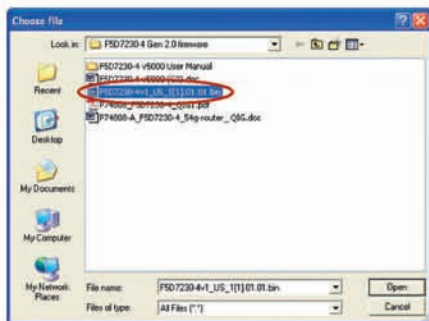**Check For New Firmware Version >** [Check Firmware]

Update Firmware > [   ] [Browse...]

(Update)

4. You will be asked if you are sure you want to continue. Click "OK".

Microsoft Internet Explorer

? Are you sure you want to continue with upgrading?

(OK) [Cancel]

5. You will see one more message. This message tells you that the Router may not respond for as long as one minute as the firmware is loaded into the Router and the Router is rebooted. Click "OK".

Microsoft Internet Explorer

⚠ At the end of the upgrade, the router may not respond to commands for as long as one minute. This is normal. Do not turn off or reboot the Router during this time.

(OK)

6. A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router's firmware update will be complete. The Router's home page should appear automatically. If not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

The firmware update is complete.

Changing System Settings

The "System Settings" page is where you can enter a new administrator password, set the time zone, enable remote management, and turn on and off the NAT function of the Router.

Setting or Changing the Administrator Password

The Router ships with NO password entered. If you wish to add a password for greater security, you can set a password here. Write down your password and keep it in a safe place, as you will need it if you need to log into the Router in the future. It is also recommended that you set a password if you plan to use the remote management feature of your Router.

Administrator Password:
The Router ships with NO password entered. If you wish to add a password for more security, you can set a password here. **More Info**

- **Type in current Password >**
- **Type in new Password >**
- **Confirm new Password >**
- **Login Timeout >**   10   (1-99 minutes)

Changing the Login Time-Out Setting

The login time-out option allows you to set the period of time that you can be logged into the Router's Web-Based Advanced User Interface. The timer starts when there has been no activity. For example, you have made some changes in the advanced setup interface, then left your computer alone without clicking "Logout". Assuming the time-out is set to 10 minutes, then 10 minutes after you leave, the login session will expire. You will have to log into the Router again to make any more changes. The login time-out option is for security purposes and the default is set to 10 minutes.

Note: Only one computer can be logged into the Router's Web-Based Advanced User Interface at one time.

Setting the Time and Time Zone

The Router keeps time by connecting to a Simple Network Time Protocol (SNTP) server. This allows the Router to synchronize the system clock to the global Internet. The synchronized clock in the Router is used to record the security log and control client filtering. Select the time zone that you reside in. If you reside in an area that observes daylight saving, then place a check mark in the box next to "Automatically Adjust Daylight Saving". The system clock may not update immediately. Allow at least 15 minutes for the Router to contact the time servers on the Internet and get a response. You cannot set the clock yourself.

Time and Time Zone: April 22 . 2003   11:12:36 AM
Please set your time Zone. If you are in an area that observes daylight saving check this box. **More Info**

- **Time Zone >**   (GMT-08:00) Pacific Time (US & Canada); Tijuana

- **Daylight Savings >**   ☑ Automatically Adjust Daylight Saving

Enabling Remote Management

Before you enable this advanced feature of your Belkin Router, **MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD.** Remote management allows you to make changes to your Router's settings from anywhere on the Internet. There are two methods of remotely managing the Router. The first is to allow access to the Router from anywhere on the Internet by selecting "Any IP address can remotely manage the Router". By typing in your WAN IP address from any computer on the Internet, you will be presented with a login screen where you need to type in the password of your Router. The second method is to allow a specific IP address only to remotely manage the Router. This is more secure, but less convenient. To use this method, enter the IP address you know you will be accessing the Router from in the space provided and select "Only this IP address can remotely manage the Router". Before you enable this function, it is STRONGLY RECOMMENDED that you set your administrator password. Leaving the password empty will potentially open your Router to intrusion.

Remote Management:

ADVANCED FEATURE! Remote management allows you to make changes to your Router's settings from anywhere on the Internet. Before you enable this function, **MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD. More Info**

☐ **Any IP address can remotely manage the router.**

- **Only this IP address can remotely manage the router>**

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Enabling/Disabling Network Address Translation (NAT)

Note: This advanced feature should be modified by advanced users only.

NAT is the method by which the Router shares the single IP address assigned by your ISP with the other computers on your network and is enabled by default. NAT should only be disabled if your ISP assigns you multiple IP addresses or you need NAT disabled for an advanced system configuration. If you have a single IP address and you turn NAT off, the computers on your network will not be able to access the Internet. Other problems may also occur. Turning off NAT will disable your firewall functions.

ADVANCED FEATURE! Allows you to turn the Network Address Translation feature off. In almost every case you would NOT want to turn this feature off. **More Info**

- **NAT Enable / Disable >**   ⦿ Enable   ○ Disable

Enabling/Disabling UPnP

UPnP (Universal Plug-and-Play) is yet another advanced feature offered by your Belkin Router. It is a technology that offers seamless operation of voice messaging, video messaging, games, and other applications that are UPnP-compliant. Some applications require the Router's firewall to be configured in a specific way to operate properly. This usually requires opening TCP and UDP ports. An application that is UPnP-compliant has the ability to communicate with the Router, basically "telling" the Router which way it needs the firewall configured. The Router ships with the UPnP feature disabled. If you are using any applications that are UPnP-compliant, and wish to take advantage of the UPnP features, you can enable the UPnP feature. Simply select "Enable" in the "UPnP Enabling" section of the "Utilities" page. Click "Apply Changes" to save the change.

ADVANCED FEATURE! Allows you to turn the UPNP feature of the Router on or off. If you use applications that support UPnP, enabling UPnP will allow these applications to automatically configure the router. More Info

- **UPNP Enable / Disable >**   ⊙ Enable ○ Disable

Enabling/Disabling Auto Firmware Update

This innovation provides the Router with the built-in capability to automatically check for a new version of firmware and alert you that the new firmware is available. When you log into the Router's Web-Based Advanced User Interface, the Router will perform a check to see if new firmware is available. If so, you will be notified. You can choose to download the new version or ignore it. The Router ships with this feature enabled. If you want to disable it, select "Disable" and click "Apply Changes".

Auto Update Firmware Enabling:

ADVANCED FEATURE! Allows you to update firmware automatically if the Router is off. More Info

- **Auto Update Firmware Enable /**
  Disable >   ○ Enable ⊙ Disable

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Manually Configuring Network Settings

In order for your computer to properly communicate with your Router, you will need to change your PC's TCP/IP settings to DHCP.

Manually Configuring Network Adapters in Windows 2000, NT, XP, or Vista

1. Click "Start", "Settings", then "Control Panel".

2. Double-click on the "Network and dial-up connections" icon (Windows 2000) or the "Network" icon (Windows XP or Vista).

3. Right-click on the "Local Area Connection" associated with your network adapter and select "Properties" from the drop-down menu.

4. In the "Local Area Connection Properties" window, click "Internet Protocol (TCP/IP)" and click the "Properties" button. The following screen will appear:
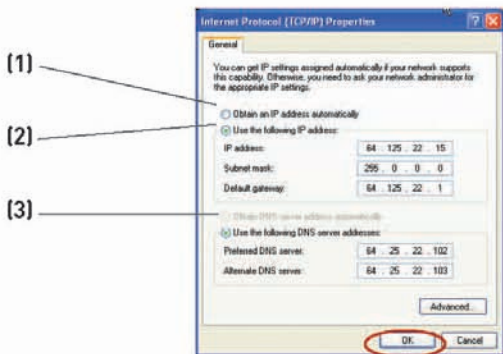
5. If "Use the following IP address" **(2)** is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

IP address:	
Subnet Mask:	
Default gateway:	
Preferred DNS server:	
Alternate DNS server:	

6. If not already selected, select "Obtain an IP address automatically" **(1)** and "Obtain DNS server address automatically" **(3)**. Click "OK".
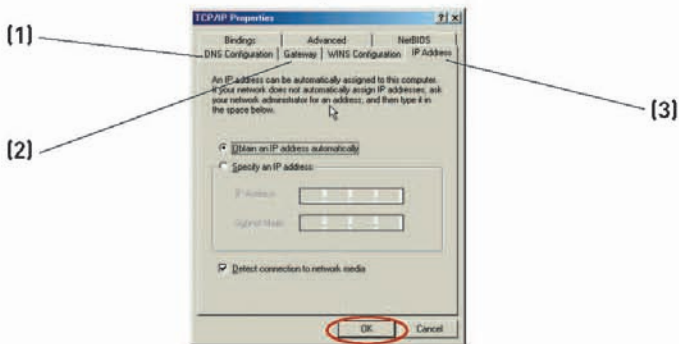
Your network adapter(s) are now configured for use with the Router.

Manually Configuring Network Settings

Manually Configuring Network Adapters in Windows 98SE or Me

1. Right-click on "My Network Neighborhood" and select "Properties" from the drop-down menu.

2. Select "TCP/IP -> settings" for your installed network adapter. You will see the following window.

(1)

(2)

(3)

3. If "Specify an IP address" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

IP address:	
Subnet Mask:	
Default gateway:	
Preferred DNS server:	
Alternate DNS server:	

4. Write in the IP address and subnet mask from the "IP Address" tab **(3)**.

5. Click the "Gateway" tab **(2)**. Write the gateway address down in the chart.

6. Click the "DNS Configuration" tab **(1)**. Write the DNS address(es) in the chart.

7. If not already selected, select "Obtain IP address automatically" in the "IP Address" tab. Click "OK".

Restart the computer. When the computer restarts, your network adapter(s) are now configured for use with the Router.
Set up the computer that is connected to the cable or DSL modem FIRST using these steps. You can also use these steps to add computers to your Router after the Router has been set up to connect to the Internet.

Manually Configuring Network Adapters in Mac OS up to 9.x
In order for your computer to properly communicate with your Router, you will need to change your Mac computer's TCP/IP settings to DHCP.

1. Pull down the Apple menu. Select "Control Panels" and select "TCP/IP".

2. You will see the TCP/IP control panel. Select "Ethernet Built-In" or "Ethernet" in the "Connect via:" drop-down menu **(1)**.
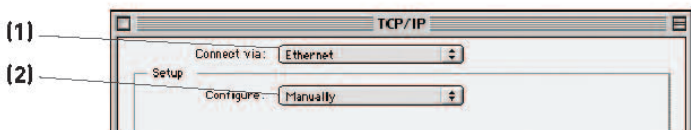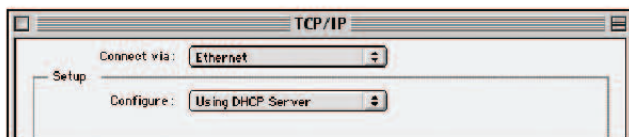

3. Next to "Configure" **(2)**, if "Manually" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

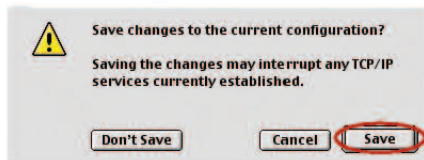
4. If not already set, at "Configure:", choose "Using DHCP Server". This will tell the computer to obtain an IP address from the Router.

5.   Close the window. If you made any changes, the following window will appear. Click "Save".

Restart the computer. When the computer restarts, your network settings are now configured for use with the Router.

Manually Configuring Network Adapters in Mac OS X
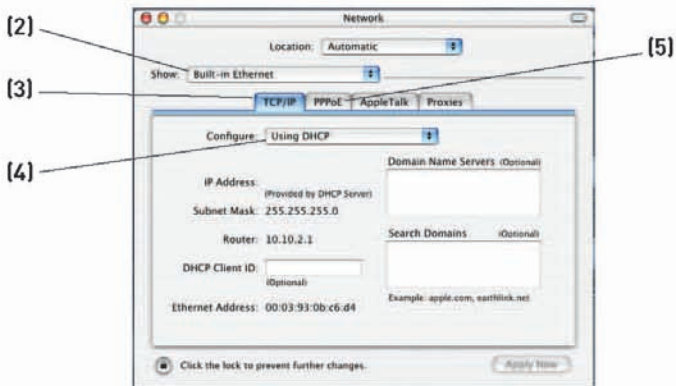
1. Click on the "System Preferences" icon.

2. Select "Network" **(1)** from the "System Preferences" menu.

(1)—

3. Select "Built-in Ethernet" **(2)** next to "Show" in the Network menu.

(2)—

(3)—

(4)—

(5)—

4. Select the "TCP/IP" tab **(3)**. Next to "Configure:" **(4)**, you should see "Manually" or "Using DHCP". If you do not, check the PPPoE tab **(5)** to make sure that "Connect using PPPoE" is NOT selected. If it is, you will need to configure your Router for a PPPoE connection type using your user name and password.

5. If "Manually" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

IP address:	
Subnet Mask:	
Router Address:	
Name Server Address:	

6. If not already selected, select "Using DHCP" next to "Configure:" **(4)**, then click "Apply Now".

Your network adapter(s) are now configured for use with the Router.

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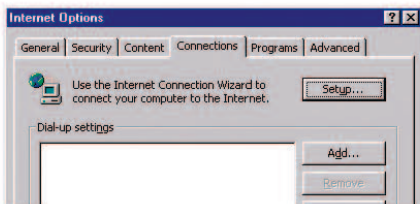
Recommended Web Browser Settings

In most cases, you will not need to make any changes to your web browser's settings. If you are having trouble accessing the Internet or the Web-Based Advanced User Interface, then change your browser's settings to the recommended settings in this section.

Internet Explorer 4.0 or Higher

1. Start your web browser. Select "Tools" then "Internet Options".
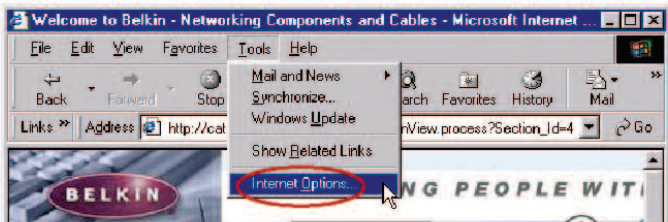
2. In the "Internet Options" screen, there are three selections: "Never dial a connection", "Dial whenever a network connection is not present", and "Always dial my default connection". If you can make a selection, select "Never dial a connection". If you cannot make a selection, go to the next step.

3. Under the "Internet Options" screen, click on "Connections" and select "LAN Settings...".

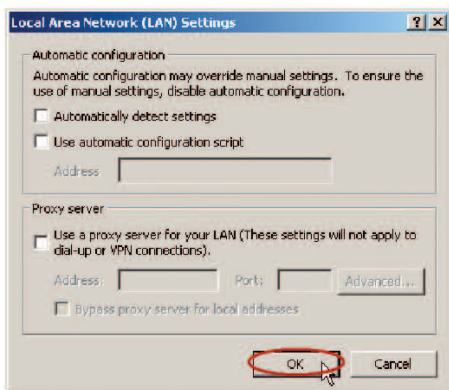**4.** Make sure there are no check marks next to any of the displayed options: "Automatically detect settings", "Use automatic configuration script", and "Use a proxy server". Click "OK". Then click "OK" again in the "Internet Options" page.

Netscape® Navigator® 4.0 or Higher

1. Start Netscape. Click on "Edit" then "Preferences".

2. In the "Preferences" window, click on "Advanced" then select "Proxies". In the "Proxies" window, select "Direct connection to the Internet".
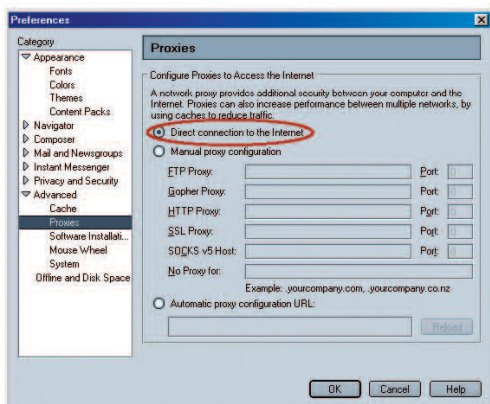
Troubleshooting

Problem:

Installation CD does not automatically start.

| Solution: |
| --- |

If the CD-ROM does not start the Easy Install Wizard automatically, it could be that the computer is running other applications that are interfering with the CD drive.
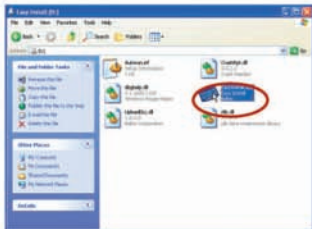
1. If the Easy Install Wizard screen does not appear within 15—20 seconds, open up your CD-ROM drive by double-clicking on the "My Computer" icon that is located on your desktop.

2. Next, double-click on the CD-ROM drive that the Easy Install Wizard Software CD has been placed in to start the installation.
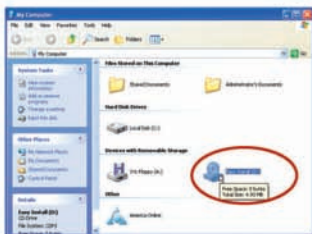
3. The Easy Install Wizard should start within a few seconds. If, instead, a window appears showing the files on the CD, double-click on the icon labeled "EasyInstall.exe".

4. If the Easy Install Wizard still does not start, reference the section titled "Manually Configuring Network Settings" (page 90 of this User Manual) for an alternate setup method.