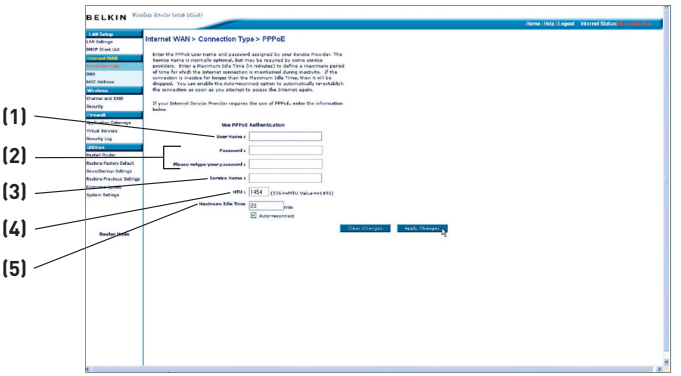
Setting your ISP Connection Type to PPPoE

Most DSL providers use PPPoE as the connection type. If you use a DSL modem to connect to the Internet, your ISP may use PPPoE to log you into the service. If you have an Internet connection in your home or small office that doesn't require a modem, you may also use PPPoE.



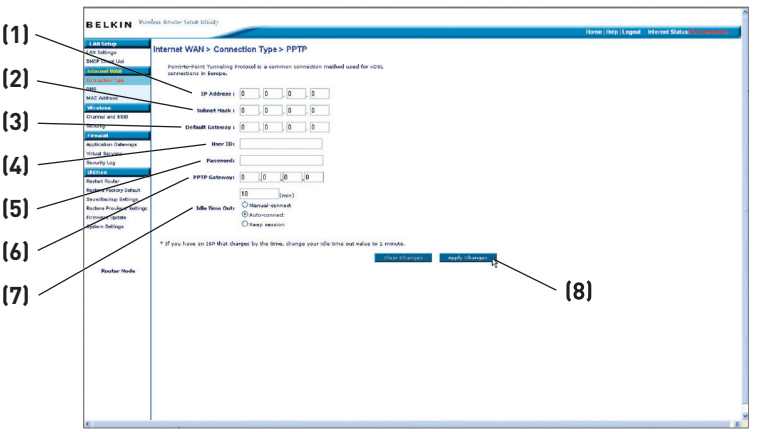
Your connection type is PPPoE if:

1) Your ISP gave you a user name and password, which is required to connect to the Internet;
2) Your ISP gave you software such as WinPOET or Enternet300 that you use to connect to the Internet; or
3) You have to double-click on a desktop icon other than your browser to get on the Internet.

1. **User Name**
   This space is provided to type in your user name that was assigned by your ISP.
2. **Password**
   Type in your password and re-type it into the “Retype Password” box to confirm it.
3. **Service Name**
   A service name is rarely required by an ISP. If you are not sure if your ISP requires a service name, leave this blank.
4. **MTU**
   The MTU setting should never be changed unless your ISP gives you a specific MTU setting. Making changes to the MTU setting can cause problems with your Internet connection including disconnection from the Internet, slow Internet access, and problems with Internet applications working properly.
5. **Maximum Idle Time**
   The “Maximum Idle Time” feature is used to automatically disconnect the Router from your ISP when there is no activity for a specified period of time. For instance, placing a check mark next to this option and entering “5” into the minute field will cause the Router to disconnect from the Internet after five minutes of no Internet activity. This option should be used if you pay for your Internet service by the minute.

Setting your Internet Service Provider (ISP) Connection Type to Point-to-Point Tunneling Protocol (PPTP)

[European Countries Only]. Some ISPs require a connection using PPTP protocol, a type of connection most common in European countries. This sets up a direct connection to the ISP's system. Type in the information provided by your ISP in the space provided. When you have finished, click "Apply Changes" **(8)**. After you apply the changes, if your Router is set up properly, the "Internet Status" indicator will read "Connected".



1. **IP Address**
   Provided by your ISP. Enter the IP address here.
2. **Subnet Mask**
   Provided by your ISP. Enter your subnet mask here.
3. **Default Gateway**
   Provided by your ISP. Enter your default gateway here.
4. **User ID**
   Provided by your ISP. Enter your PPTP account name here.

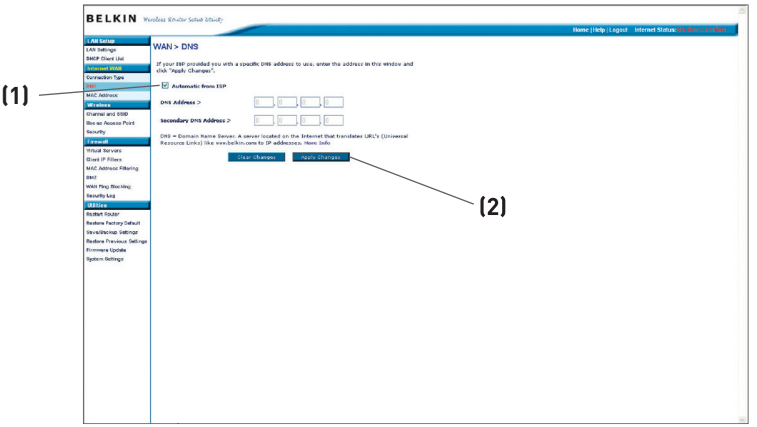
5. **Password**
   Type your password here. Then retype it into the “Retype Password” box.

6. **PPTP Default Gateway**
   Provided by your ISP. Enter your service IP address here.

7. **Idle Time Out**
   The “Maximum Idle Time” feature is used to automatically disconnect the Router from your ISP when there is no activity for a specified period of time. For instance, if you place a check mark next to this option and enter “5” into the minute field, the Router will disconnect from the Internet after five minutes of no Internet activity. This option should be used if you pay for your Internet service by the minute. This feature also allows you to select “manual connect”, “auto connect”, and “keep session” options.

Setting Custom Domain Name Server (DNS) Settings

A “Domain Name Server” is a server located on the Internet that translates Universal Resource Locators (URLs) like “www.belkin.com” into IP addresses. Many Internet Service Providers (ISPs) do not require you to enter this information into the Router. The “Automatic from ISP” box **(1)** should be checked if your ISP did not give you a specific DNS address. If you are using a static IP connection type, then you may need to enter a specific DNS address and secondary DNS address for your connection to work properly. If your connection type is dynamic or PPPoE, it is likely that you do not have to enter a DNS address. Leave the “Automatic from ISP” box checked. To enter the DNS address settings, uncheck the “Automatic from ISP” box and enter your DNS entries in the spaces provided. Click “Apply Changes” **(2)** to save the settings.



Configuring your WAN Media Access Controller (MAC) Address

All network components including cards, adapters, and routers, have a unique “serial number” called a MAC address. Your Internet Service Provider may record the MAC address of your computer’s adapter and only let that particular computer connect to the Internet service. When you install the Router, its own MAC address will be “seen” by the ISP and may cause the connection not to work. Belkin has provided the ability to clone (copy) the MAC address of the computer into the Router. This MAC address, in turn, will be seen by the ISP’s

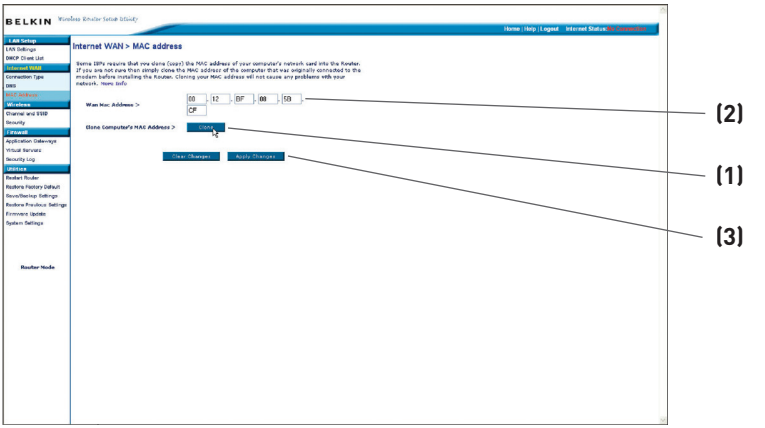
system as the original MAC address and will allow the connection to work. If you are not sure whether your ISP needs to see the original MAC address, simply clone the MAC address of the computer that was originally connected to the modem. Cloning the address will not cause any problems with your network.

Cloning your MAC Address

To clone your MAC address, make sure that you are using the computer that was ORIGINALLY CONNECTED to your modem before the Router was installed. Click the “Clone” button **(1)**. Click “Apply Changes” **(3)**. Your MAC address is now cloned to the Router.

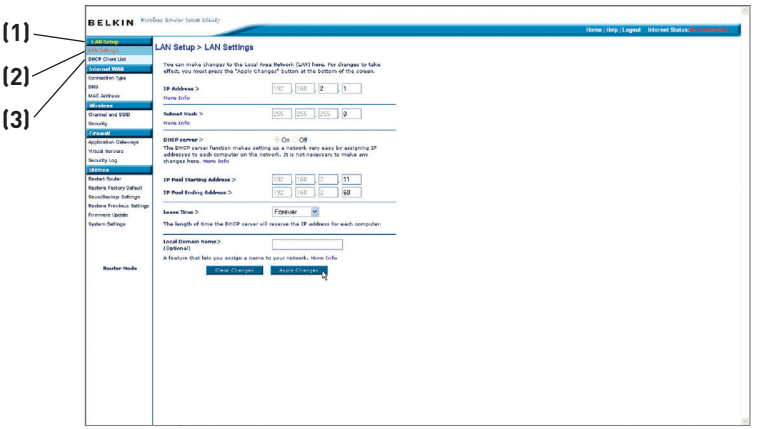
Entering a Specific MAC Address

In certain circumstances you may need a specific WAN MAC address. You can manually enter one in the “MAC Address” page. Type in a MAC address in the spaces provided **(2)** and click “Apply Changes” **(3)** to save the changes. The Router’s WAN MAC address will now be changed to the MAC address you specified.



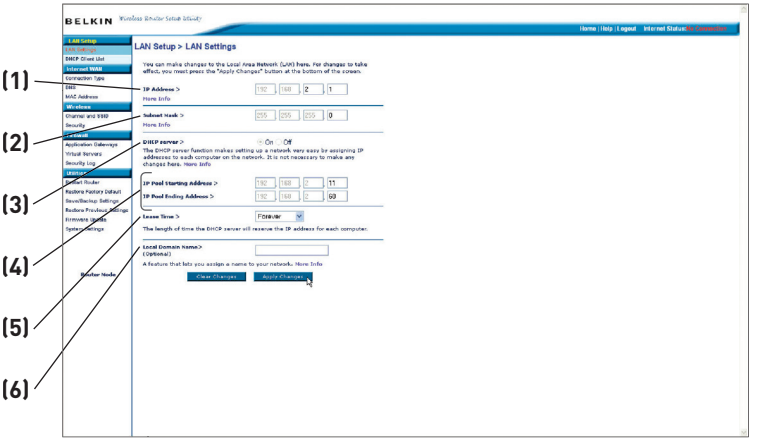
Viewing LAN Settings

Clicking on the header of the “LAN Setup” tab **(1)** will take you to its header page. A quick description of the functions can be found here. To view the settings or make changes to any of the LAN settings, click on “LAN Settings” **(2)** or to view the list of connected computers, click on “DHCP Client List” **(3)**.



Changing LAN Settings

All settings for the internal LAN setup of the Router can be viewed and changed here.



1. **IP Address**
   The “IP address” is the internal IP address of the Router. The default IP address is “192.168.2.1”. To access the Web-Based Advanced User Interface, type this IP address into the address bar of your browser. This address can be changed if needed. To change the IP address, type in the new IP address and click “Apply Changes”. The IP address you choose should be a non-routable IP.
   Examples of a non-routable IP are:
   192.168.x.x (where x is anything between 0 and 255), and
   10.x.x.x (where x is anything between 0 and 255).

2. **Subnet Mask**
   There is no need to change the subnet mask. This is a unique, advanced feature of your Belkin Router. It is possible to change the subnet mask if necessary; however, do **NOT** make changes to the subnet mask unless you have a specific reason to do so. The default setting is “255.255.255.0”.

3. **DHCP Server**
   The DHCP server function makes setting up a network very easy by assigning IP addresses to each computer on the network automatically. The default setting is “On”. The DHCP server can be turned OFF if necessary; however, in order to do so you must manually set a static IP address for each computer on your network. To turn off the DHCP server, select “Off” and click “Apply Changes”.

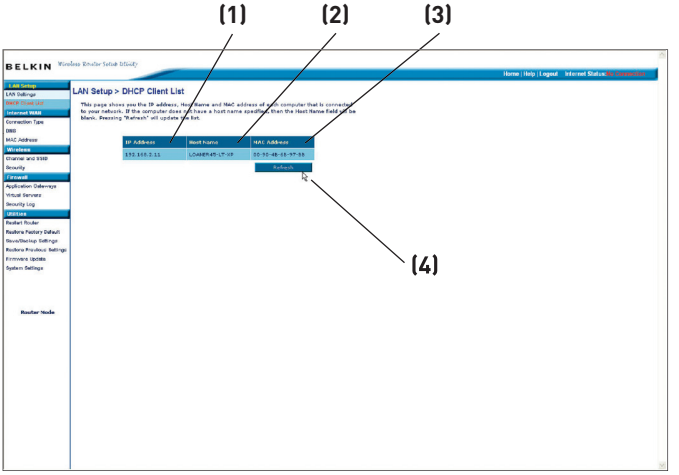
4. **IP Pool**
   The range of IP addresses set aside for dynamic assignment to the computers on your network. The default is 2–100 (99 computers). If you want to change this number, you can do so by entering a new starting and ending IP address and clicking on “Apply Changes”. The DHCP server can assign 100 IP addresses automatically. This means that you cannot specify an IP address pool larger than 100 computers. For example, starting at 50 means you have to end at 150 or lower so as not to exceed the 100-client limit. The starting IP address must be lower in number than the ending IP address.

5. **Lease Time**
   The length of time the DHCP server will reserve the IP address for each computer. We recommend that you leave the lease time set to “Forever”. The default setting is “Forever”, meaning that any time a computer is assigned an IP address by the DHCP server, the IP address will not change for that particular computer. Setting lease times for shorter intervals such as one day or one hour frees IP addresses after the specified period of time. This also means that a particular computer’s IP address may change over time. If you have set any of the other advanced features of the Router such as DMZ or client IP filters, these are dependent on the IP address. For this reason, you will not want the IP address to change.

6. **Local Domain Name**
   The default setting is “Belkin”. You can set a local domain name (network name) for your network. There is no need to change this setting unless you have a specific advanced need to do so. You can name the network anything you want such as “MY NETWORK”.

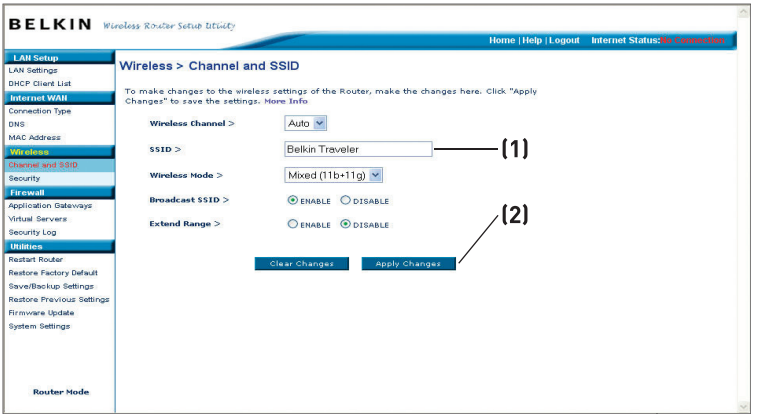
Viewing the DHCP Client List Page

You can view a list of the computers (known as clients), which are connected to your network. You are able to view the IP address **(1)** of the computer, the host name **(2)** (if the computer has been assigned one), and the MAC address **(3)** of the computer's network interface card (NIC). Pressing the "Refresh" **(4)** button will update the list. If there have been any changes, the list will be updated.



Configuring the Wireless Network Settings

The “Wireless” tab lets you make changes to the wireless network settings. From this tab, you can make changes to the wireless network name (SSID), operating channel, and encryption security settings. You can also configure the Router to be used as an access point.



Changing the Wireless Network Name (SSID)

To identify your wireless network, a name called the SSID (Service Set Identifier) is used. The default SSID of the Router is “Belkin Traveler”. You can change this to a name of your choice or leave it unchanged. If there are other wireless networks operating in your area, you will want to make sure that your SSID does not match that of another wireless network in the area. To change the SSID, type the SSID that you want to use in the “SSID” field **(1)** and click “Apply Changes” **(2)**. The change will be effective immediately. If you make a change to the SSID, your wireless-equipped computers may also need to be reconfigured to connect to your newly named network. Refer to the documentation of your wireless network adapter for information on making this change.

Securing your Wi-Fi® Network

Here are a few different ways you can maximize the security of your wireless network and protect your data from prying eyes and ears. This section is intended for the home, home office, and small office user. At the time of this User Manual's publication, there are three encryption methods available.

Name	64-bit Wired Equivalent Privacy	128-bit Wired Equivalent Privacy	Wi-Fi Protected Access-TKIP	Wi-Fi Protected Access-AES
Acronym	64-bit WEP	128-bit WEP	WPA-TKIP	WPA-AES
Security	Good	Better	Best	Best
Features	Static keys	Static keys	Dynamic key encryption and mutual authentication	Dynamic key encryption and mutual authentication
	Encryption keys based on RC4 algorithm (typically 40-bit keys)	More secure than 64-bit WEP using a key length of 104 bits plus 24 additional bits of system-generated data	TKIP (temporal key integrity protocol) added so that keys are rotated and encryption is strengthened	AES (Advanced Encryption Standard) does not cause any throughput loss

WEP (Wired Equivalent Privacy)

WEP (Wired Equivalent Privacy) is a common protocol that adds security to all Wi-Fi-compliant wireless products. WEP was designed to give wireless networks the equivalent level of privacy protection as a comparable wired network.

64-Bit WEP

64-bit WEP was first introduced with 64-bit encryption, which includes a key length of 40 bits plus 24 additional bits of system-generated data (64 bits total). Some hardware manufacturers refer to 64-bit as 40-bit encryption. Shortly after the technology was introduced, researchers found that 64-bit encryption was too easy to decode.