

# USING THE WEB-BASED ADVANCED USER INTERFACE

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## Choosing an Application

Select your application from the drop-down list. Click "Add". The settings will be transferred to the next available space in the screen. Click "Apply Changes" to save the setting for that application. To remove an application, select the number of the row that you want to remove then click "Clear".

## Manually Entering Settings into the Virtual Server

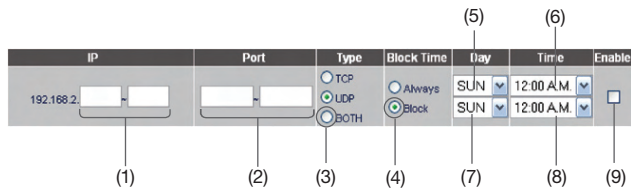
To manually enter settings, enter the IP address in the space provided for the internal (server) machine, the port(s) required to pass (use a comma between multiple ports), select the port type (TCP or UDP), and click "Apply Changes". You can only pass one port per internal IP address. Opening ports in your firewall can pose a security risk. You can enable and disable settings very quickly. It is recommended that you disable the settings when you are not using a specific application.

## Setting Client IP Filters

The Router can be configured to restrict access to the Internet, email, or other network services at specific days and times. Restriction can be set for a single computer, a range of computers, or multiple computers.

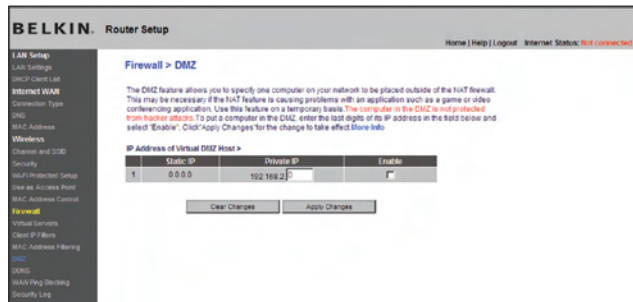
IP	Port	Type	Block Time	Day	Time	Enable
192.168.1		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>
192.168.2		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>
192.168.2		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>
192.168.2		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>
192.168.2		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>
192.168.2		TCP	Always	SUN	12:00 AM	<input type="checkbox"/>
		UDP	Block	SUN	12:00 AM	<input type="checkbox"/>

To restrict Internet access to a single computer for example, enter the IP address of the computer you wish to restrict access to in the IP fields (1). Next, enter "80" in both the port fields (2). Select "Both" (3). Select "Block" (4). You can also select "Always" to block access all of the time. Select the day to start on top (5), the time to start on top (6), the day to end on the bottom (7), and the time to stop (8) on the bottom. Select "Enable" (9). Click "Apply Changes". The computer at the IP address you specified will now be blocked from Internet access at the times you specified. **Note:** Be sure you have selected the correct time zone under "Utilities> System Settings> Time Zone".



## 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.



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. If you are using multiple static WAN IP addresses, it is possible to select which WAN IP address the DMZ host will be directed to. Type in the WAN IP address you wish the DMZ host to direct to, enter the last two digits of the IP address of the DMZ host computer, select "Enable" and click "Apply Changes".

## Using Dynamic DNS

The Dynamic DNS service allows you to alias a dynamic IP address to a static host name in any of the many domains DynDNS.org offers, allowing your network computers to be more easily accessed from various locations on the Internet. DynDNS.org provides this service, for up to five host names, free to the Internet community.

The Dynamic DNS<sup>SM</sup> service is ideal for a home website, file server, or to make it easy to access your home PC and stored files while you're at work. Using the service can ensure that your host name always points to your IP address, no matter how often your ISP changes it. When your IP address changes, your friends and associates can always locate you by visiting yourname.dyndns.org instead!

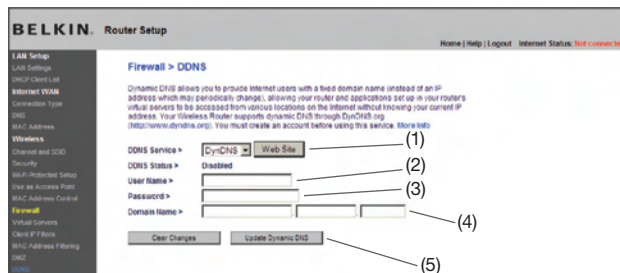
To register free for your Dynamic DNS host name, please visit <http://www.dyndns.org>.

## Setting up the Router's Dynamic DNS Update Client

You must register with DynDNS.org's free update service before using this feature. Once you have your registration, follow the directions below.

1. Select DynDNS as the "DDNS Service" (1).
2. Enter your DynDNS.org user name in the "User Name" field (2).
3. Enter your DynDNS.org password in the "Password" field (3).
4. Enter the DynDNS.org domain name you set up with DynDNS.org in the "Domain Name" field (4).
5. Click "Update Dynamic DNS" (5) to update your IP address.

Whenever your IP address assigned by your ISP changes, the Router will automatically update DynDNS.org's servers with your new IP address. You can also do this manually by clicking the "Update Dynamic DNS" button (5).



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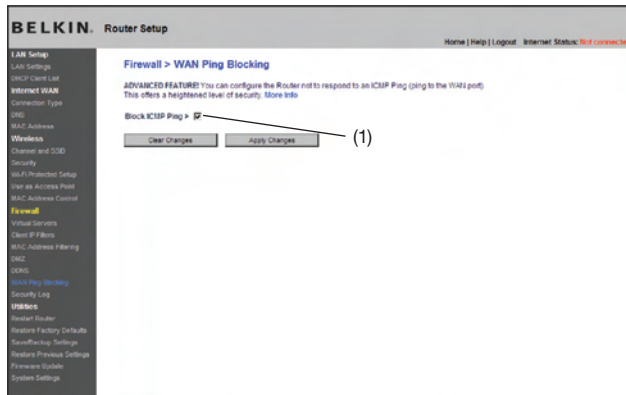
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## Blocking an ICMP Ping

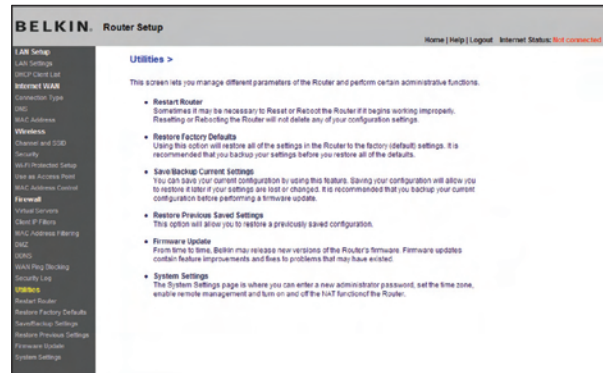
Computer hackers use what is known as “pinging” to find potential victims on the Internet. By pinging a specific IP address and receiving a response from the IP address, a hacker can determine that something of interest might be there. The Router can be set up so it will not respond to an ICMP ping from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



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

The “Utilities” screen lets you manage different parameters of the Router and perform certain administrative functions.



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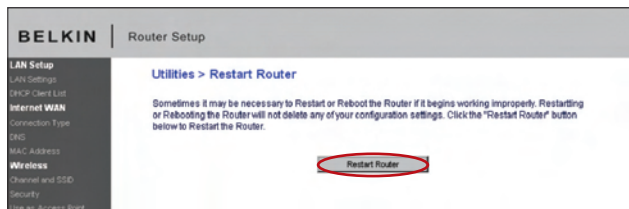
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### Restarting the Router

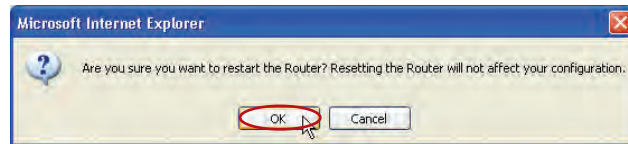
Sometimes it may be necessary to restart or reboot the Router if it begins working improperly. Restarting or rebooting the Router will NOT delete any of your configuration settings.

#### Restarting the Router to Restore Normal Operation

1. Click the “Restart Router” button.



2. The following message will appear. Click “OK”.



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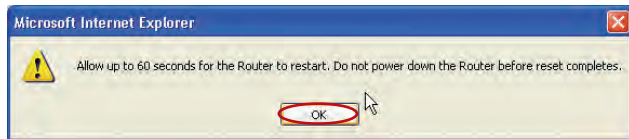
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- The following message will appear. Restarting the Router can take up to 60 seconds. It is important not to turn off the power to the Router during the restart.



- A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router will be restarted. The Router 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.

### Restoring Factory Default Settings

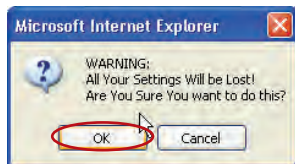
Using this option will restore all of the settings in the Router to the factory (default) settings. It is recommended that you back up your settings before you restore all of the defaults.

- Click the "Restore Defaults" button.

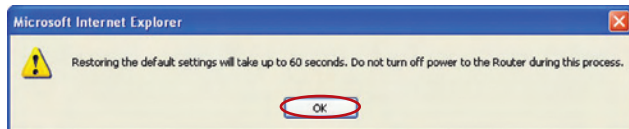


## USING THE WEB-BASED ADVANCED USER INTERFACE

2. The following message will appear. Click “OK”.



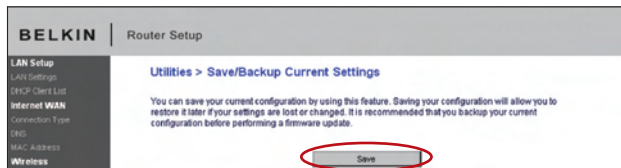
3. The following message will appear. Restoring the defaults includes restarting the Router. It can take up to 60 seconds. It is important not to turn the power to the Router off during the restart.



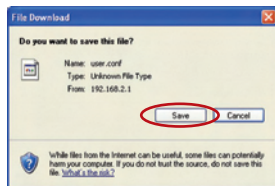
4. A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router's defaults will be restored. The Router home page should appear automatically. If it does not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

## Saving a Current Configuration

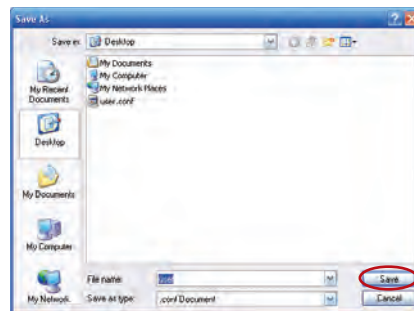
You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed. It is recommended that you back up your current configuration before performing a firmware update.



1. Click "Save". A window called "File Download" will open. Click "Save".

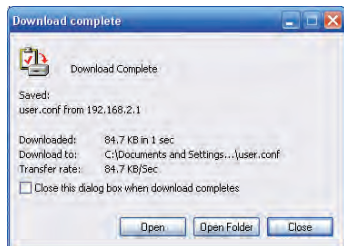


2. A window will open that allows you to select the location where you want to save the configuration file. Select a location. You can name the file anything you want, or use the default name "user.conf". Be sure to name the file so you can locate it yourself later. When you have selected the location and name of the file, click "Save".





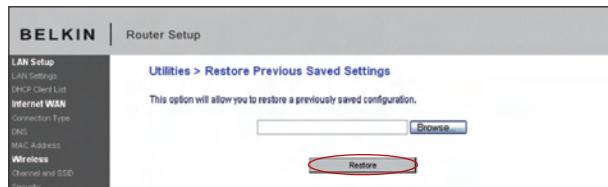
- When the save is complete, you will see the window below. Click "Close".



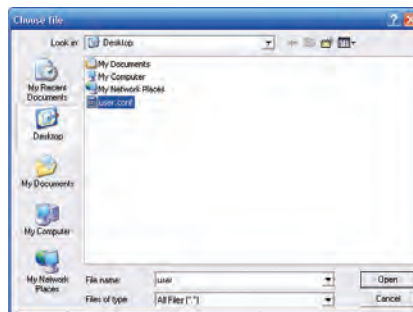
The configuration is now saved.

## Restoring a Previous Configuration

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

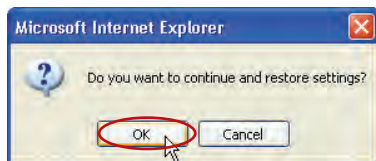


- Click "Browse". A window will open that allows you to select the location of the configuration file. All configuration files end with a ".conf". Locate the configuration file you want to restore and double-click on it.



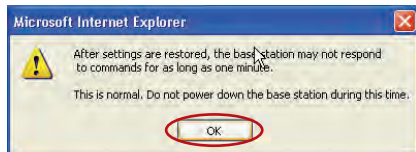
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2. You will be asked if you want to continue. Click "OK".



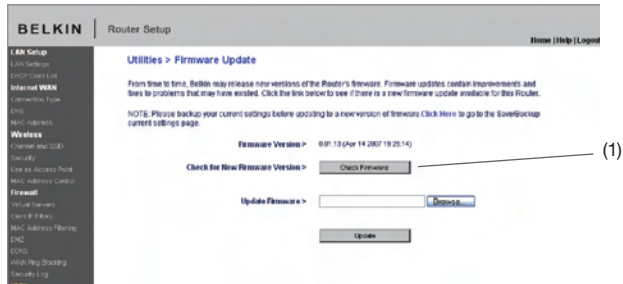
4. A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router's configuration will be restored. The Router's home page should appear automatically. If not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

3. A reminder window will appear. It will take up to 60 seconds for the configuration restoration to complete. Click "OK".



## 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 have existed. 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.



### Checking for a New Version of Firmware

The "Check Firmware" (1) button allows you to instantly check for a new version of firmware. When you click the button, a new browser window will appear informing you that either no new firmware is available or that there is a new version available. If a new version is available, you will have the option to download it.

### Downloading a New Version of Firmware

If you click the "Check Firmware" button and a new version of firmware is available, you will see a screen similar to the one below:



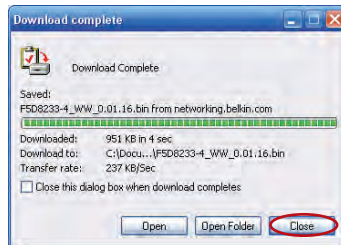
1. To download the new version of firmware, click "Download".

## USING THE WEB-BASED ADVANCED USER INTERFACE

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 locate the file in a place where you can locate it yourself later. When you have selected the location, click “Save”.



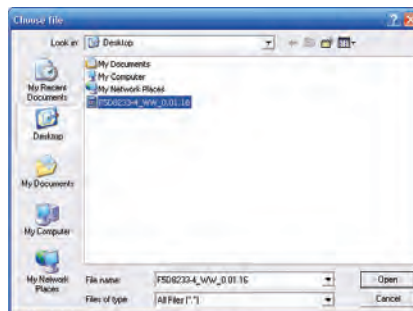
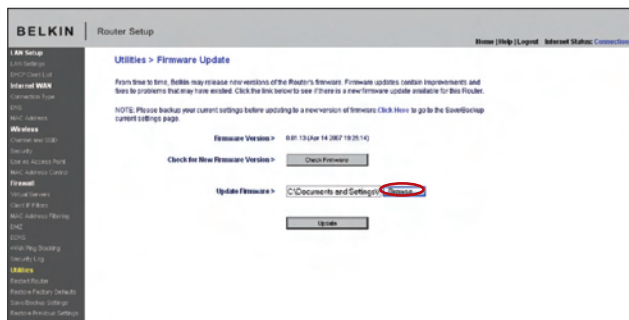
3. When the save is complete, you will see the following window. Click “Close”.



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.



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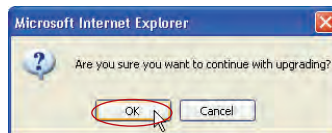
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- The "Update Firmware" box will now display the location and name of the firmware file you just selected. Click "Update".



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



- 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".



- A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router firmware update will be complete. The Router 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.

### 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 >  (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 advanced setup interface. The timer starts when there has been no activity. For example, imagine 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, 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 advanced setup interface at one time.

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## 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. You have the option to select a primary and a backup NTP server to keep your Router's clock synchronized. Select your desired NPT server from the drop-down box, or simply keep it as is.

If you reside in an area that observes daylight saving, then place a check mark in the box next to "Enable 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.

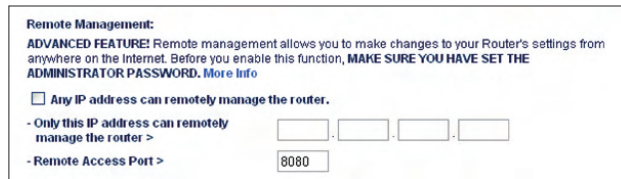


## Enabling Remote Management

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.

Advanced Feature: The "Remote Access Port" option allows you to configure the desired "Remote Access Port for Remote Management" feature. The default access port is set to port 80.





### 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, and in some instances, setting trigger 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.

**UPnP Enabling:**

**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 advanced 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.

**Auto Update Firmware Enabling:**

**ADVANCED FEATURE!** Allows you to automatically check the availability of firmware updates for your router. [More Info](#)

- Auto Update Firmware Enable / Disable >



Enable



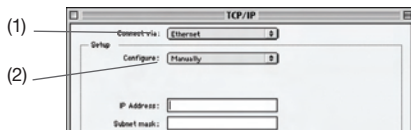
Disable

## MANUALLY CONFIGURING NETWORK SETTINGS

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 Settings in Mac OS up to 9.x

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).



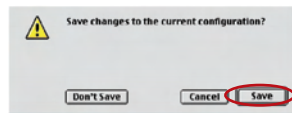
3. Next to "Configure" (2), if "Manually" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

IP address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Router Address:	<input type="text"/>
Name Server Address:	<input type="text"/>

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 SETTINGS

## Manually Configuring Network Settings in Mac OS X

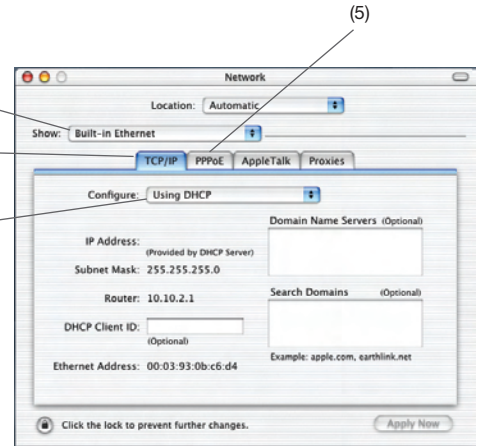
1. Click on the “System Preferences” icon.



2. Select “Network” (1) from the “System Preferences” menu.



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



## MANUALLY CONFIGURING NETWORK SETTINGS

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:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Router Address:	<input type="text"/>
Name Server Address:	<input type="text"/>

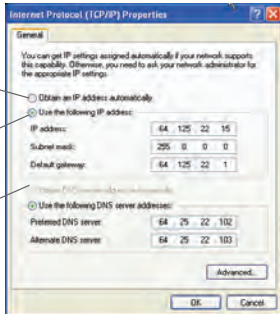
6. If not already selected, select “Using DHCP” next to “Configure” (4), then click “Apply Now”.

**Your network settings are now configured for use with the Router.**

## MANUALLY CONFIGURING NETWORK SETTINGS

### Manually Configuring Network Settings in Windows 2000, NT, or XP

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).
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 the table below. You will need to enter this information into the Router.

IP address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Default gateway:	<input type="text"/>
Preferred DNS server:	<input type="text"/>
Alternate DNS server:	<input type="text"/>

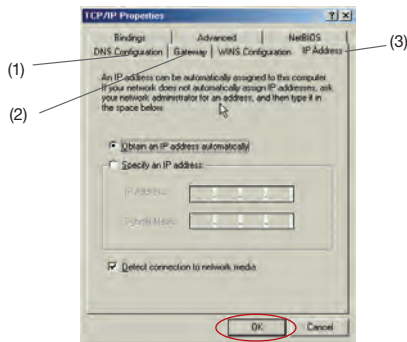
6. If not already selected, select “Obtain an IP address automatically” (1) and “Obtain DNS server address automatically” (3). Click “OK”.

**Your network settings are now configured for use with the Router.**

## MANUALLY CONFIGURING NETWORK SETTINGS

### Manually Configuring Network Settings in Windows 98 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.



3. If “Specify and 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.
4. Write 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.

IP address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Default gateway:	<input type="text"/>
Preferred DNS server:	<input type="text"/>
Alternate DNS server:	<input type="text"/>

7. If not already selected, select “Obtain IP address automatically” on the IP address tab. Click “OK”.

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

# RECOMMENDED WEB BROWSER SETTINGS

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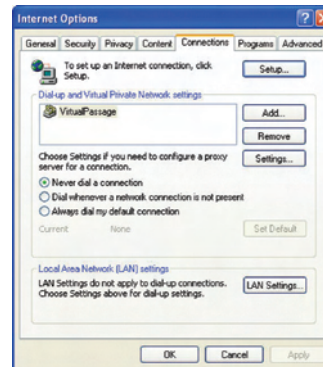
10

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.

## Microsoft® Internet Explorer 4.0 or Higher

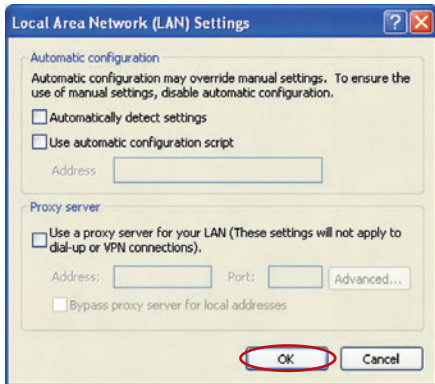
1. Start your web browser. Select "Tools" then "Internet Options".

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, select "Always dial my default connection". If you cannot make a selection, go to the next step.



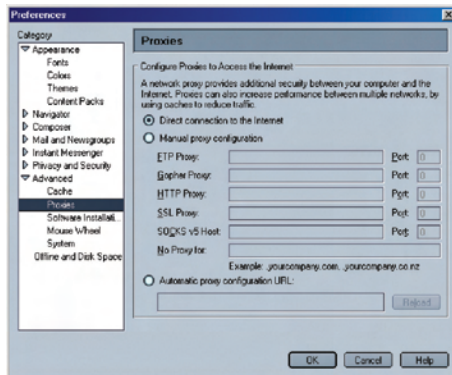
## RECOMMENDED WEB BROWSER SETTINGS

- Under the “Internet Options” screen, click on “Connections” and select “LAN Settings...”.
- 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

- Start Netscape. Click on “Edit” then “Preferences”.
- In the “Preferences” window, click on “Advanced” then select “Proxies”. In the “Proxies” window, select “Direct connection to the Internet”.





### Setup Assistant CD does not automatically start.

If the CD-ROM does not start the Setup Assistant automatically, it could be that the computer is running other applications that are interfering with the CD drive.

1. If the Setup Assistant Welcome 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 Setup Assistant CD has been placed in to start the installation.
3. The Setup Assistant should start within a few seconds. If, instead, a window appears showing the files on the CD, double-click on the icon labeled "SetupAssistant".
4. If the Setup Assistant still does not start, reference the section titled "Manually Configuring Network Settings" (page 68) of this User Manual for an alternative setup method).

### Setup Assistant cannot find my Router.

If the Setup Assistant is not able to find the Router during the installation process, please check the following items:

1. If the Setup Assistant is not able to find the Router during the installation process, there may be third-party firewall software installed on the computer attempting to access the Internet. Examples of third-party firewall software are ZoneAlarm, BlackICE PC Protection, McAfee Personal Firewall, and Norton

Personal Firewall. If you do have firewall software installed on your computer, please make sure that you properly configure it. You can determine if the firewall software is preventing Internet access by temporarily turning it off. If, while the firewall is disabled, Internet access works properly, you will need to change the firewall settings to function properly when it is turned on. Please refer to the instructions provided by the publisher of your firewall software for instructions on configuring the firewall to allow Internet access.

2. Unplug power to the Router for 10 seconds, and then plug the power back into the Router. Ensure that the Router's "router" LED is on; it should be solid BLUE. If not, check to make sure that the AC adapter is connected to the Router and plugged into a wall outlet.
3. Ensure that you have a cable connected between the network (Ethernet) port on the back of the computer and one of the "to Wired Computers" ports on the back of the Router.  
**Note:** The computer should NOT be connected to the port labeled "to Modem" on the back of the Router.
4. Try shutting down and restarting your computer, then rerunning the Setup Assistant.

If the Setup Assistant is still unable to find the Router, reference the section titled "Manually Configuring Network Settings" for installation steps.