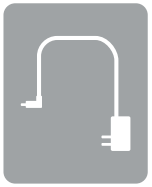
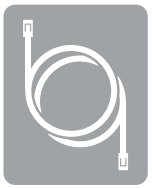
Package Contents

DIR-817LW Wireless AC750 Dual Band Cloud Router



Power Adapter



Ethernet Cable

Wi-Fi Configuration Card

Quick Install Guide

If any of the above items are missing, please contact your reseller.

Note: *Using a power supply with a different voltage rating than the one included with the DIR-817LW will cause damage and void the warranty for this product.*

System Requirements

Network Requirements	• An Ethernet-based broadband modem
Web-based Configuration Utility Requirements	**Computer with the following:** • Windows® 8, 7, Vista®, XP SP2, or Mac OS® X (v10.4) • An installed Ethernet adapter or wireless adapter **Supported Browsers:** • Internet Explorer 7 or higher • Firefox • Chrome • Safari 4 or higher **Windows® Users:** Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.
mydlink Requirements	For mydlink and mydlink app requirements, refer to: **http://www.mydlink.com**

Introduction

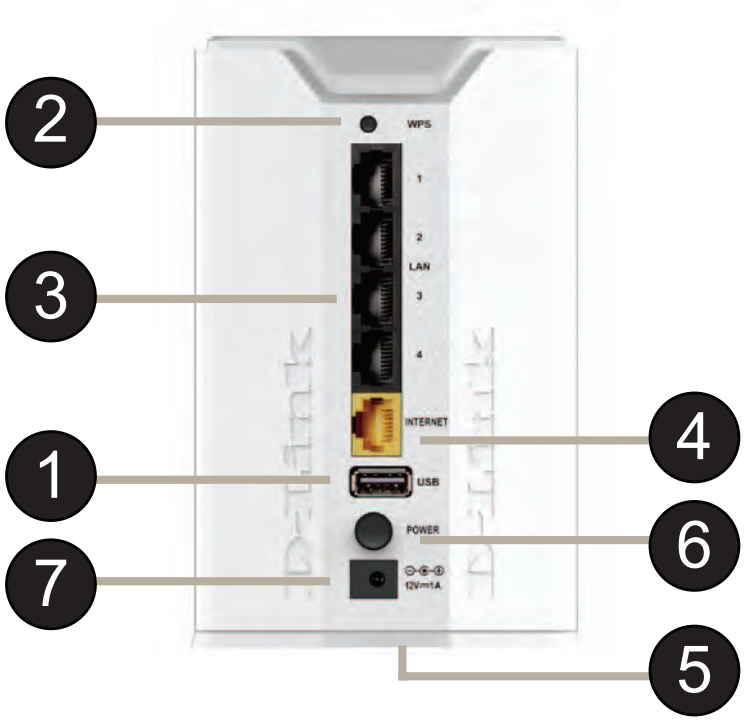
The DIR-817LW Wireless AC750 Dual Band Cloud Router provides revolutionary 802.11ac wireless speed - up to 750Mbps - for flawless HD video streaming to multiple devices.

With ground-breaking mydlink Cloud Services, you can monitor your home network from anywhere on your iPhone, iPad, and Android device. See websites that are being visited, block unwanted devices and receive automatic e-mail alerts when unauthorized connections are attempted. With the mydlink SharePort™ app, you can remotely access your media on a USB drive or SD card connected to your DIR-817LW from your iPhone, iPad, or Android device. Best of all, the apps for network management and file access are free.

* Maximum wireless signal rate derived from IEEE Standard 802.11ac (draft), 802.11a, 802.11g, and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Hardware Overview

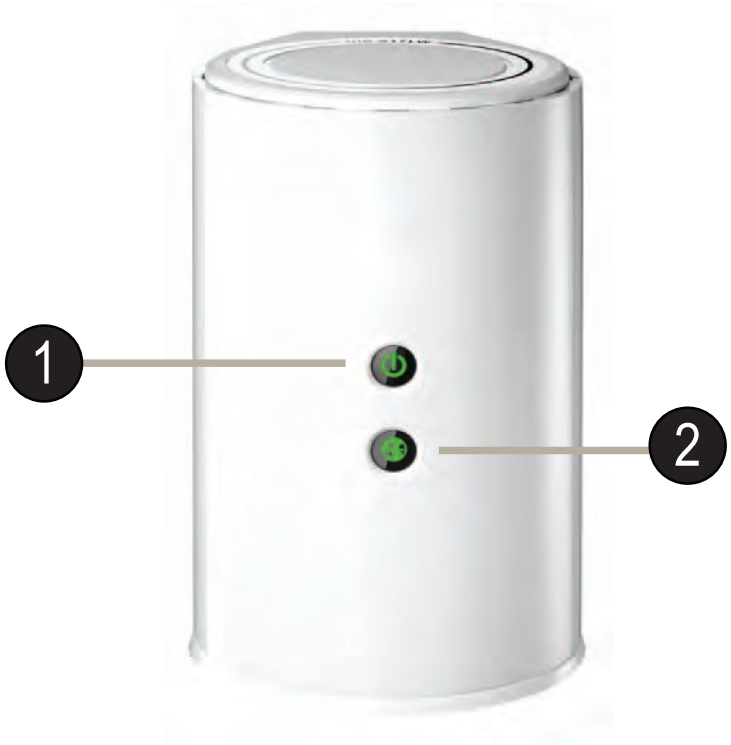
Connections



1	USB Port	Connect a USB flash drive to share content throughout your network.
2	WPS Button	Press to start the WPS process. The Internet LED will start to blink.
3	LAN Ports (1-4)	Connect 10/100 Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
4	Internet Port	Using an Ethernet cable, connect your broadband modem to this port.
5	Reset Button	Insert a paperclip in the hole and wait for 10 seconds to reset the router to default settings.
6	Power Button	Press the power button to power on and off.
7	Power Receptor	Receptor for the supplied power adapter.

Hardware Overview

LEDs



1	Power LED	A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process.
2	Internet LED	A solid light indicates connection on the Internet port.

Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- **Users with DSL providers** - If you are using a PPPoE connection, you will need your PPPoE user name and password. If you do not have this information, contact your Internet provider. Do not proceed until you have this information.
- **Users with Cable providers** - Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to five minutes.
- **Advanced Users** - If your ISP provided you with a modem/router combo, you will need to set it to "bridge" mode so the DIR-817LW router can work properly. For details, contact your ISP or refer to the user manual for your modem/router device.

Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

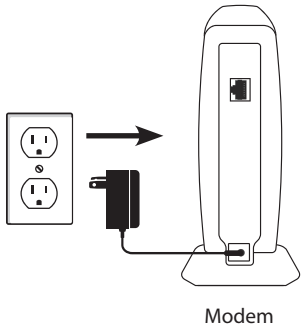
3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

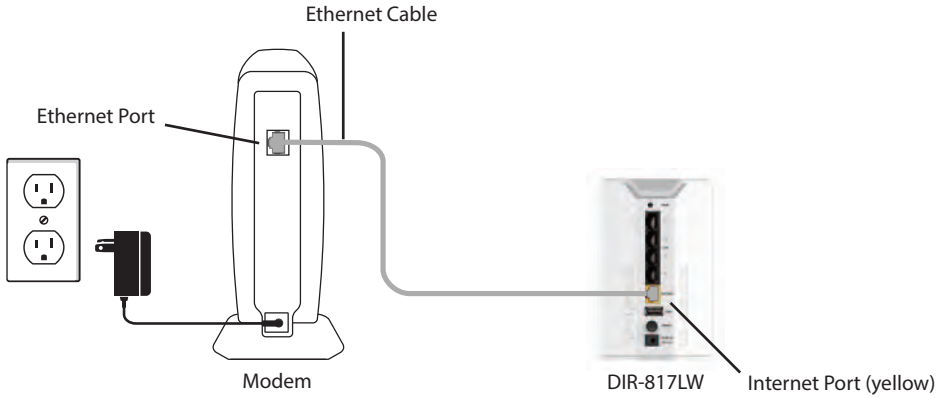
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

Connect to your Network

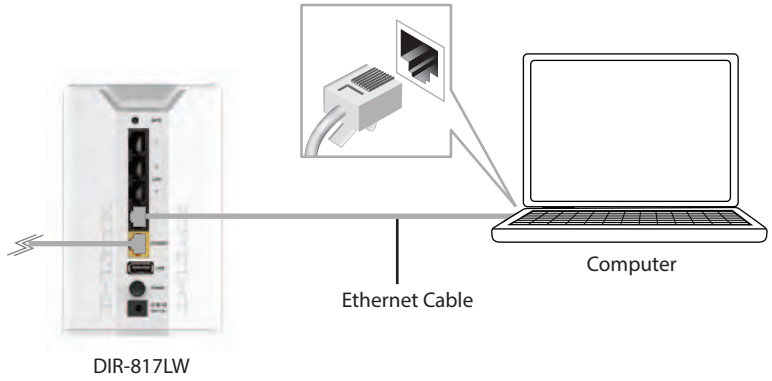
1. Turn off and unplug the power to your DSL or Cable modem. This is required.



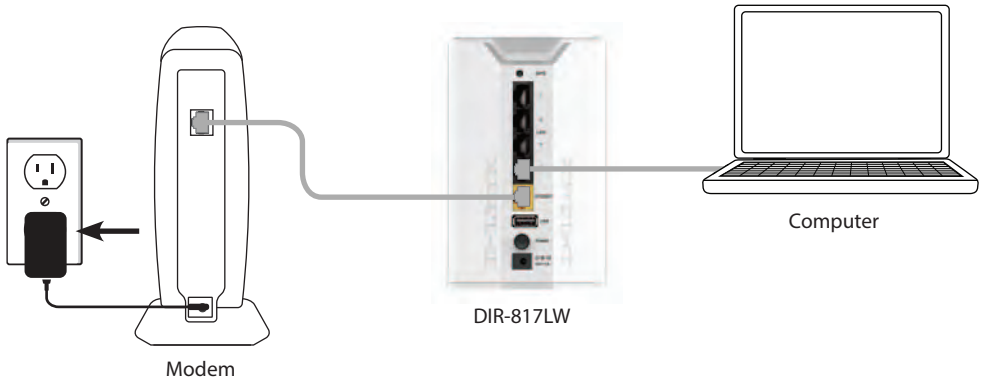
2. Connect an Ethernet cable from the Internet port of the router to the Ethernet port on your DSL or Cable modem.



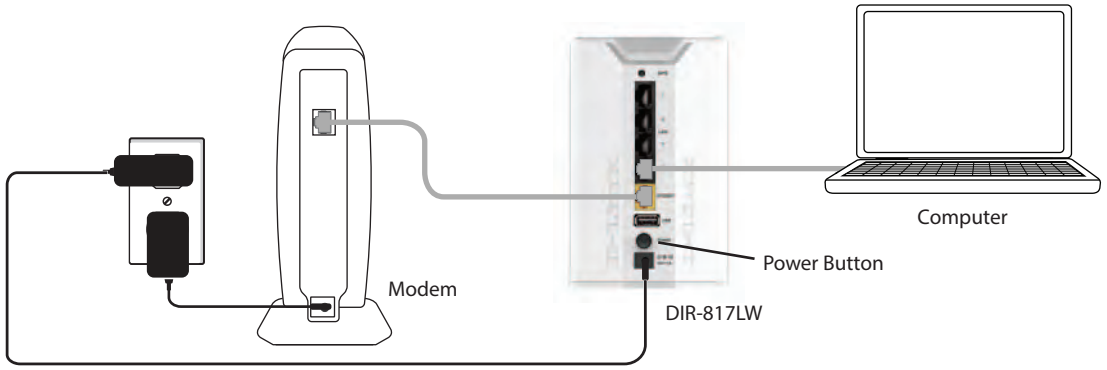
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the router.



4. Plug the power back into your DSL or Cable modem. Please wait about one minute before continuing.



5. Plug the power adapter into your router and connect to an available power outlet or surge protector. If the Power LED does not light up, press the Power button on the back of the router.



6. After the router has powered up, verify that the power and Internet LEDs are both lit. Please skip to "Configuration" on page 13 to configure your router and use the manual setup procedure to configure your network and wireless settings. If you did not connect to the Internet, use the "Internet Connection Setup Wizard" on page 32).

Connect to an Existing Router

Note: *It is strongly recommended that you replace your existing router with the DIR-817LW instead of using both. If your modem is a combo router, you may want to contact your ISP or review the manufacturer's user guide so you can put the router into Bridge mode, which will 'turn off' the router's (NAT) functions.*

If you are connecting the DIR-817LW router to an existing router to use as a wireless access point and/or switch, you will have to do the following to the DIR-817LW before connecting it to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.

2. Open a web browser, enter **http://192.168.0.1** (or **http://dlinkrouter.local./**) and press **Enter**. When the login window appears, set the user name to **Admin** and leave the password box empty. Click **Log In** to continue.

3. Click on **Advanced** and then click **Advanced Network**. Uncheck the **Enable UPnP** checkbox. Click **Save Settings** to continue.

4. Click **Setup** and then click **Network Settings**. Uncheck the **Enable DHCP Server** checkbox. Click **Save Settings** to continue.

5. Under Router Settings, enter an available **IP Address** and the **Subnet Mask** of your network. Click **Save Settings** to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.

6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.

7. Connect an Ethernet cable in one of the **LAN** ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) port of the D-Link router.

8. You may now use the other three LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** and **Wireless Security** sections for more information on setting up your wireless network.

Configuration

There are several different ways you can configure your router to connect to the Internet and connect to your clients:

- **QRS Mobile App** - Use your iPhone, iPad, or Android device to configure your router. See "QRS Mobile App" on page 21.
- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to "Quick Setup Wizard" on page 14.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to "Manual Internet Setup" on page 24.

Quick Setup Wizard

If this is your first time installing the router, launch your web browser (e.g., Internet Explorer), and you will automatically be directed to the *D-Link Setup Wizard.*

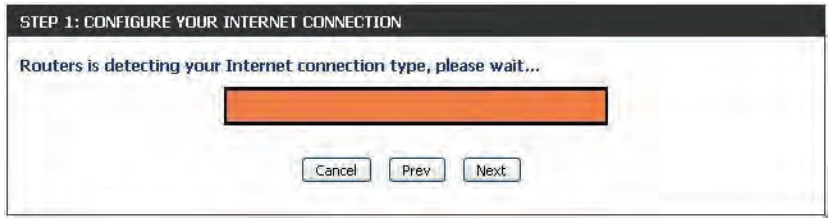
If you have already configured your settings and you would like to access the configuration utility, please refer to "Web-based Configuration Utility" on page 22.

If this is your first time logging into the router, and the wizard does not start automatically, enter **http://192.168.0.1.**

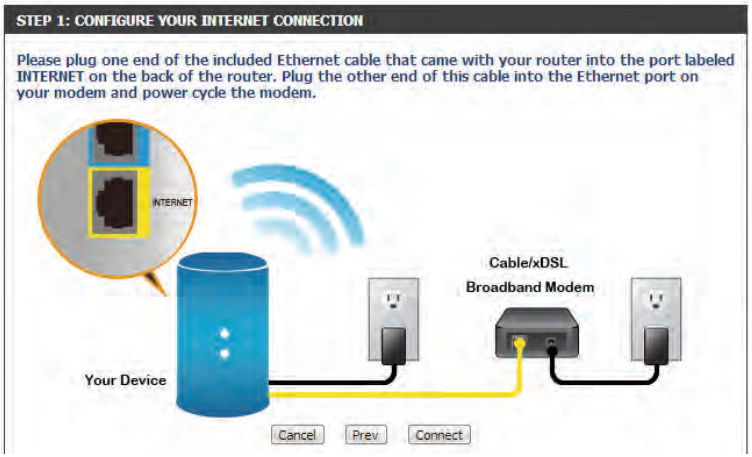
The wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.

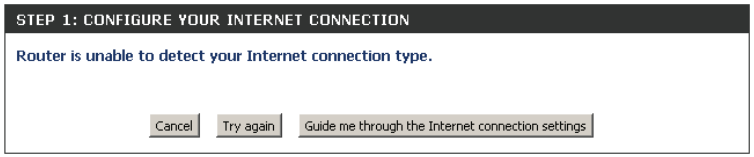
Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password. (See instructions on page 16 for PPPoE, PPTP and L2TP).



If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Connect**.

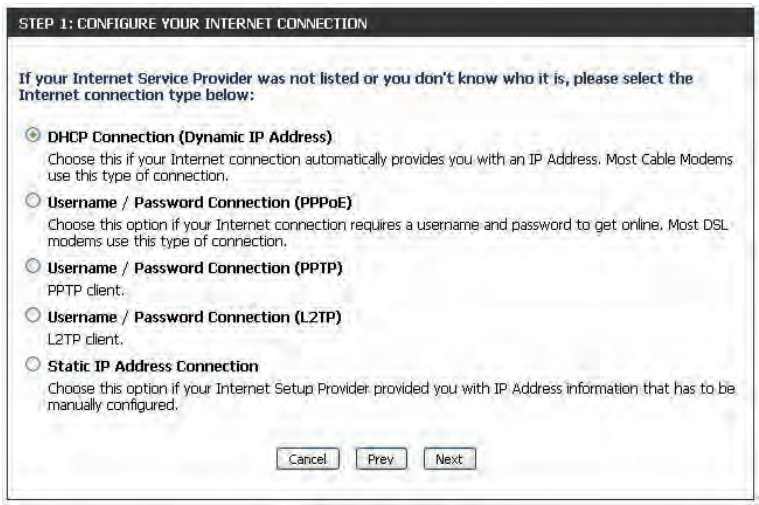


If the router detects an Ethernet connection but does not detect the type of Internet connection you have, this screen will appear. Click **Guide me through the Internet Connection Settings** to display a list of connection types to choose from.



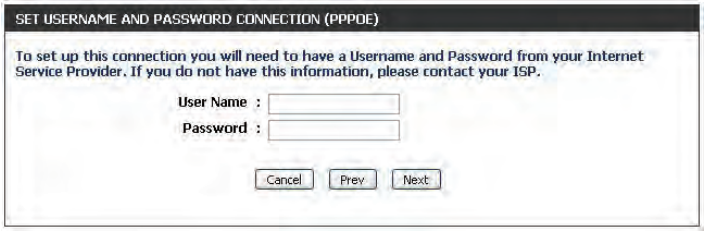
Select your Internet connection type and click **Next** to continue. You can select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP Address. This option is commonly used for cable modem services.

Click **Next** to continue.

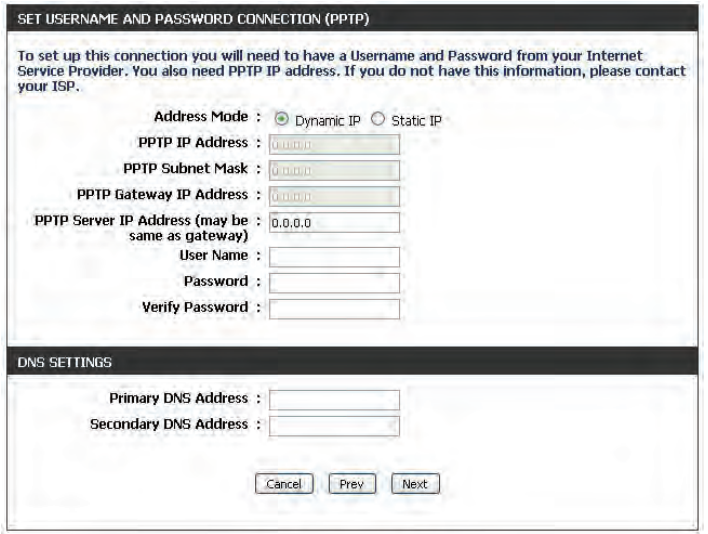


If the router detected or you selected **PPPoE**, enter your PPPoE **User Name** and **Password** and click **Next** to continue.

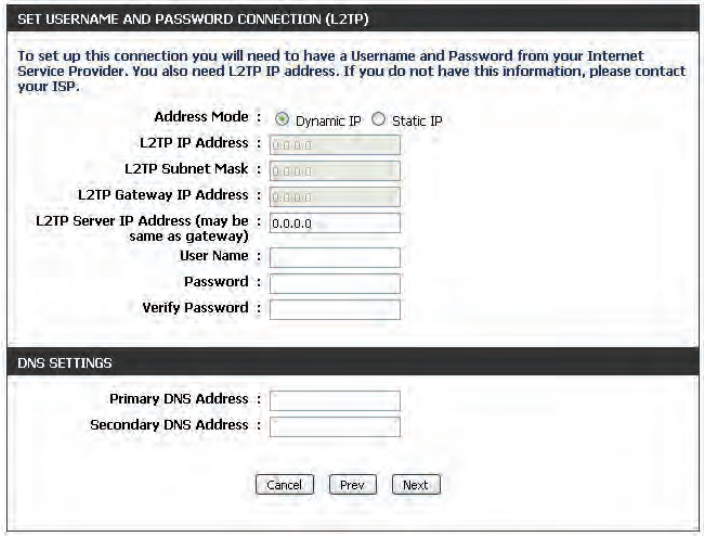
Note: *Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.*



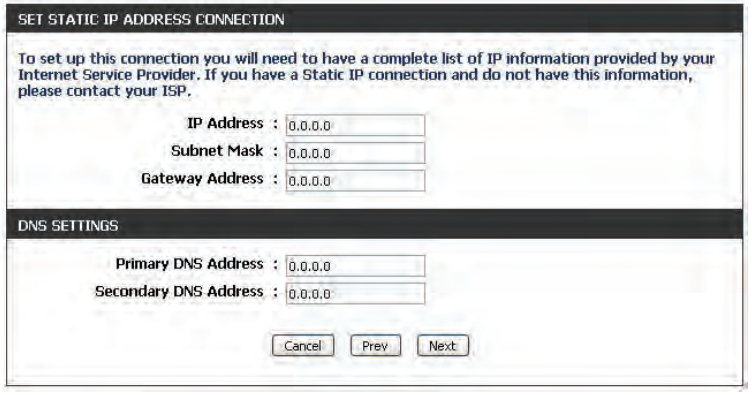
If the router detected or you selected **PPTP**, enter your PPTP **User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.



If the router detected or you selected **L2TP**, enter your **L2TP User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.



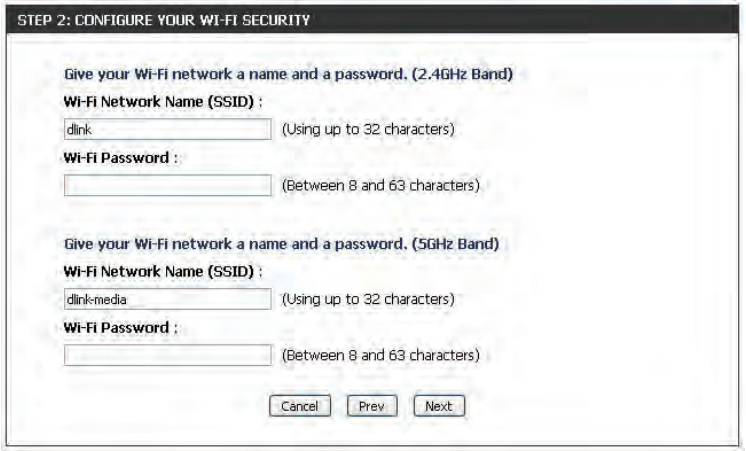
If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.



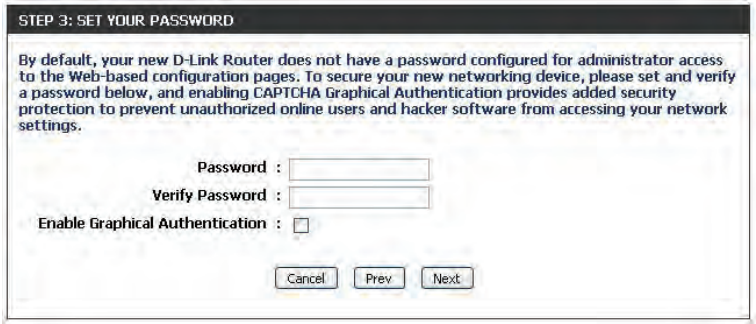
For both the 2.4GHz and 5GHz segments, create a wireless network name (SSID) using up to 32 characters.

Create a wireless security passphrase or key (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

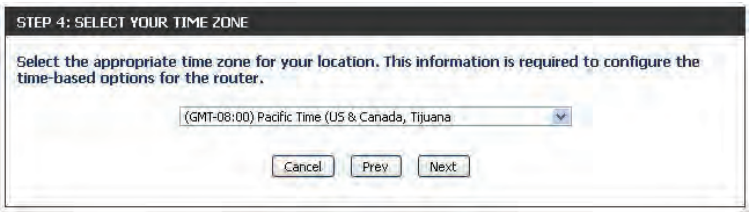
Click **Next** to continue.



In order to secure your router, please enter a new **Password**. Check the **Enable Graphical Authentication** box to enable CAPTCHA authentication for added security. Click **Next** to continue.

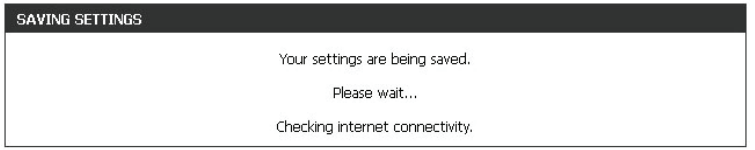


Select your time zone from the drop-down menu and click **Next** to continue.



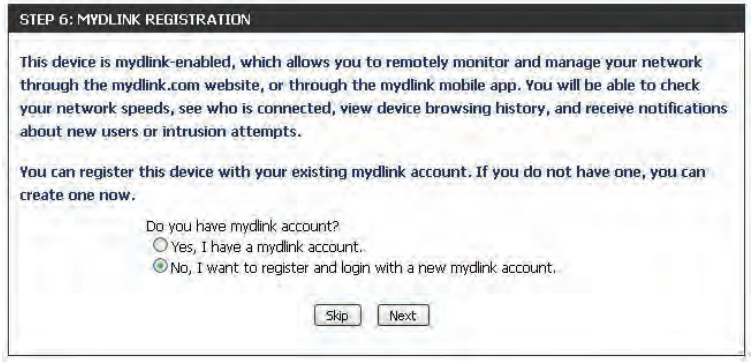
The *Confirm Wi-Fi Settings* window will display your wireless settings. Click **Next** to continue.

The *Saving Settings* window will appear. Wait while the router is *checking Internet connectivity*.

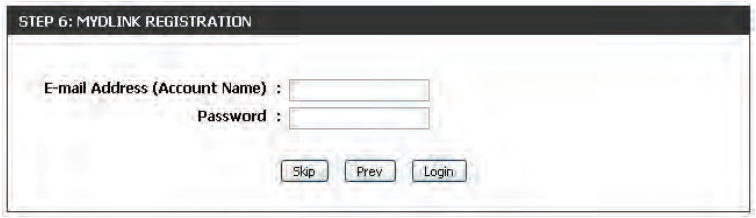


To use free mydlink Cloud Services (with the mydlink SharePort™ app or the mydlink Lite app), you must have an account. Select if you do have a mydlink account or if you need to create one. Click **Next** to continue.

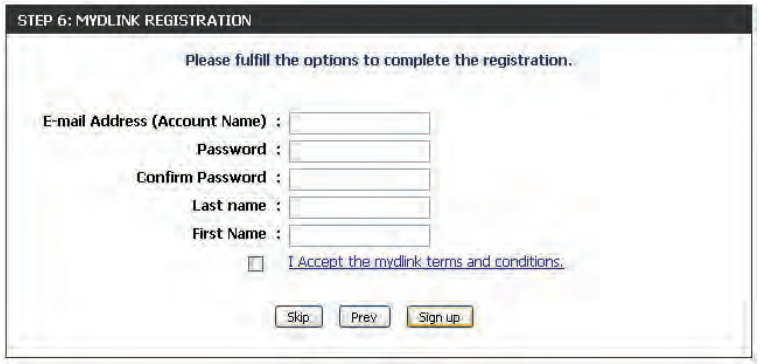
If you do not want to register at this time, click **Skip**.



If you clicked **Yes, I have a mydlink account** enter your mydlink **Account Name** (**E-mail Address**) and **Password**. Click **Login** to register your router.



If you clicked **No, I want to login with a new mydlink account** fill out the requested information and click **Sign up** to create your mydlink account. This is a free service. Refer to www.mydlink.com for more information.



To download the "mydlink SharePort" app or the "mydlink Lite" app, visit the App Store or Google Play. Refer to "Sharing Files Using the mydlink SharePort™ App" on page 54.

For more on "mydlink Lite" go to **https://mydlink.com/apps**.

PC and Mac users can access the mydlink portal at **http://mydlink.com**.

QRS Mobile App

D-Link offers the QRS Mobile app for your iPad, iPhone (iOS 4.3 or higher), or Android device to install and configure your router.

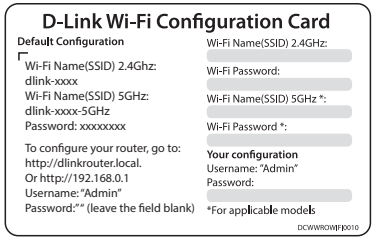
Step 1
From your iPad, iPhone, or Android device, go to the *iTunes Store* and search for **D-Link**. Select **QRS Mobile** and then download it.

You may also scan this code to download.

iOS

Android

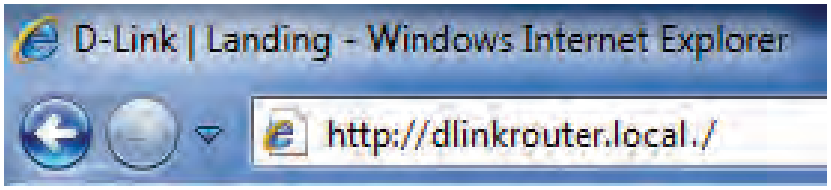
Step 2
Once your app is installed, you may now configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the wireless network name (SSID) as listed on the supplied info card. Select and then enter your security password (Wi-Fi Password).



Step 3
Once you connect to the router, launch the QRS mobile app and it will guide you through the installation of your router.

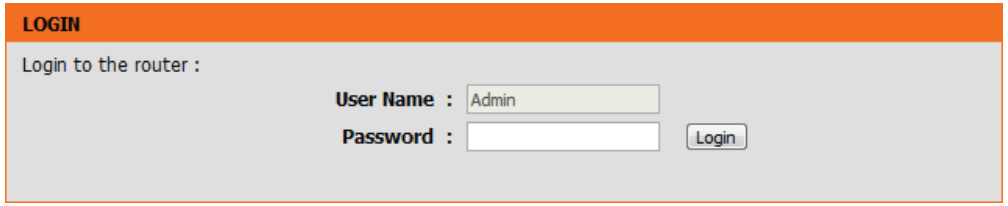
Web-based Configuration Utility

Open a web browser (e.g., Internet Explorer, Chrome, Firefox , or Safari) and enter **http://dlinkrouter.local./** or **http://192.168.0.1**. Windows XP users may use **http://dlinkrouter**.



Enter your password and click **Login**.

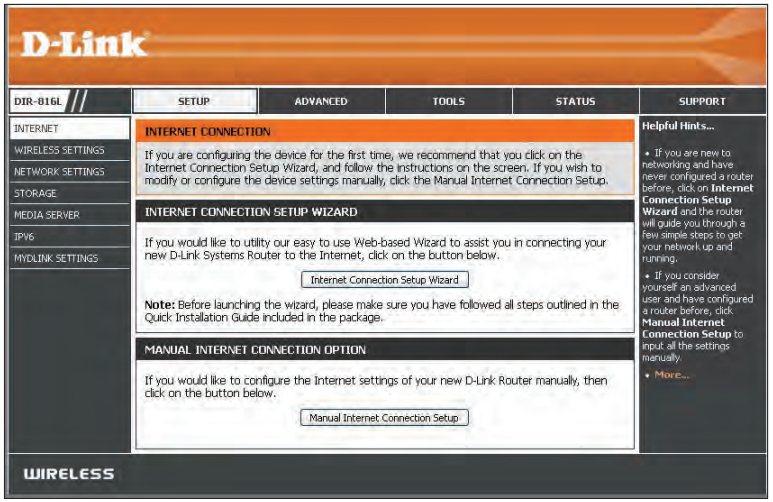
Note: *If you did not create a password with the Setup Wizard, leave the password blank by default.*



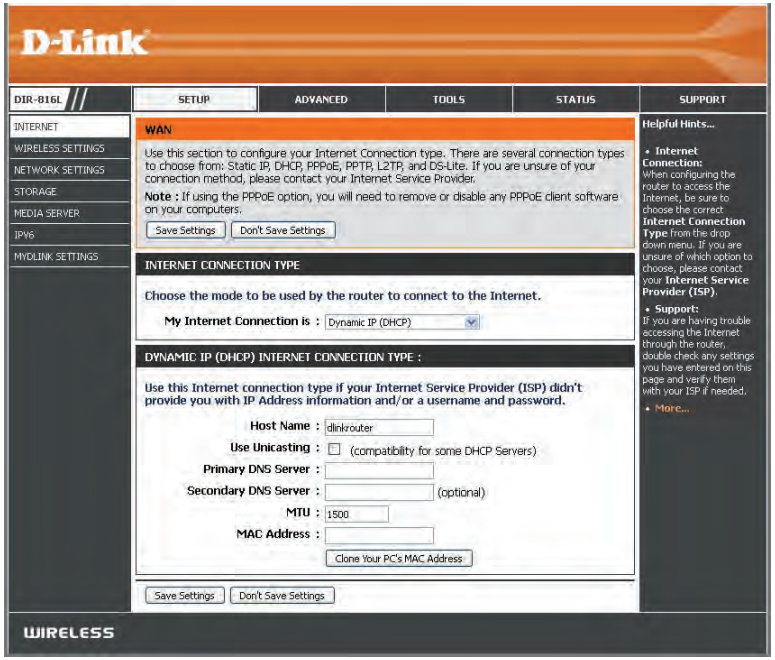
Internet Connection Setup

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. Refer to "Internet Connection Setup Wizard" on page 32.

If you consider yourself an advanced user, click **Manual Internet Connection Setup** to configure your connection manually. (Instructions for manual setup begin below.)



The next few pages will explain each of the ISP connection types. You can select the type from the **My Internet Connection is** drop-down menu.



Manual Internet Setup

Static (assigned by ISP)

Select **Static IP** if all the IP information is provided to you by your ISP.

My Internet Connection is: Select **Static IP** to manually enter the IP settings supplied by your ISP (Internet Service Provider).

IP Address: Enter the **IP Address** assigned by your ISP.

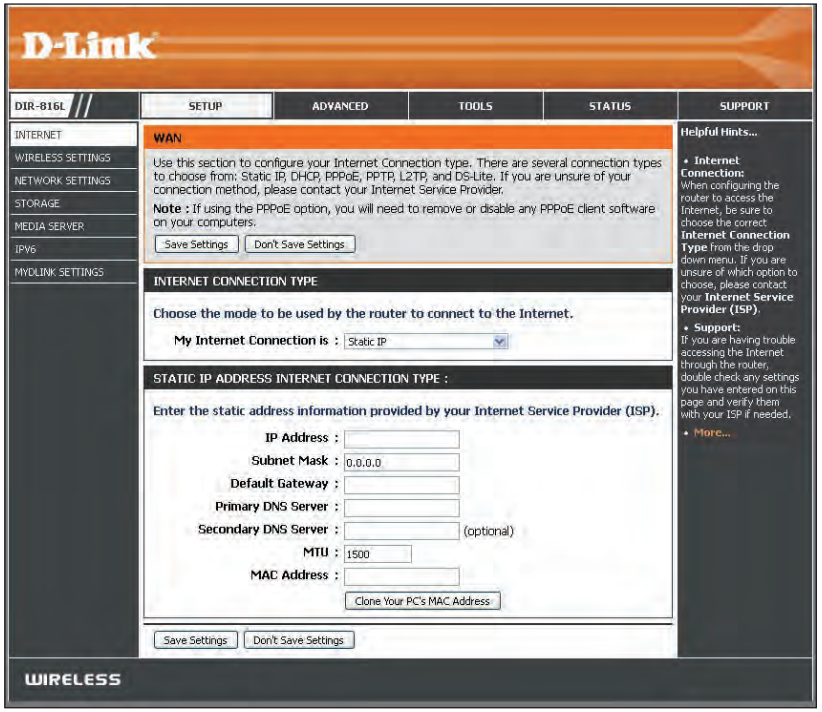
Subnet Mask: Enter the **Subnet Mask** assigned by your ISP.

Default Gateway: Enter the **Default Gateway** assigned by your ISP.

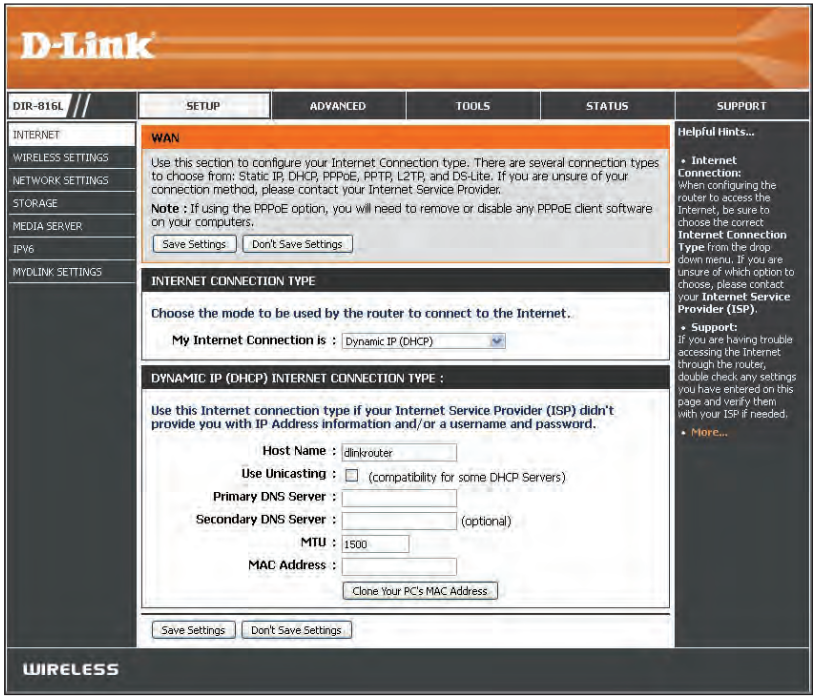
DNS Servers: The DNS server information will be supplied by your ISP.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can click on **Clone Your PC's MAC Address** to replace the Internet port's MAC address with the MAC address of your Ethernet card.



Internet Setup
Dynamic (Cable)



My Internet Connection is: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. This option is commonly used for cable modem services.

Host Name: The **Host Name** is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Check the box if you are having problems obtaining an IP address from your ISP.

Primary/Secondary DNS Server: Enter the Primary and Secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave blank if you did not specifically receive these from your ISP.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can click on **Clone Your PC's MAC Address** to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
PPPoE (DSL)

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP (Internet Service Provider) uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection is: Select **PPPoE (Username/Password)** from the drop-down menu.

Address Mode: In most cases, select **Dynamic IP**. Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

IP Address: Enter the **IP Address** (Static PPPoE only).

Username: Enter your PPPoE **Username**.

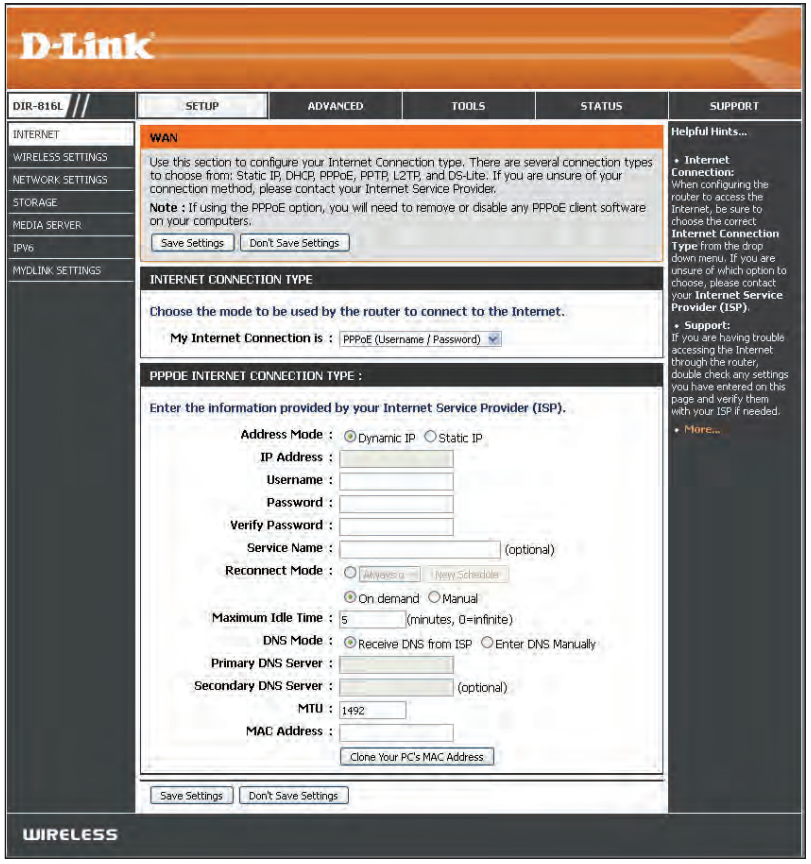
Password: Enter your PPPoE **Password** and retype the password in the next box.

Service Name: Enter the ISP **Service Name** (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a **Maximum Idle Time** during which the Internet connection is maintained during inactivity. Enable Auto-reconnect to disable this feature.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses of your choice or enter DNS Server Addresses supplied by your ISP.

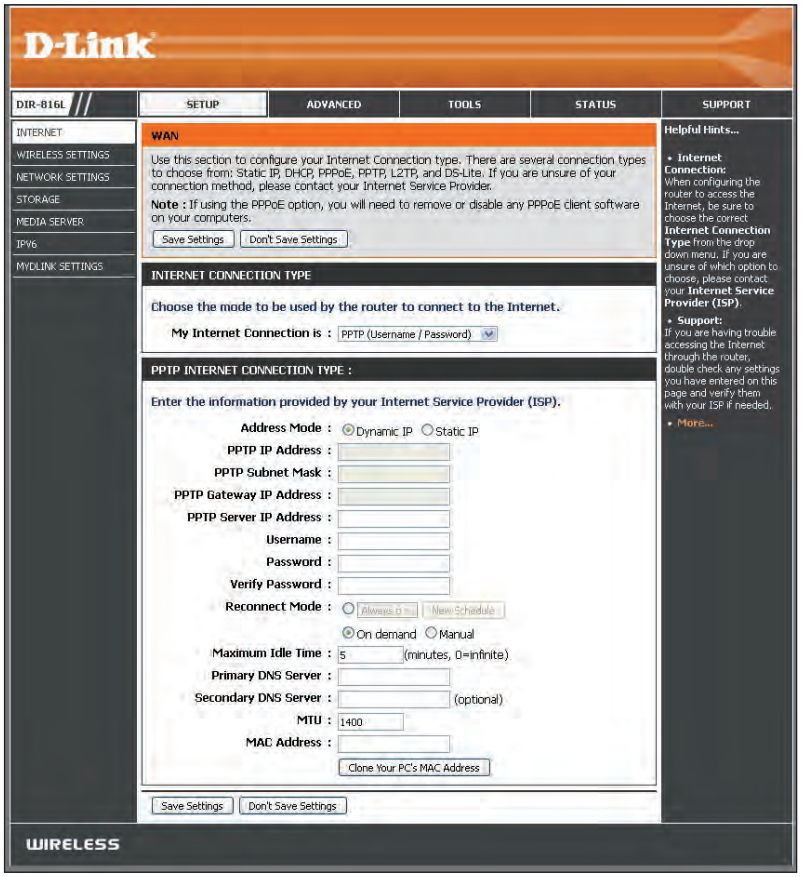


MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can click on **Clone Your PC's MAC Address** to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP (Internet Service Provider) uses a PPTP connection. Your ISP will provide you with a username and password.



My Internet Connection is: Select **PPTP (Username/Password)** from the drop-down menu.

Address Mode: In most cases, select **Dynamic IP**. Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

PPTP IP Address: Enter the **IP Address** (Static PPTP only).

PPTP Subnet Mask: Enter the **Subnet Mask** (Static PPTP only).

PPTP Gateway IP Address: Enter the **Gateway IP Address** provided by your ISP.

PPTP Server IP Address: Enter the **Server IP Address** provided by your ISP (optional).

Username: Enter your PPTP **Username**.

Password: Enter your PPTP **Password** and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a **Maximum Idle Time** during which the Internet connection is maintained during inactivity. Enable Auto-reconnect to disable this feature.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses. The DNS server information will be supplied by your ISP.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can click on **Clone Your PC's MAC Address** to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP (Internet Service Provider) uses a L2TP connection. Your ISP will provide you with a username and password.

My Internet Connection is: Select **L2TP (Username/Password)** from the drop-down menu.

Address Mode: In most cases, select **Dynamic IP**. Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

L2TP IP Address: Enter the **L2TP IP Address** supplied by your ISP (Static only).

L2TP Subnet Mask: Enter the **Subnet Mask** supplied by your ISP (Static only).

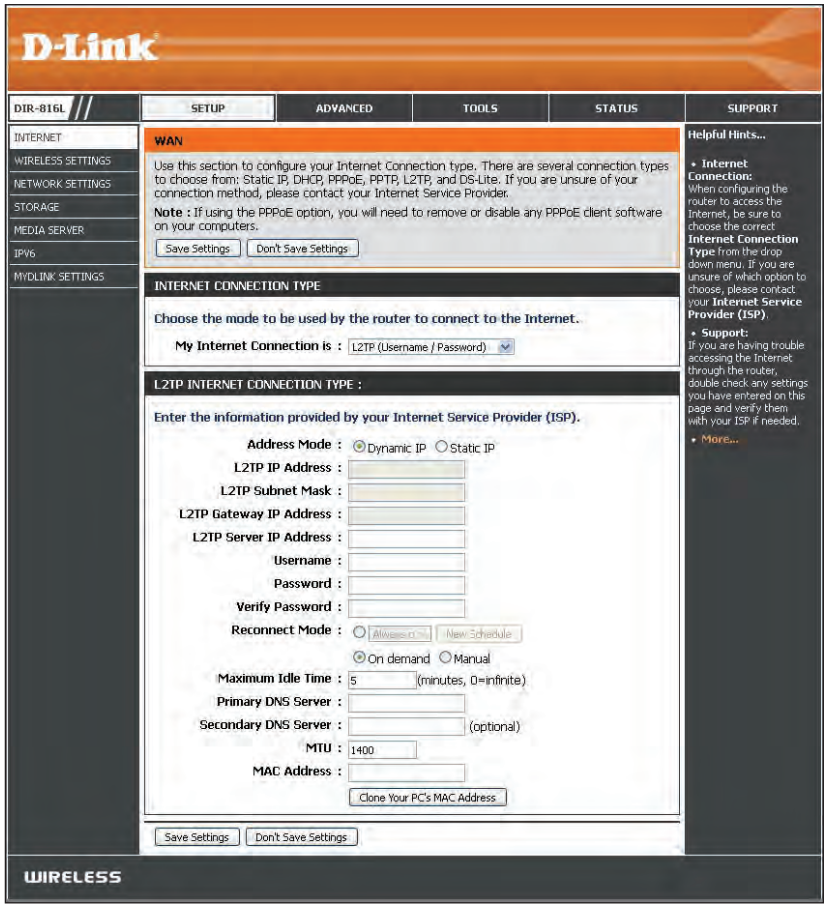
L2TP Gateway IP Address: Enter the **Gateway IP Address** provided by your ISP.

L2TP Server IP Address: Enter the **Server IP Address** provided by your ISP (optional).

Username: Enter your L2TP **Username**.

Password: Enter your L2TP **Password** and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.



Maximum Idle Time: Enter a **Maximum Idle Time** during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses (Static L2TP only).

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can click on **Clone Your PC's MAC Address** to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
DS-Lite

DS-Lite is an IPv6 connection type. After selecting DS-Lite, the following parameters will be available for configuration:

My Internet Connection is: Select **DS-Lite** from the drop-down menu.

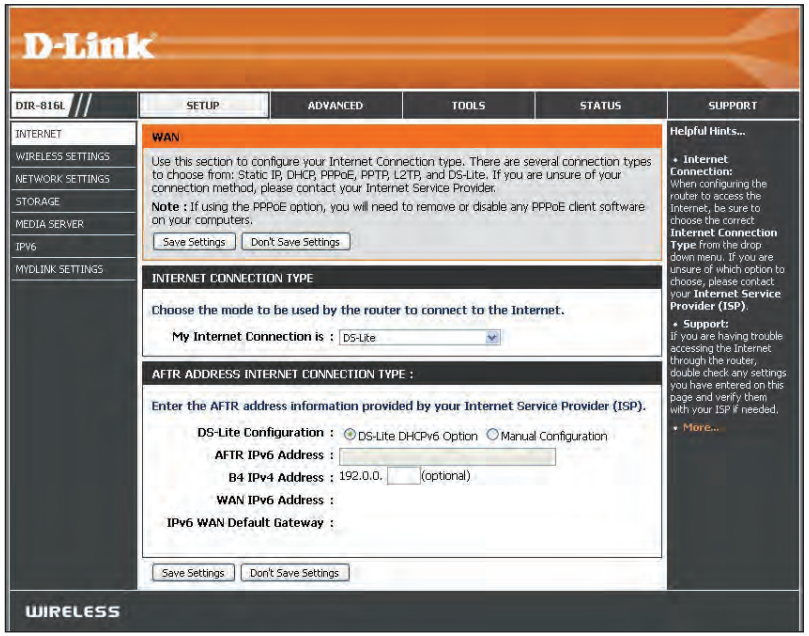
DS-Lite Configuration: Select the **DS-Lite DHCPv6 Option** to let the router allocate the AFTR IPv6 address automatically. Select the **Manual Configuration** option to enter the AFTR IPv6 address in manually.

AFTR IPv6 Address: If you selected the **Manual Configuration** option above, enter the **AFTR IPv6 Address** used here.

B4 IPv4 Address: Enter the **B4 IPv4 Address** value used here. (Optional.)

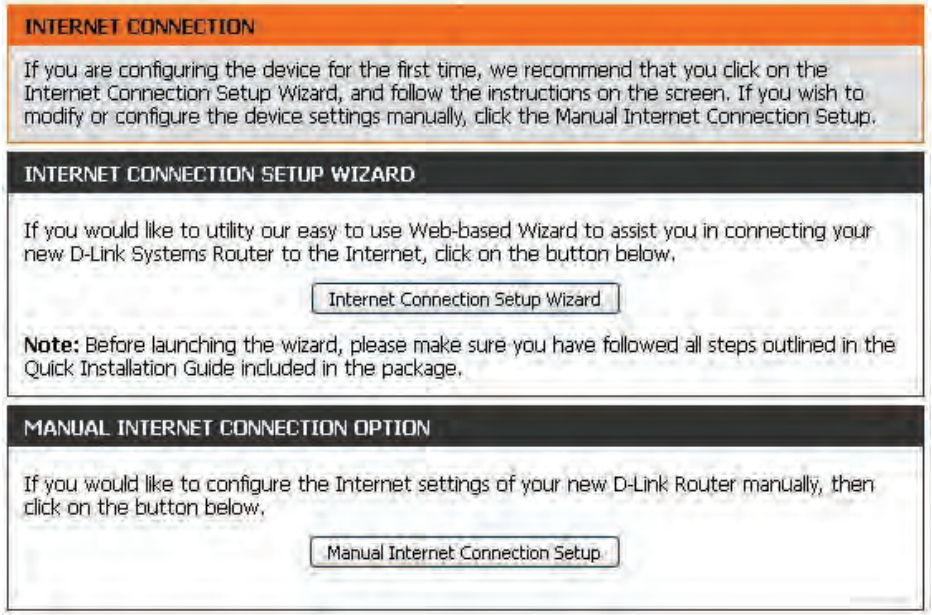
WAN IPv6 Address: Once connected, the *WAN IPv6 Address* will be displayed here.

IPv6 WAN Default Gateway Once connected, the *IPv6 WAN Default Gateway* address will be displayed here.



Internet Connection Setup Wizard

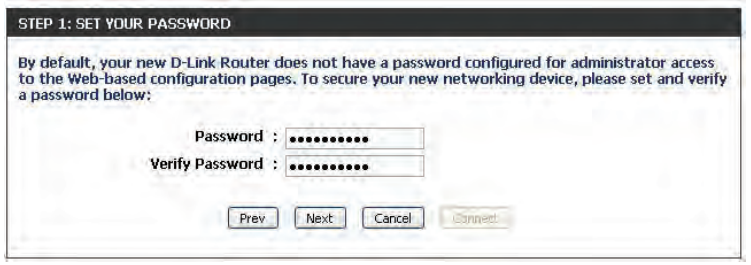
If you did not initially choose to install your router with the *Quick Setup Wizard*, you can click on **Internet Connection Setup Wizard** from the **Setup** > **Internet** screen.



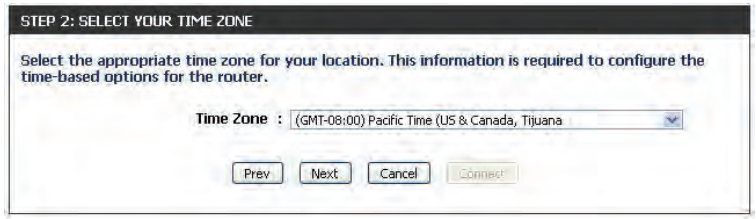
This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.

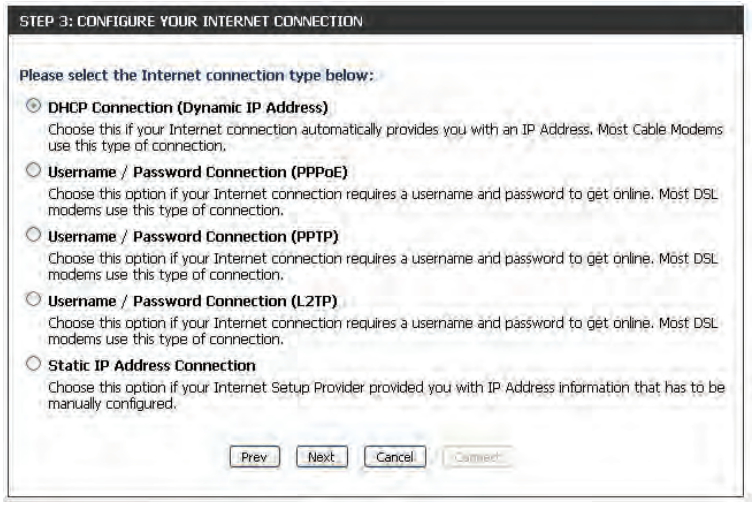
In order to secure your router, enter a new password. Click **Next** to continue.



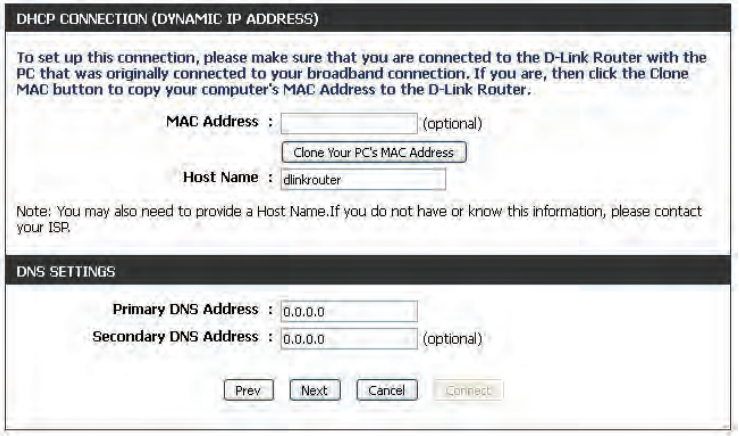
Select your time zone from the drop-down menu and click **Next** to continue.



Select your Internet connection type. You can select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP Address. This option is commonly used for cable modem services. Click **Next** to continue.

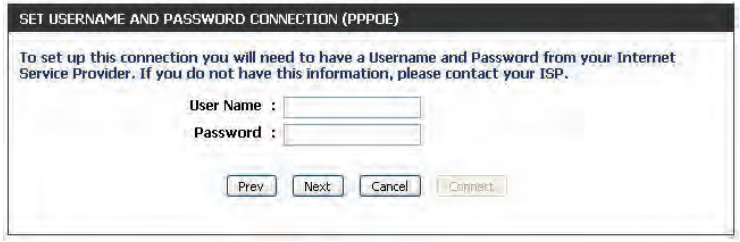


If you selected **DHCP Connection (Dynamic IP Address)** you can click on **Clone Your PC's MAC Address** to copy your computer's MAC address to your router. Click **Next** to continue.

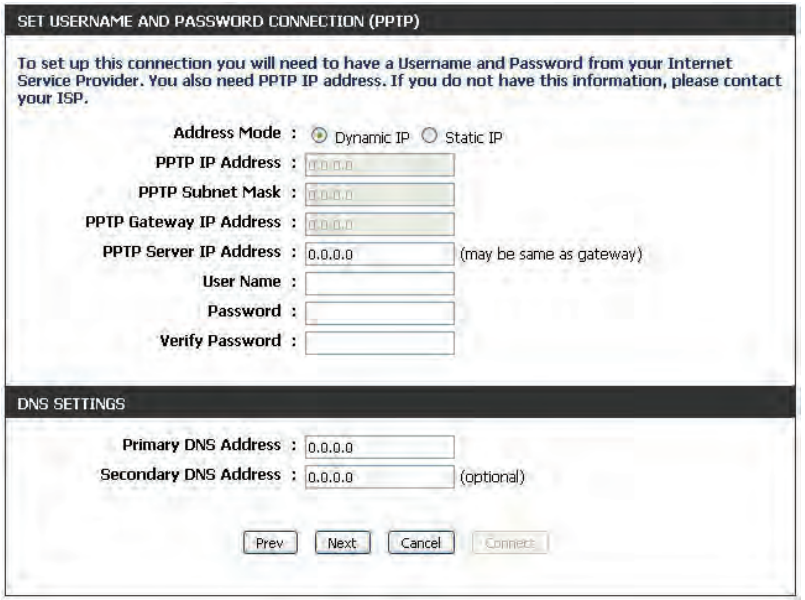


If you selected **PPPoE**, enter your PPPoE **User Name** and **Password**. Click **Next** to continue.

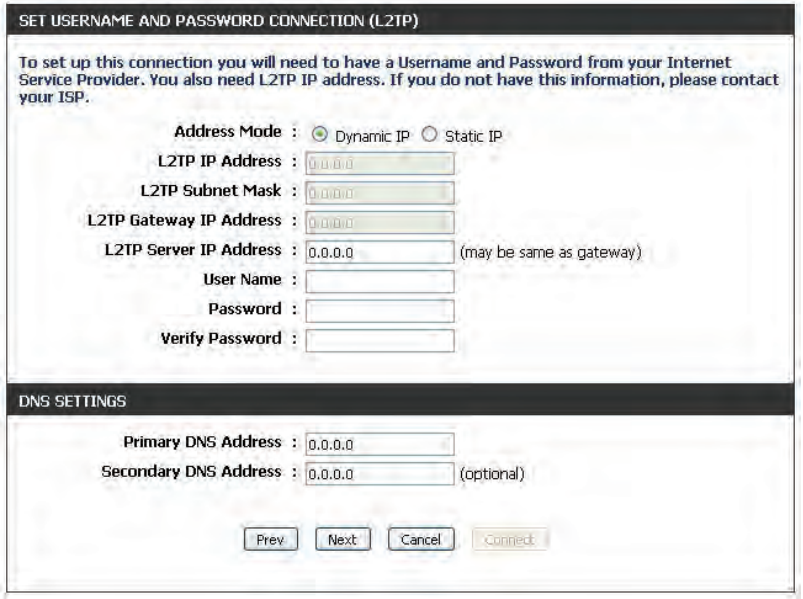
Note: *Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.*



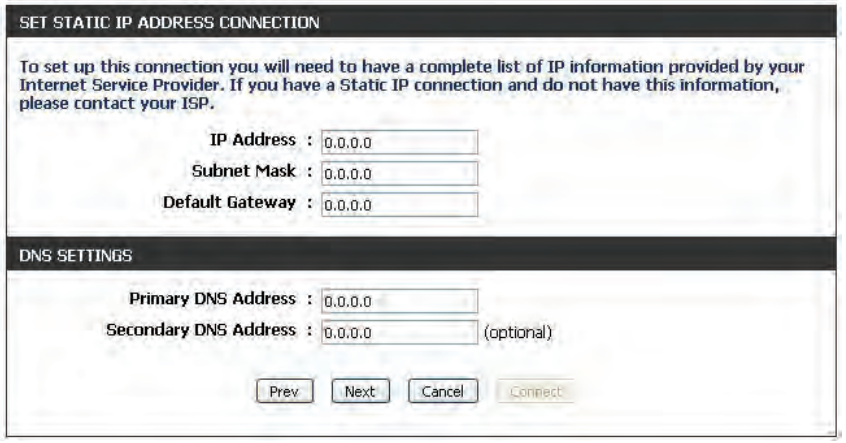
If you selected **PPTP**, enter your PPTP **User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.



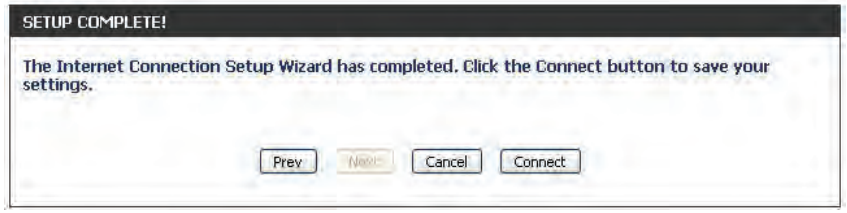
If you selected **L2TP**, enter your L2TP **User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.



If you selected **Static**, enter the IP information and DNS settings supplied by your ISP. Click **Next** to continue.



When the setup process is complete, you will see this screen. Click on **Connect** to save your settings.

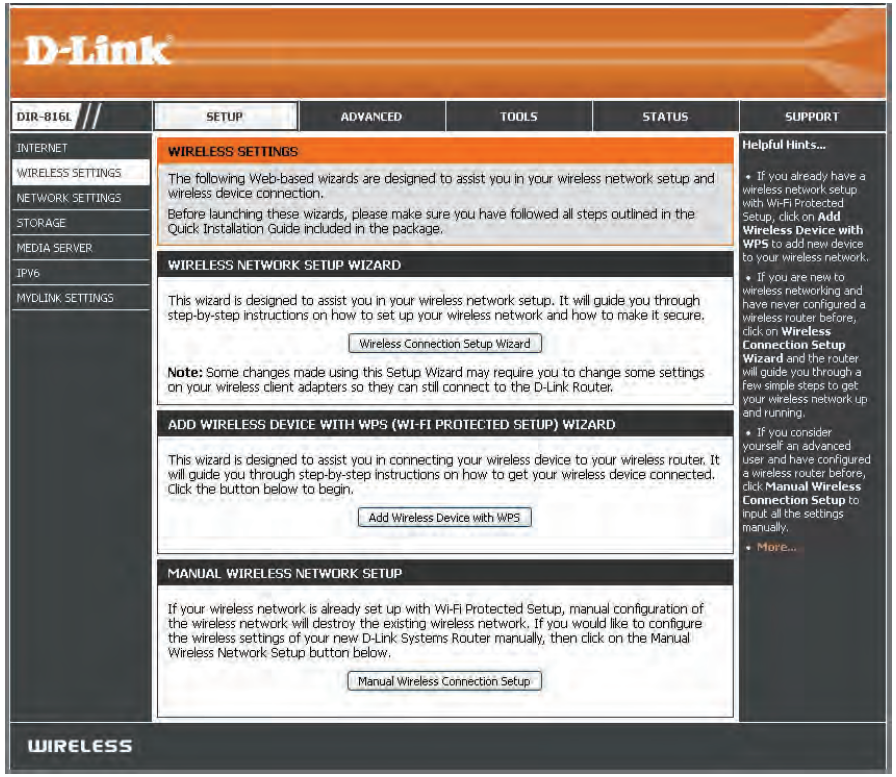


Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Connection Setup Wizard** and refer to the next page.

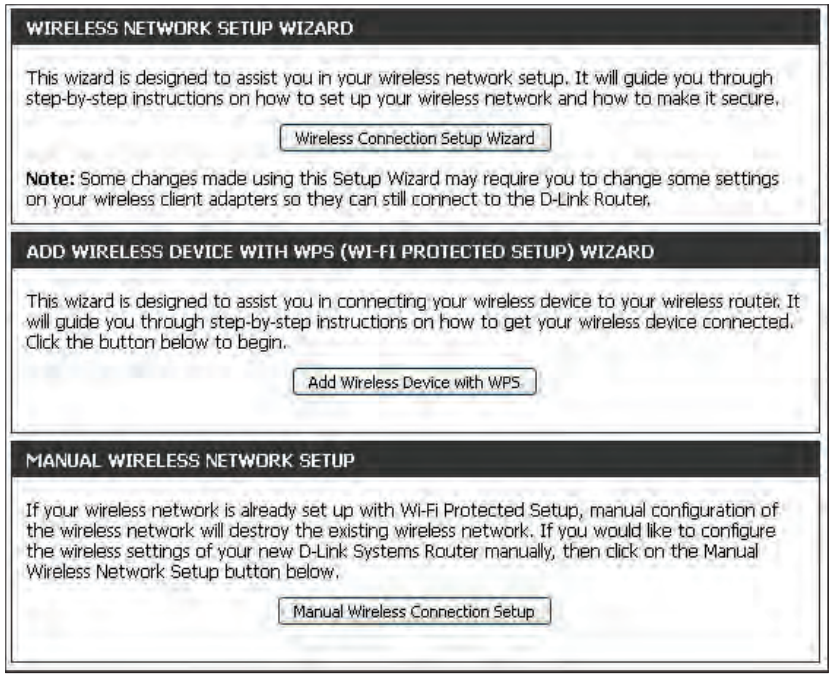
Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS). Refer to "Add Wireless Device with WPS Wizard" on page 40.

Click **Manual Wireless Connection Setup** if you want to manually configure the wireless settings on your router. Refer to "Manual Wireless Settings" on page 42.

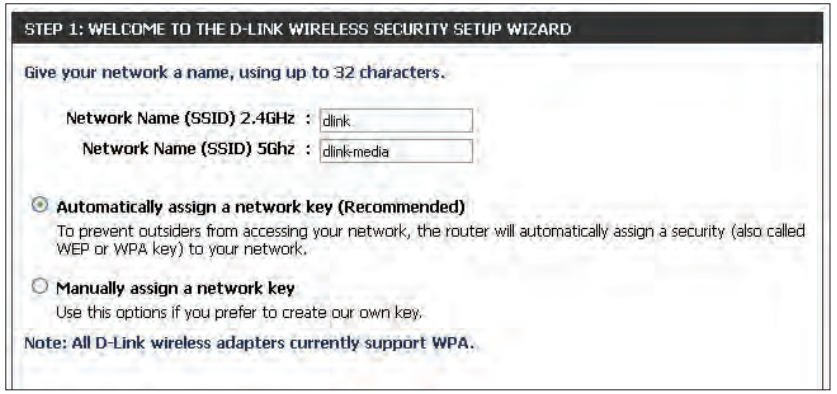


Wireless Connection Setup Wizard

To run the security wizard, click on **Setup** > **Wireless Settings**. Click on the **Wireless Connection Setup Wizard** button.



Enter a **Network Name** for your 2.4GHz and 5GHz wireless networks (SSID). Do not use personal information as your SSID since users with wireless devices within range of your router will be able to see this information.

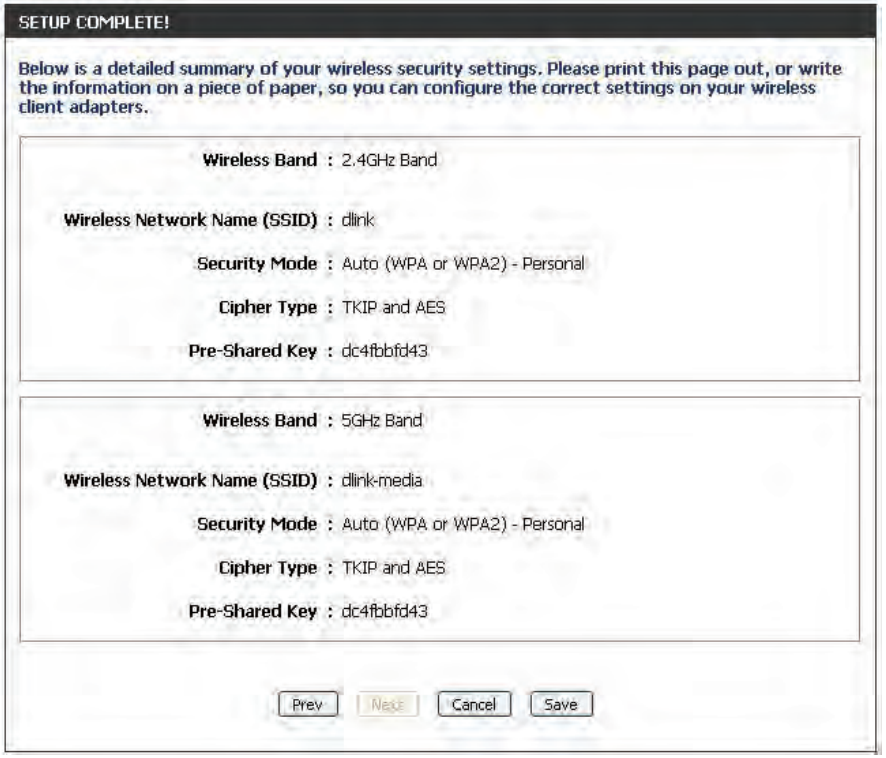


Then select one of the following options:

Automatically: Select this option to automatically generate the router's network key and click **Next**.

Manually: Select this option to manually enter your own network key and click **Next**.

If you selected **Automatically**, the summary window will display your settings. Write down the security key and enter this on your wireless clients. Click **Save** to save your settings.

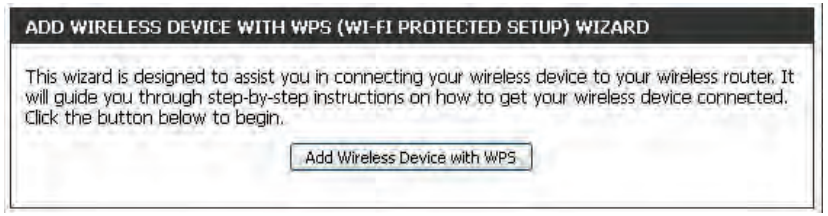


If you selected **Manually**, the following screen will appear. Create a passphrase for your security password. Click **Next** to continue. You will see the *Setup Complete* screen like the one above.

Note: *The security password/passphrase must be between 8 and 63 characters and is case-sensitive. You will need to enter this passphrase on your wireless clients exactly or it will not connect.*

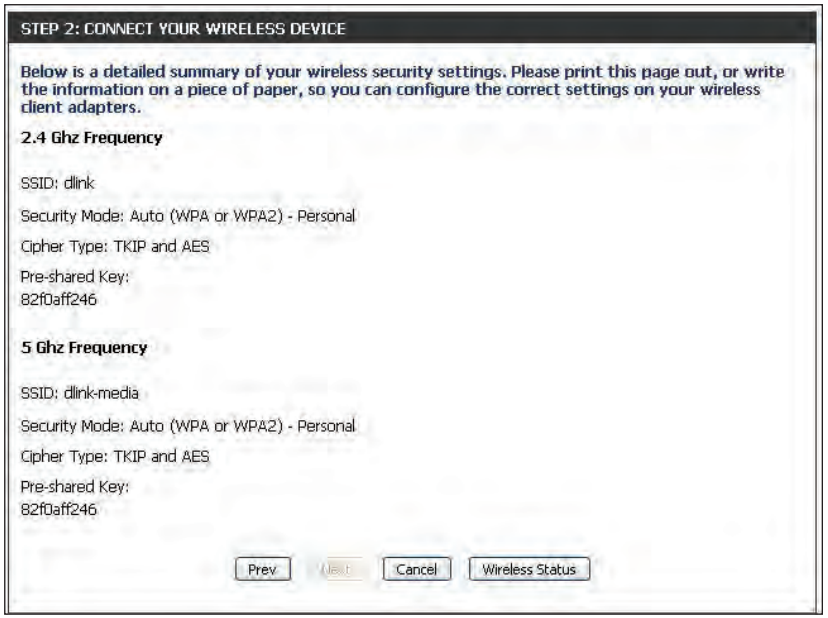
Add Wireless Device with WPS Wizard

From the **Setup** > **Wireless Settings** screen, click **Add Wireless Device with WPS**.



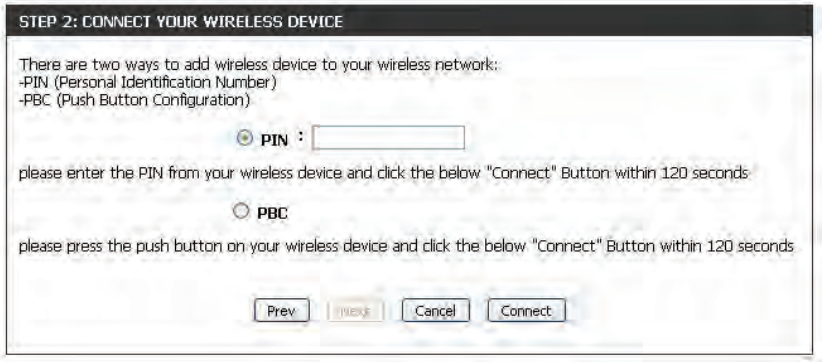
Select **Auto** to add a wireless client using WPS (Wi-Fi Protected Setup) and then click **Next**. Skip to the next page.

If you select **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients. Click **Wireless Status** to finish. This will take you to the *Wireless Status* screen. Skip to the bottom of the next page.

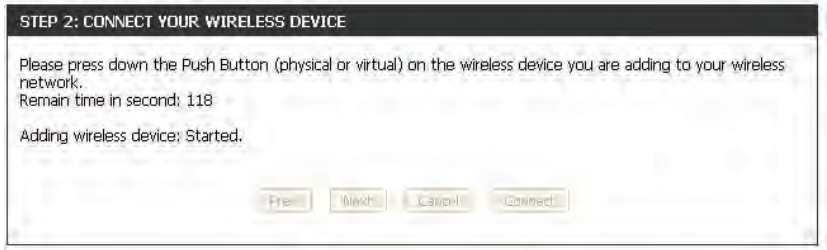


PIN: Select this option to use PIN method. In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**.

PBC: Select this option to use PBC (Push Button) method to add a wireless client. Click **Connect**.

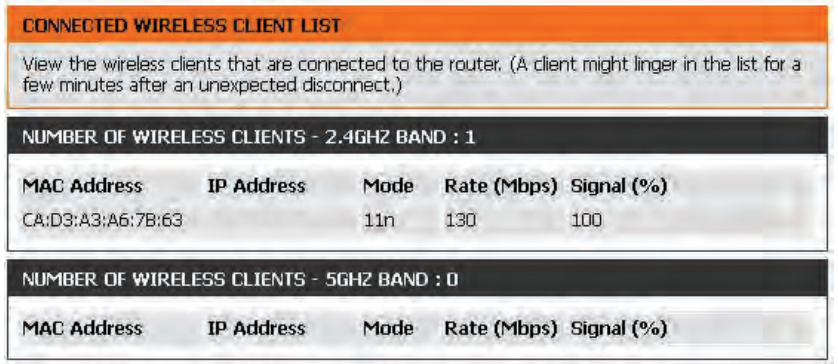


Once you click **Connect**, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.



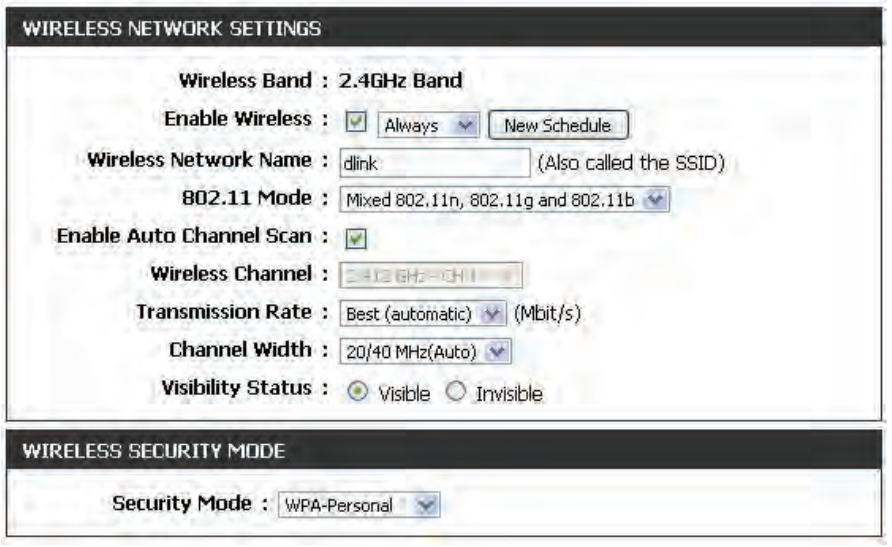
Click on **Cancel** to add another wireless device. Click on **Wireless Status** to view the *Wireless Status* screen.

View the *Wireless Status* screen.



Manual Wireless Settings

802.11n/g (2.4GHz)



Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

New Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Schedules you create will be available in the drop-down menu. Click **New Schedule** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11b Only - Select only if all of your wireless clients are 802.11b.
802.11g Only - Select only if all of your wireless clients are 802.11g.
802.11n Only - Select only if all of your wireless clients are 802.11n.
Mixed 802.11g and 802.11b - Select if you are using both 802.11g and 802.11b wireless clients.
Mixed 802.11n and 802.11g - Select if you are using both 802.11n and 802.11g wireless clients.
Mixed 802.11n, 11g, and 11b - Select if you are using a mix of 802.11n, 802.11g, and 802.11b wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-817LW to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-817LW. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check **Enable Auto Channel Scan**, this option will be greyed out.

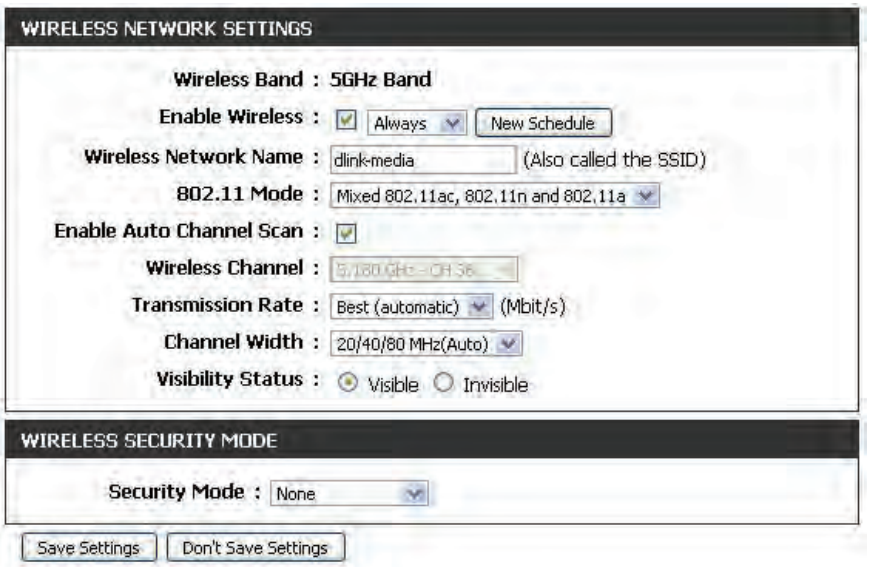
Transmission Rate: Best (automatic) is selected by default, or you can select a channel from the drop-down menu.

Channel Width: Select the Channel Width:
20/40MHz (Auto) - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-817LW. If **Invisible** is selected, the SSID of the DIR-817LW will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-817LW in order to connect to it.

Wireless Security: Refer to "Wireless Security" on page 44 for more information regarding wireless security.

802.11ac/n/a (5GHz)



Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

New Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Schedules you create will be available in the drop-down menu. Click **New Schedule** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11n Only - Select only if all of your wireless clients are 802.11n.
802.11ac Only - Select only if all of your wireless clients are 802.11ac.
Mixed 802.11n and 802.11a - Select if you are using both 802.11n and 802.11a wireless clients.
Mixed 802.11ac and 802.11n - Select if you are using both 802.11ac and 802.11n wireless clients.
Mixed 802.11ac, 11n and 11a - Select if you are using a mix of 802.11ac, 802.11n, and 802.11a wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-817LW to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-817LW. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check **Enable Auto Channel Scan**, this option will be greyed out.

Transmission Rate: Best (automatic) is selected by default, or you can select a channel from the drop-down menu.

Channel Width: Select the Channel Width:
20MHz - Select if you are not using any 802.11n wireless clients.
20/40MHz (Auto) - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20/40/80MHz (Auto) - Select if you are using 802.11ac, 802.11n and non-802.11n wireless devices. This option is only available when the 802.11 Mode is set to Mixed 802.11ac.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-817LW. If **Invisible** is selected, the SSID of the DIR-817LW will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-817LW in order to connect to it.

Wireless Security: Refer to "Wireless Security" on page 44 for more information regarding wireless security.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-817LW offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

WPA (Wi-Fi Protected Access), is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

WPA/WPA2-Personal (PSK)

It is recommended that you enable wireless security on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption.

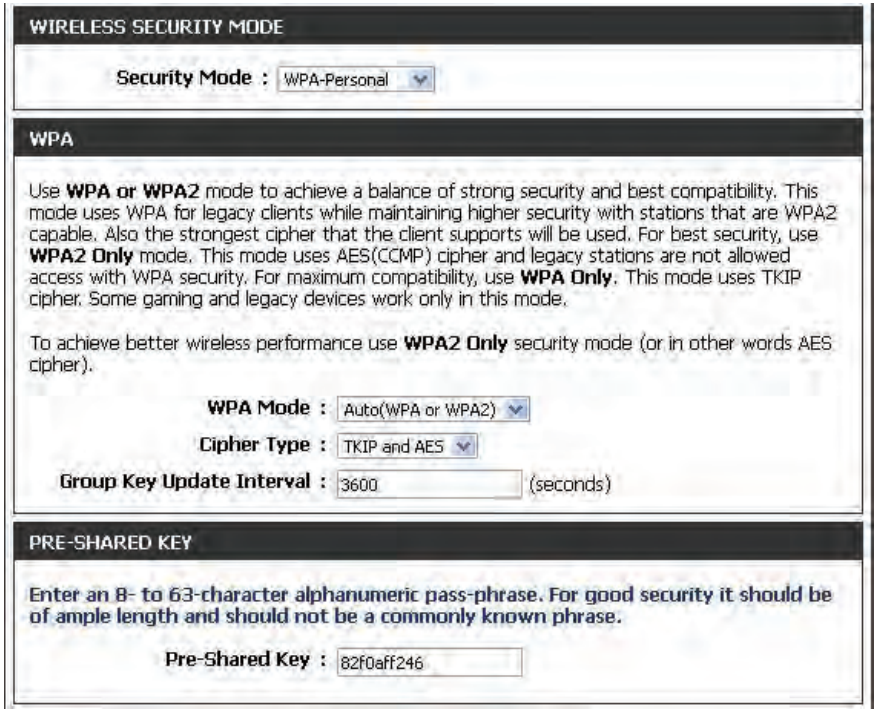
1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.

2. Next to *Security Mode*, select **WPA-Personal**.

3. Next to *WPA Mode*, select **Auto (WPA or WPA2)**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.

4. Next to *Cypher Type*, select **TKIP and AES**, **TKIP**, or **AES**.

5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).



6. Next to *Pre-Shared Key*, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.

7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

Configure WPA/WPA2-Enterprise (RADIUS)

It is recommended that you enable wireless security on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.

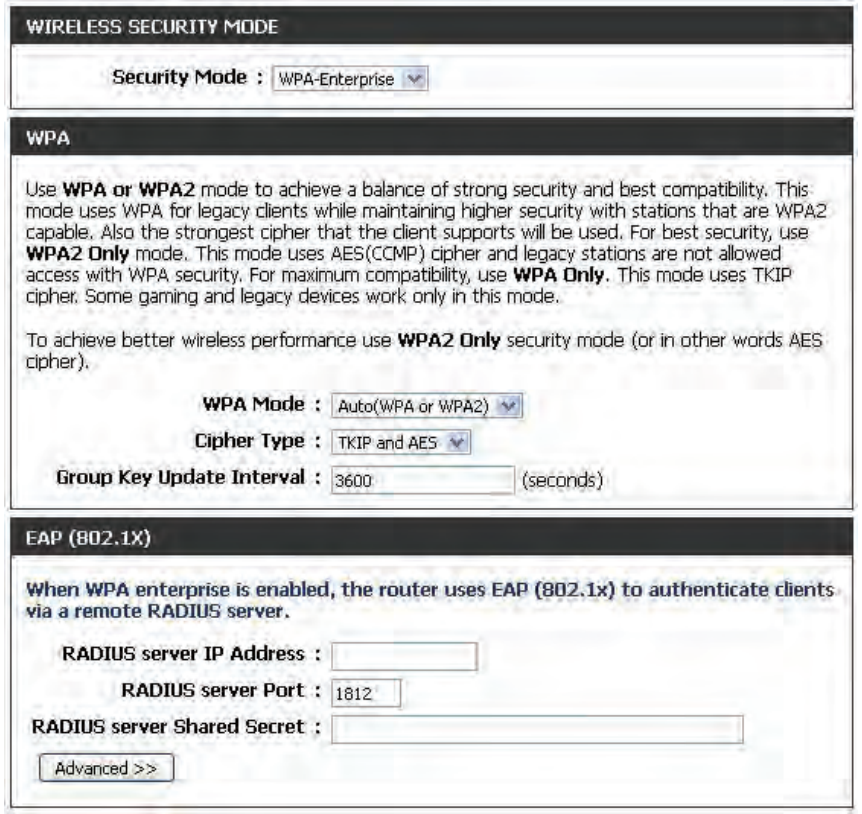
2. Next to *Security Mode*, select **WPA-Enterprise**.

3. Next to *WPA Mode*, select **Auto(WPA or WPA2)**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.

4. Next to *Cypher Type*, select **TKIP and AES**, **TKIP**, or **AES**.

5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).

6. Next to *RADIUS Server IP Address* enter the **IP Address** of your RADIUS server.

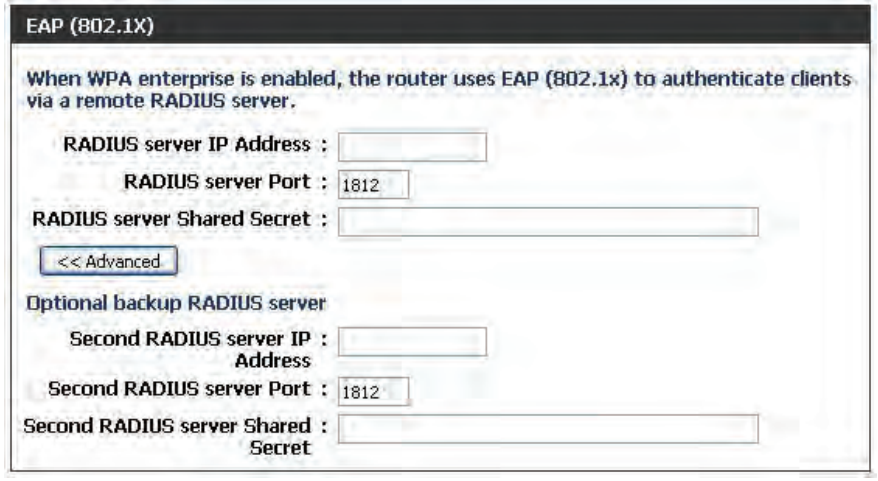


7. Next to *RADIUS Server Port*, enter the port you are using with your RADIUS server. 1812 is the default port.

8. Next to *RADIUS Server Shared Secret*, enter the security key.

9. Click **Advanced** to enter settings for a secondary (backup) RADIUS Server.

10. Click **Save Settings** to save your settings.



Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

Router Settings

Router IP Address: Enter the **IP Address** of the router. The default IP address is 192.168.0.1.

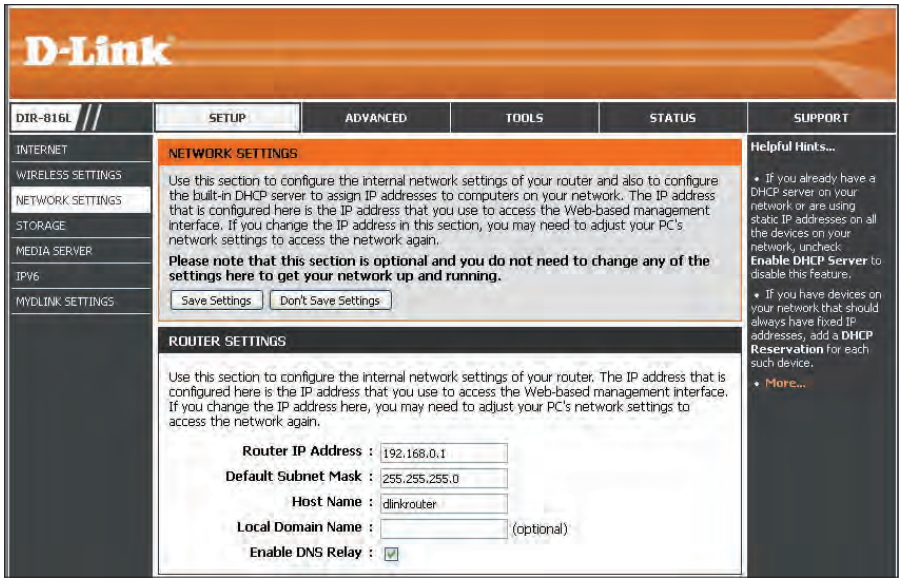
If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Default Subnet Mask: Enter the **Subnet Mask**. The default subnet mask is 255.255.255.0.

Host Name: Enter a name for the router.

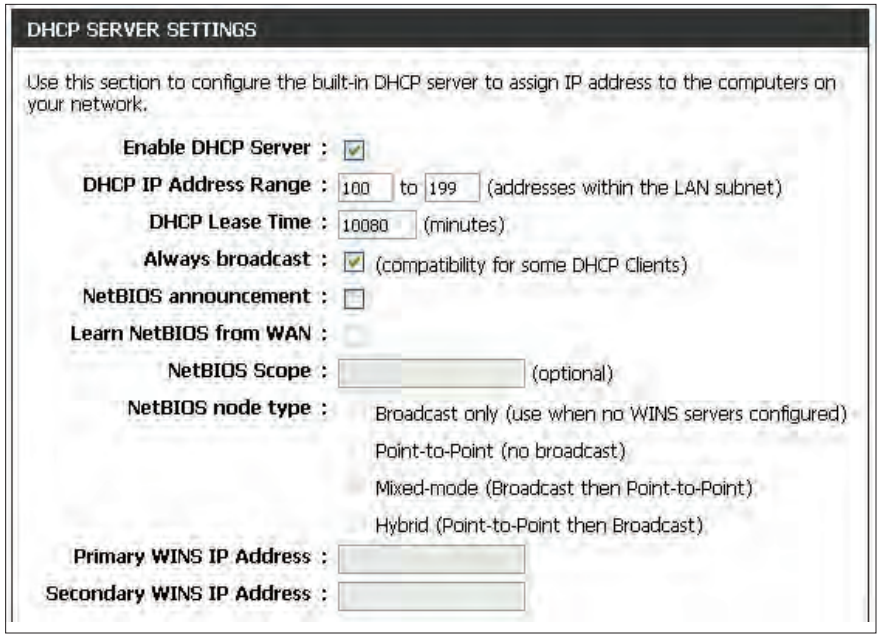
Local Domain Name: Enter the **Domain Name** (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.



DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-817LW has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to **Obtain an IP Address Automatically**. When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-817LW. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.



Enable DHCP Server: Check this box to enable the DHCP server on your router. Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server's IP assignment.

Note: *If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.*

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Always Broadcast: Enable this feature to broadcast your networks DHCP server to LAN/WLAN clients.

NetBIOS Announcement: NetBIOS allows LAN hosts to discover all other computers within the network, enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

Learn NetBIOS from WAN: Enable this feature to allow WINS information to be learned from the WAN side, disable to allow manual configuration.

NetBIOS Scope: This feature allows the configuration of a NetBIOS 'domain' name under which network hosts operates. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

NetBIOS Node Type: Select the type of NetBIOS node; **Broadcast only**, **Point-to-Point**, **Mixed-mode**, and **Hybrid**.

WINS IP Address: Enter your Primary and Secondary WINS Server IP address(es).

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: *This IP address must be within the DHCP IP Address Range.*

Enable: Check this box to enable the reservation.

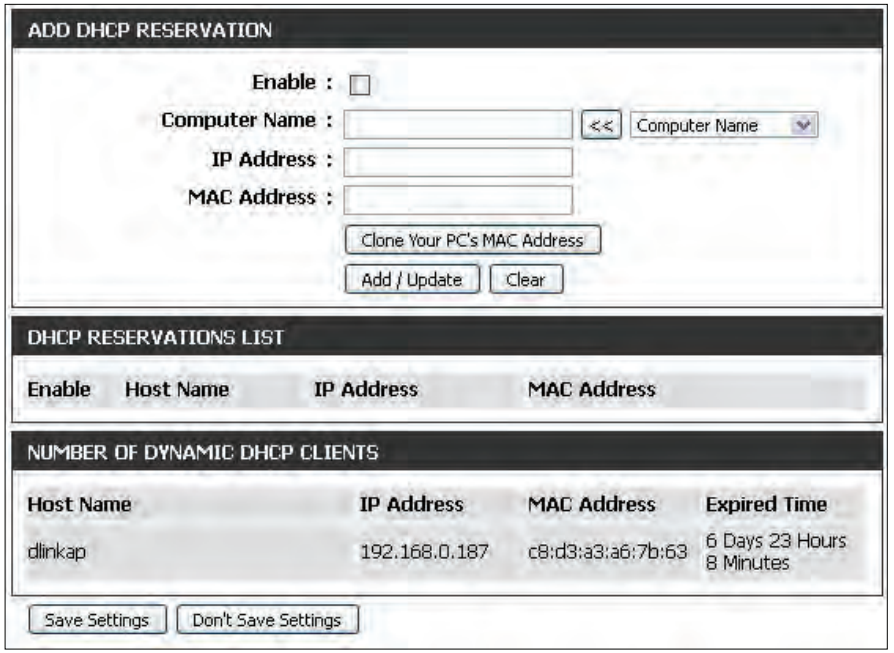
Computer Name: Enter the **Computer Name** or select from the drop-down menu and click **<<**.

IP Address: Enter the **IP Address** you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the **MAC Address** of the computer or device.

Clone Your PC's MAC Address: You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC Address with the MAC address of your Ethernet card.

Add/Update: Click **Add/Update** to add your entry. You must click **Save Settings** at the bottom to activate your reservations.



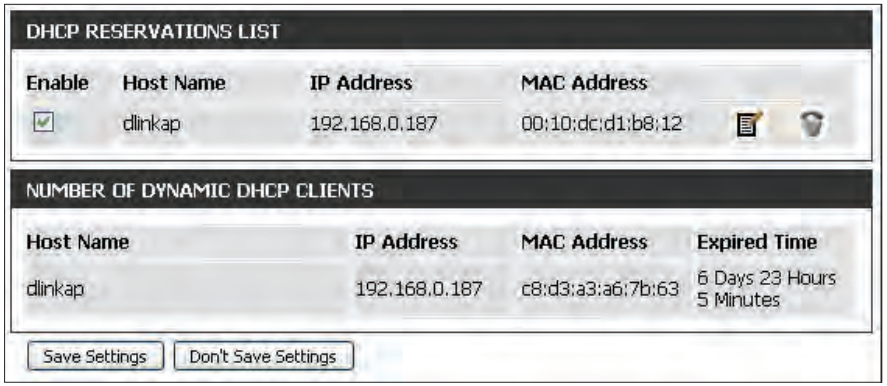
DHCP Reservations List

DHCP Reservations List: Displays any reservation entries. Displays the *Host Name* (name of your computer or device), *IP Address*, and *MAC Address*.

Enable: Check the box to enable the reservation.

Edit: Click the edit icon to make changes to the reservation entry.

Delete: Click the trash icon to remove the reservation from the list.



Storage

This page will allow you to access files from a USB external hard drive or thumb drive that is plugged into the router from your local network or from the Internet using a web browser or an app for your smartphone or tablet, like the mydlink Shareport™ app. You can create users to allow access to these files.

Windows File Sharing: Select either **Require router's admin password** or **Allow all users to access (no password).**

Enable SharePort Web Access: Check the box to enable file sharing on your USB storage device that is plugged in your router.

HTTP Access Port: Enter a port (8181 is default). You will have to enter this port in the URL when connecting to the shared files. For example: (**http://192.168.0.1:8181**).

HTTPS Access Port: Enter a port (4433 is default). You will have to enter this port in the URL when connecting to the shared files. For example: (**https://192.168.0.1:4433**).

Allow Remote Access: Check this option to allow remote access to this router.

User Name: To create a new user, enter a **User Name**.

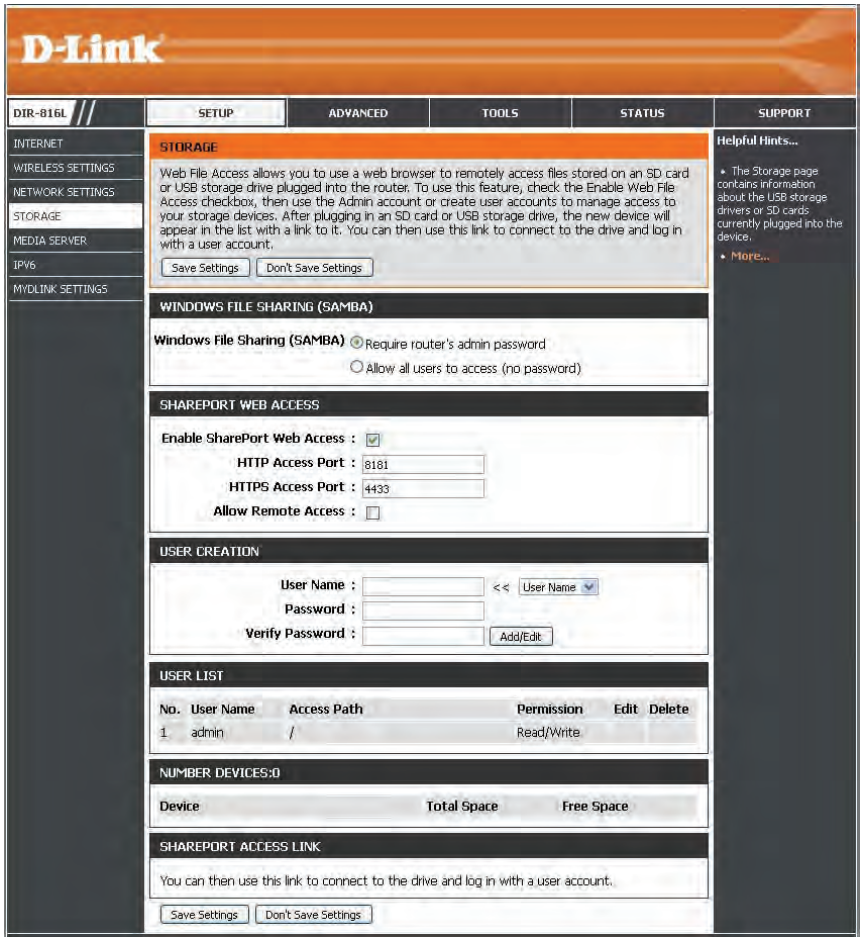
Password: Enter a **Password** for this account.

Verify Password: Re-enter the **Password**. Click **Add/Edit** to create the user.

User List: Displays the user accounts. The Admin and Guest accounts are built-in to the router.

Number of Devices: Displays the USB device plugged into the router.

Click **Save Settings**.



Access Files from the Internet

Below are step-by-step instructions on how to access files from the Internet from your USB drive or external hard drive that is connected to your DIR-817LW router:

Step 1 - Enable SharePort Web Access
Under *SharePort Web Access*, check **Enable SharePort Web Access** to enable. Then enter the port(s) for HTTP or HTTPS (secure). The default for HTTP is 8181 and HTTPS is 4433.

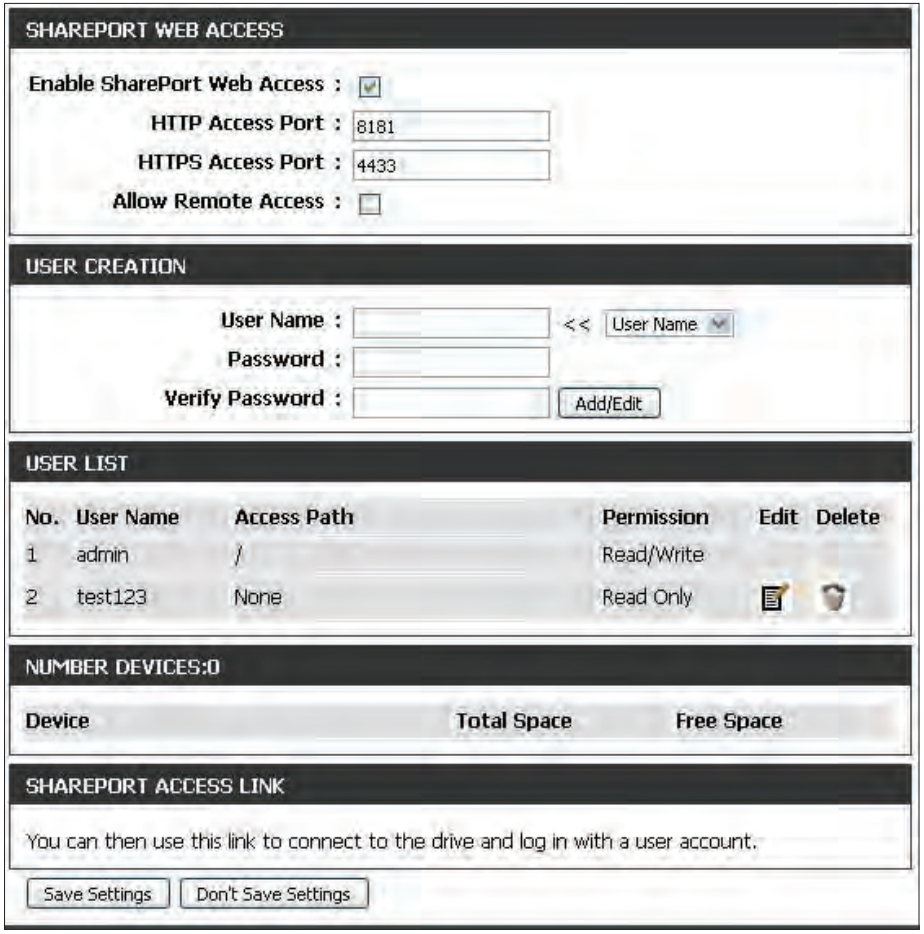
Step 2 - Create a User Account
Under *User Creation*, enter a **User Name** and **Password**. Verify **Password** and then click **Add/Edit**.

Step 3 - Configure your Access Path
Under *User List*, click the **Edit** icon for the user you just created. You will see an *Append New Folder* window with the name of the new user in the *User Name* field. Click on **Browse** to locate the folder on your USB storage device or external hard drive for which you want to assign access to the user.

Step 4 - Save Settings
If you want to add more users, repeat steps 2 and 3. Once you are finished, click the **Save Settings** button at the very bottom to save your settings.

Note: *The* ***SharePort Access Link*** *(at the bottom) will display the URL(s) you can use to connect.*

Also, If you want to use HTTPS, you must type in **HTTPS://** instead of **HTTP://** to get a secure connection. Remember to type the port number after the colon. For example, if you selected HTTPS and changed the port to 3200, and your WAN IP address is 1.2.3.4, then you would enter **HTTPS://1.2.3.4:3200** to connect.



Sharing Files Using the mydlink SharePort™ App

The free mydlink SharePort app for iOS and Android allows you to remotely access files stored on a USB drive or SD card connected to the DIR-817LW.

Supported File Formats for iOS and Android*:

- **Movies/Films:** .m4v, .mov, .mp4
- **Audio/Music:** .aac, .mp3, .wav
- **Photos/Images:** .bmp, .gif, .jpg, .png, .psd, .tif
- **Documents**: Microsoft® Office formats, .pdf

Note: *The video and audio format supported for Android depends upon the media player app that is installed on the device.*

1. If you did not create a free **mydlink** account when using the *Setup Wizard*, you will need one. Go to www.mydlink.com for more information.

2. Make sure you enabled file sharing on your USB storage device that is plugged in your router. Refer to "Storage" on page 52.

3. Plug your USB storage device into the USB port on the back of the DIR-817LW.

4. Use your iOS or Android mobile device to scan the appropriate QR code for your device to download the free **mydlink** SharePort™ app from the App Store or Google Play.

   If you do not have a QR code reader, you can simply search for **mydlink** SharePort™ at the App Store or Google Play.

Available on the App Store

iOS

ANDROID APP ON Google play

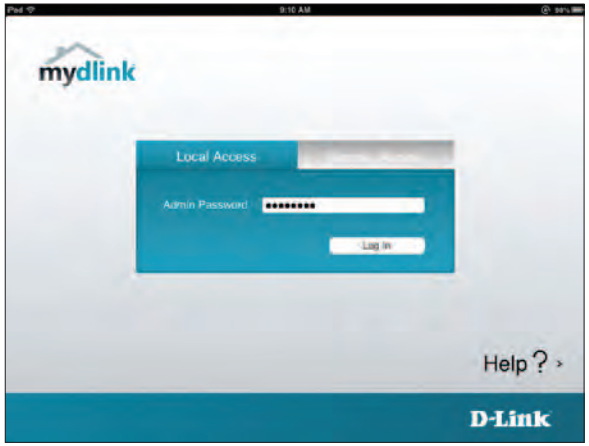
Android

Note: *Make sure you select* ***mydlink SharePort****. The D-Link SharePort Mobile app is for local access only. If your router does not support mydlink SharePort, use Shareport Mobile for local streaming.*

5. Tap on the **logo** for the *mydlink SharePort* app to download.

Note: *Before you start using mydlink SharePort, make sure you download the latest firmware for your router.*

6. If you are at the same physical location as your router, you can connect wirelessly by using the wireless utility on your mobile device. Scan for the wireless network name as listed on your Wi-Fi Configuration card or sticker. Select the **Wi-Fi Network** and enter the **Wi-Fi Password**.



7. When you see the **Log In** screen:
   Select **Local Access** if you are connecting directly to the wireless router you want to access files from.
   Select **Remote Access** if you are using the Internet to connect to your router at a different location.

8. For **Local Access**, enter the **Admin Password** for your router and tap **Log In**. For R**emote Access**, enter your mydlink account information and tap **Log In**.

9. You can now use the mydlink SharePort™ app interface to stream media and access files stored on your USB drive. Tap on the left or right **arrows** to cycle through the file categories. Tap the file category **icon** at the bottom center of the screen to view the files in that category.

Note: *If you connect a USB storage or SD card with many files or a large capacity, it may take a while for the DIR-817LW to scan and catalog your files.*

Movie (Film)

The *Movie* (*Film)* section allows you to stream video clips and movies from your DIR-817LW to your mobile device. Tap the **Movie** icon on the main menu to view a list of movies stored on your USB storage device or SD card attached to your router.

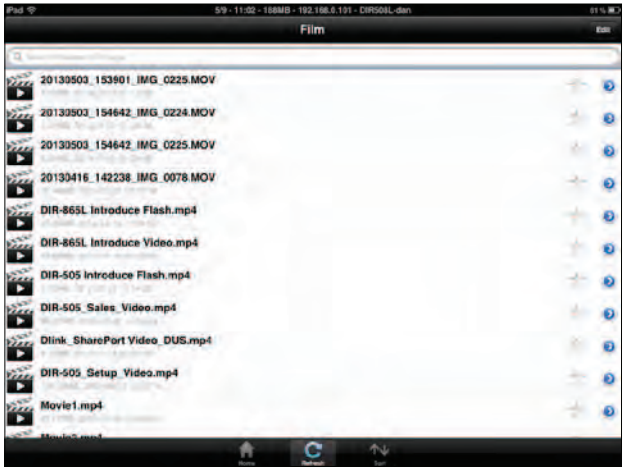
The Search bar at the top lets you search your SharePort storage by filename.

Tap **Edit** at the top right to mark files for deletion.

Tap the star icon next to each file to add it into your *Favorite* section.

Tap the  icon next to each file to perform file options:

- **Mail**: Lets you e-mail the video.
- **iCloud**: Lets you store the video on iCloud.
- **Open In...**: Allows you to use a third-party app to open the file.



Options from the bottom menu bar:

Home: Tap to go back to the main menu.

Refresh: Tap to update the list of files.

Sort: Tap to re-order the files alphabetically.

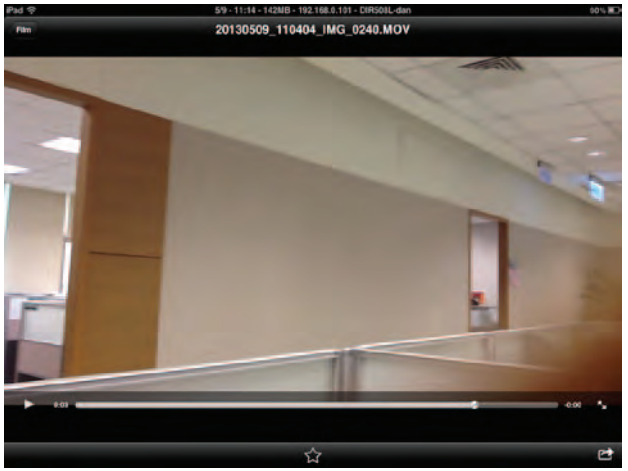
Tap on the file to start the player. In the player:

Tap **Play** to start the video. You can scroll to any time on the time line by pressing and sliding your finger.

Tap  (located to the right of the progress bar) to maximize the video.

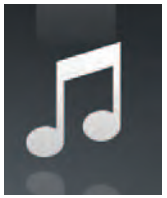
Tap the star icon to add/remove the video from your Favorites.

Tap the  icon to bring up the same options as  .



Music

The *Music* section allows you to stream songs from your DIR-817LW to your mobile device. Tap the **Music** icon on the main menu to browse through your music collection on your USB storage device or SD card attached to your router.



The Search bar at the top lets you search your SharePort storage for songs by filename.

Tap **Edit** at the top right to create a *Playlist* and mark files for deletion.

Tap the star icon next to each file to add it into your *Favorite* section.

Tap the icon next to each file to perform file options:

- **Mail**: Tap to e-mail the audio file.
- **iCloud**: Tap to store the audio file on iCloud.
- **Open In...**: Tap to use a third-party app to open the file.

Options from the bottom menu bar:

Home: Tap to go back to the main menu.

Refresh: Tap to update the list of files.

Sort: Tap to re-order the files alphabetically.

Tap the file to play the song. The title will be shown above the scroll bar. In the player:

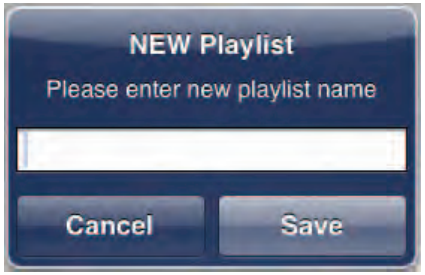
Tap to repeat all or repeat a single song.

Tap to play previous song, and to play the next song.

Tap to enable/disable shuffle mode.

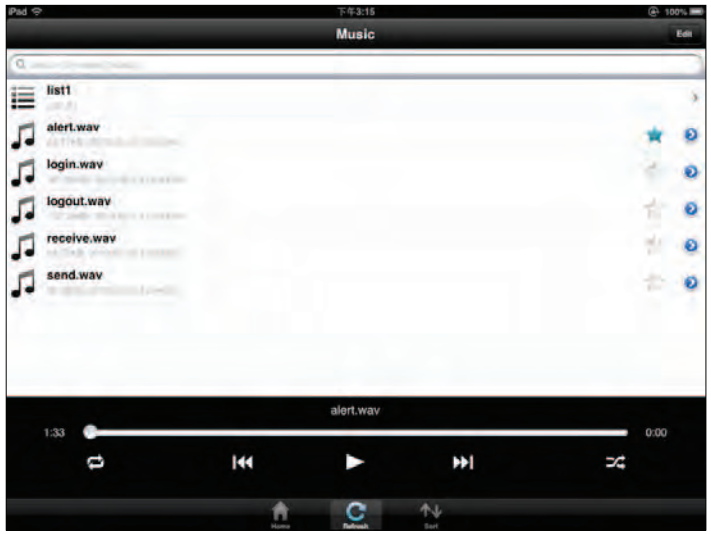
To create a playlist:

1. Tap **Edit** > **Add Playlist**. The *New Playlist* window will open.
2. Enter a name for the *Playlist*.
3. Tap **Save**. The name of the *Playlist* will appear in the browser next to the icon.



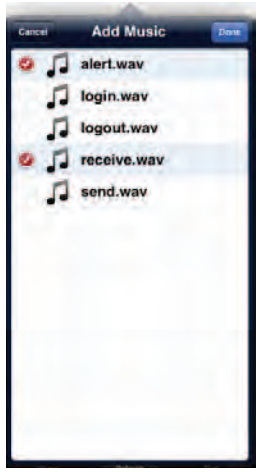
To review songs in a *Playlist*:

Tap the name to open the *Playlist* browser, which displays all of the songs in the list.



Add songs to a playlist:

1. Tap **Add Music...** to add songs to the current *Playlist*.
2. Click the songs you wish to add and tap **Done**. The *Playlist* will be saved and you will be able to play the saved songs.



Delete songs from the playlist:

1. Tap **Edit** in the *Playlist* browser and mark the files to be deleted.
2. Tap **Delete**.

Photo

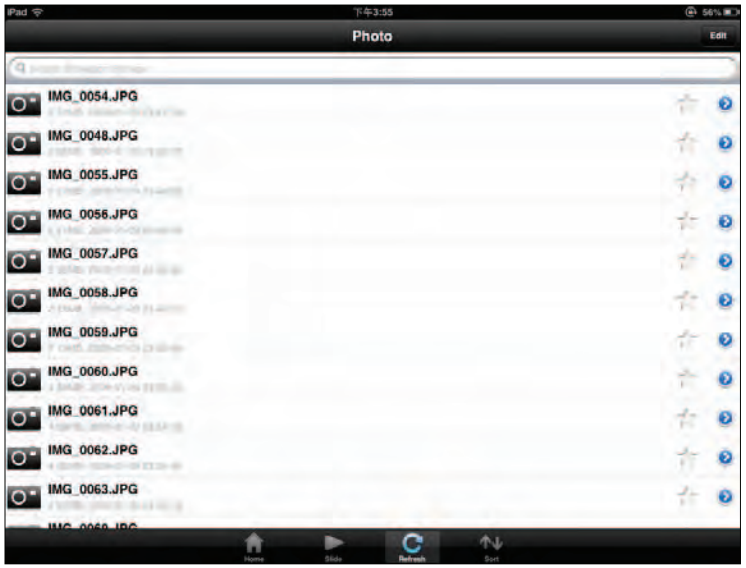
The *Photo* section allows you to view images streamed from your DIR-817LW to your mobile device. Tap the **Camera** icon on the main menu to browse through your photo collection on your USB storage device or SD card attached to your router.

The Search bar at the top lets you search your SharePort storage for images by filename.

Tap **Edit** at the top right to mark files for deletion.
Tap the star icon next to each file to add an image into your *Favorite* section.

The icon next to each file gives you image options:

- **Mail**: Tap to e-mail the image.
- **Print**: Tap to print the image.
- **iCloud**: Tap to store the image on iCloud.
- **Facebook:** Tap to upload the image to your Facebook account.
- **Twitter:** Tap to upload the image to your Twitter account.
- **Open In...**: Tap to use a third-party app to open the file.



Options from the bottom menu bar:

Home: Tap to go back to the main menu.
Slide: Tap to start the slideshow. Tap the screen again to bring up the menu.
Refresh: Tap to update the list of files.
Sort: Tap to re-order the files alphabetically.

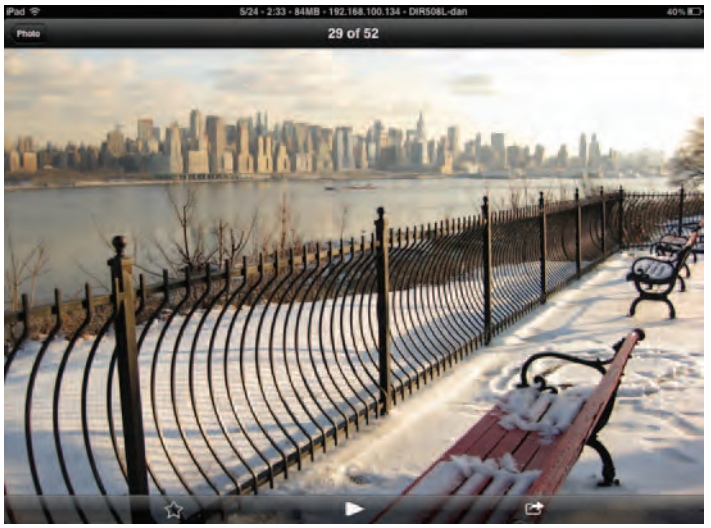
Tap on the file to start the *Photo* viewer.

Tap **Photo** at the top left to return to the photo browser.

Tap the star icon to add/remove the image from your Favorites.

Tap play to start the slideshow.

Tap the icon to bring up the same image options as on the previous page.



Document

The *Document* section allows you to share, print, and view documents stored on a USB storage device or SD card attached to your DIR-817LW. Tap the **Document** icon on the main menu to view the list of files.

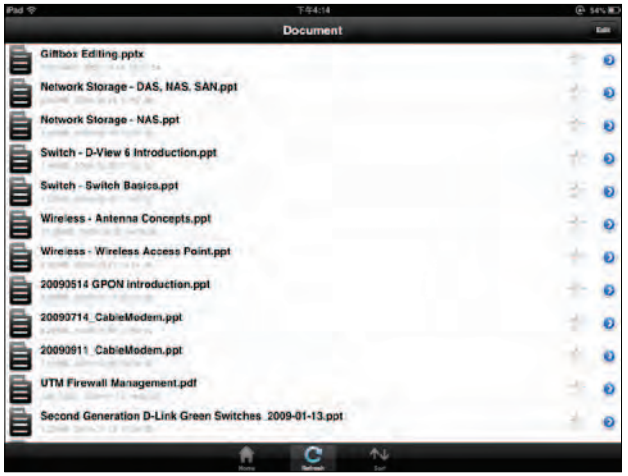
The Search bar at the top lets you search your SharePort storage by filename.

Tap **Edit** at the top right to mark files for deletion.

Tap the star icon next to each file to add a file into your *Favorite* section.

Tap the icon next to each file to perform file options:

- **Mail**: Tap to e-mail the file.
- **Print**: Tap to print the file.
- **iCloud**: Tap to store the file on iCloud.
- **Open In...**: Tap to use a third-party app to open the file.



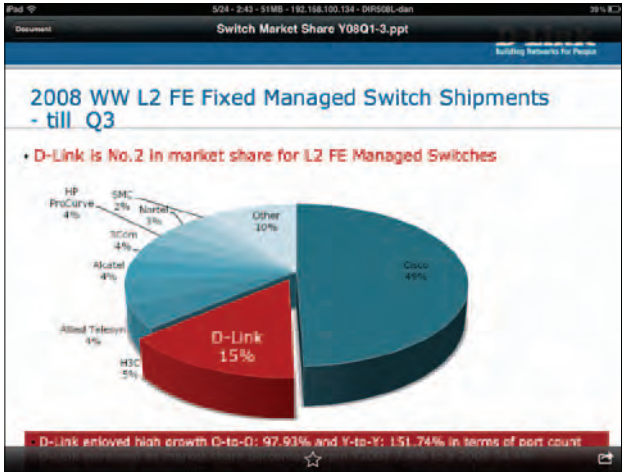
Options from the bottom menu bar:

Home: Tap to go back to the main menu.

Refresh: Tap to update the list of files.

Sort: Tap to re-order the files alphabetically.

Tap the file to view the contents.



Note: *If the file is unsupported, you will need to use a third-party app to open it.*

Favorite

The *Favorite* section allows you to quickly access your most frequently used files, no matter what file type, from a central location.

Add a file to your favorites:

1. Tap on a section and browse to the file.
2. Tap the star icon next to its filename or while it is playing.

Access your favorite files:

Tap the star icon on the main menu to browse the files on your mobile device.

Tap on the filename to play or view the file.

Tap the icon next to each file to perform file options:

- **Mail**: Tap to e-mail the image.
- **Print**: Tap to print the image.
- **iCloud**: Tap to store the image on iCloud.
- **Open In...**: Tap to use a third-party app to open the file.

Options from the bottom menu bar:

Home: Tap to go back to the main menu.

Refresh: Tap to update the list of files.

Sort: Tap to re-order the files alphabetically.

Note: *The file options will vary depending on the file type.*

Folder

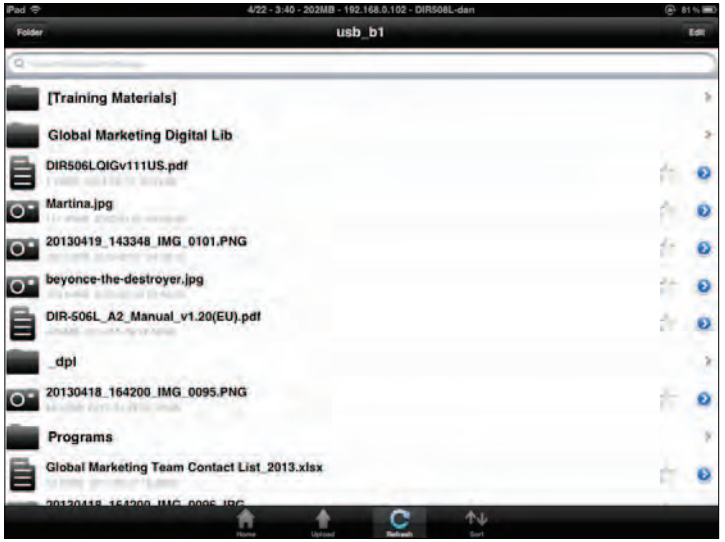
You can browse your folders and files hierarchically in the *Folder* section. Tapping the filename will open the viewer/player for that file type, as explained in the preceding pages. You can also upload files from your mobile device to the USB storage device attached to your DIR-817LW.

The Search bar at the top lets you search your SharePort storage by filename.

Tap **Edit** at the top right to go to the editing screen for the selected file type.

Tap the star icon next to each file to add a file to your *Favorite* section.

Tap the  icon next to each file to bring up file options. The options will vary according to the file type.



Options from the bottom menu bar:

Home: Tap to go back to the main menu.

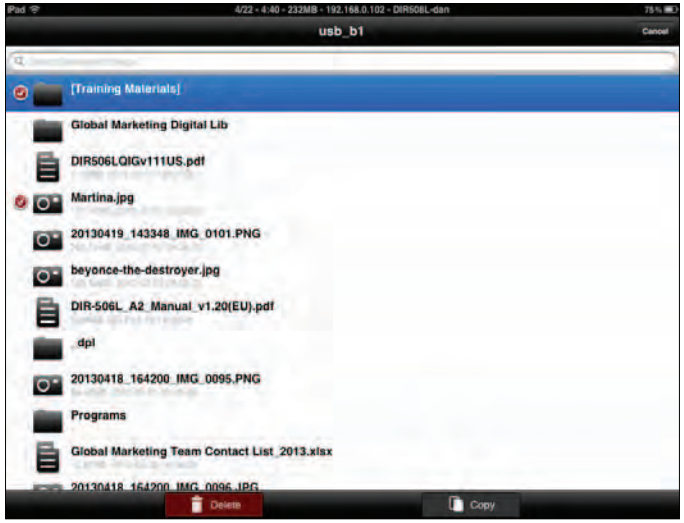
Upload: Tap to upload images/videos from your mobile device.

Refresh: Tap to update the list of files.

Sort: Tap to re-order the files alphabetically.

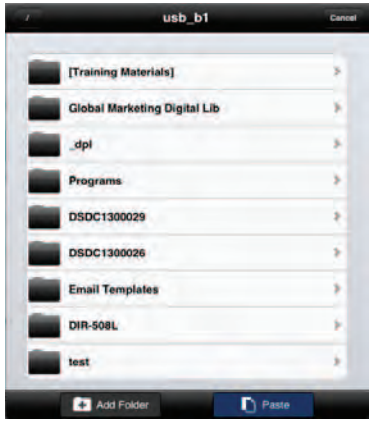
Edit files:

1. Tap **Edit** at the top right.
2. Click the circle next to a file to mark it for deletion or copy.
3. Tap on **Delete** at the bottom to delete the file.



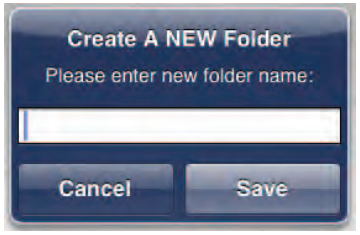
Copy files:

1. Tap on **Copy** to bring up a window where you can select the folder to copy to.
2. Browse to the directory you want to copy the marked files to and tap **Paste**.



Create a new folder:

1. Browse to locate the directory you wish to create a new folder in.
2. Tap **Edit** at the top right.
3. Tap **Add Folder** to add a new folder.
4. Enter the name of the new folder. Tap **Save**.
5. Tap **OK** to confirm folder creation.



Upload images and videos from your mobile device:

1. Browse to the folder you wish to upload to.
2. Tap **Upload** at the bottom.
3. Select an album containing the file you wish to upload.
4. Tap to mark each of the photo/video you wish to upload.
5. Tap **Done**.

The files will begin to upload and the progress will be displayed below the filename. When complete, it will say, *100% uploaded*.

To add more files, tap the **+** icon at the top right corner of the screen and repeat the procedure listed above.

Media Server

DLNA (Digital Living Network Alliance) provides a standard for Network Media Devices (NMDs). This allows users to share music, pictures, and videos using network connected PCs or mobile devices. The iTunes Server allows iTunes software to automatically detect and play music from the router.

DLNA Server: Click on the **Enable** button to enable the *DLNA Server* feature.

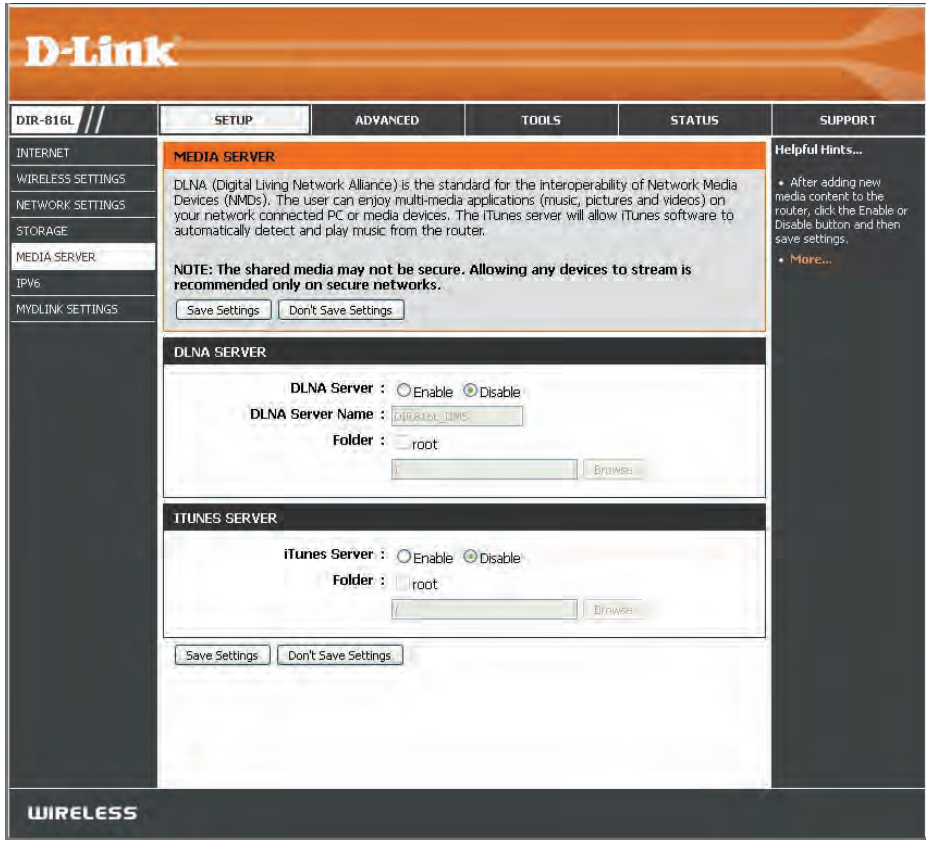
DLNA Server Name: Enter the **DLNA Server Name**.

Folder: Uncheck the checkbox for **root** and click on the **Browse** button to select a folder on your thumb drive.

iTunes Server: Click on the **Enable** button to enable the *iTunes Server* feature.

Folder: Uncheck the checkbox for **root** and click on the **Browse** button to select a folder on your thumb drive. .

Click **Save Settings.**



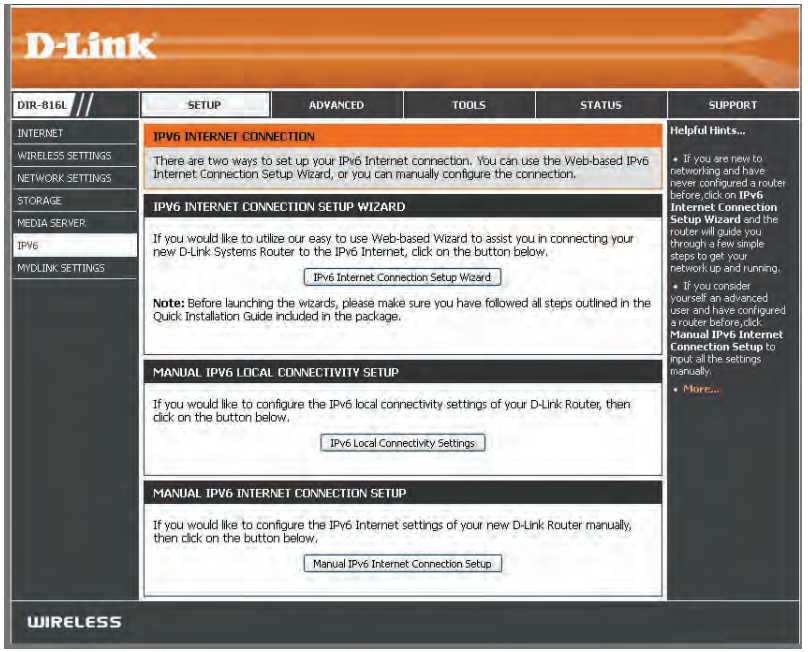
IPv6

On this page, the user can configure the IPv6 Connection type. There are three ways to set up the IPv6 Internet connection.

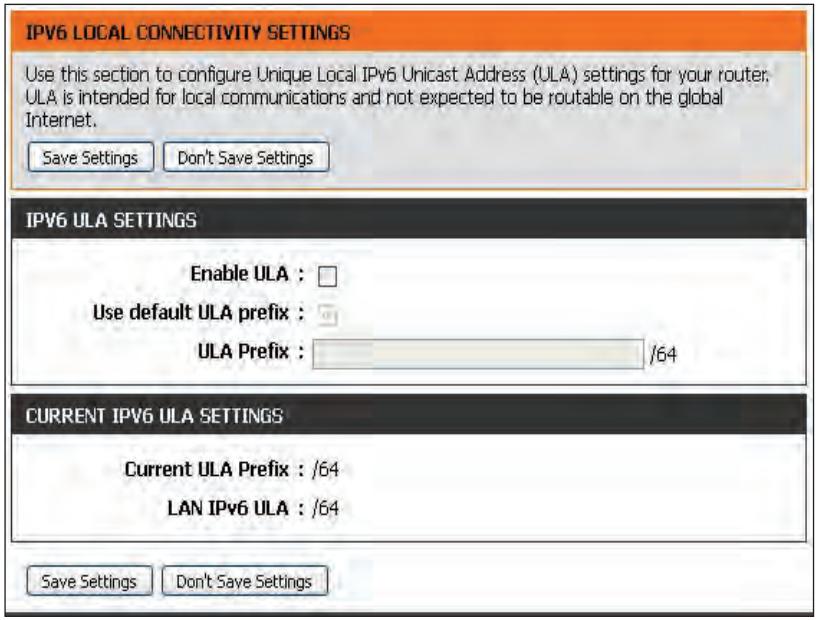
For the beginner user that has never configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running. (Refer to "IPv6 Internet Connection Setup Wizard" on page 70.)

For the advanced user that has experience with configuring a router, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually. (Refer to "IPv6 Manual Setup" on page 75.)

If you would like to manually configure the IPv6 local connectivity settings of your router, click on **IPv6 Local Connnectivity Settings**.



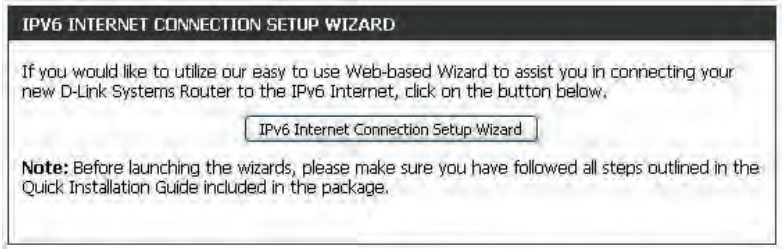
Click on **Enable ULA.** You can check **Use default ULA prefix**, or you can leave the box unchecked and enter the prefix manually in the **ULA Prefix** text box.



IPv6 Internet Connection Setup Wizard

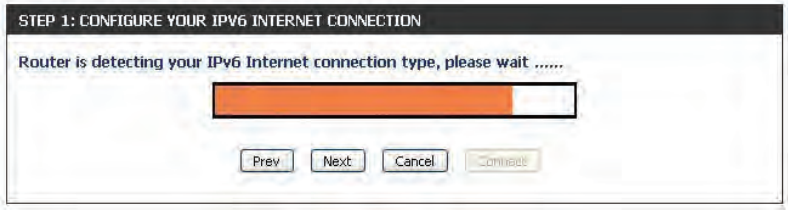
On this page, the user can configure the IPv6 Connection type using the IPv6 Internet Connection Setup Wizard.

Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.



Click **Next** to continue to the next page. Click **Cancel** to return to the main page.

The router will try to detect whether its possible to obtain the IPv6 Internet connection type automatically. If this succeeds then the user will be guided through the input of the appropriate parameters for the connection type found.



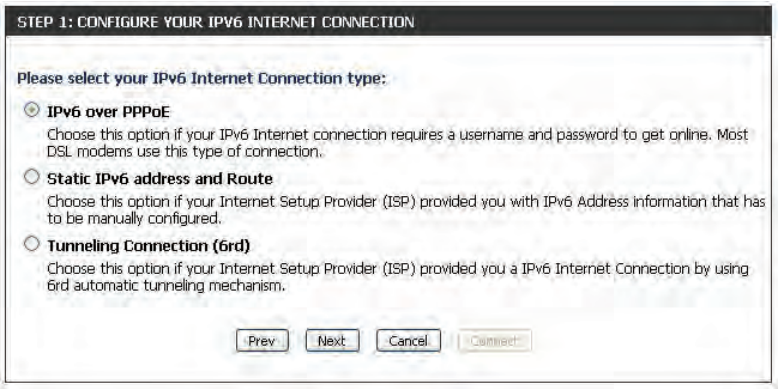
However, if the automatic detection fails, the user will be prompt to either **Try again** or to click on the **Guide me through the IPv6 settings**.

There are several connection types to choose from. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: *If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.*

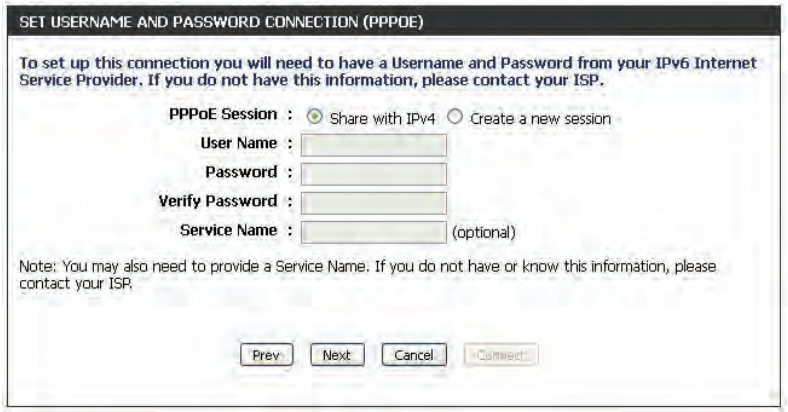
The three options available on this page are **IPv6 over PPPoE, Static IPv6 address and Route,** and **Tunneling Connection (6rd).**

Choose the required IPv6 Internet Connection type and click on the **Next** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.



IPv6 over PPPoE

After selecting the IPv6 over PPPoE option, the user will be able to configure the IPv6 Internet connection that requires a username and password to get online. Most DSL modems use this type of connection.



The following parameters will be available for configuration:

PPPoE Session: Select the PPPoE Session value used here. This option will state that this connection shares it's information with the already configured IPv6 PPPoE connection, or the user can create a new PPPoE connection here.

User Name: Enter the PPPoE **User Name** used here. If you do not know your user name, please contact your ISP.

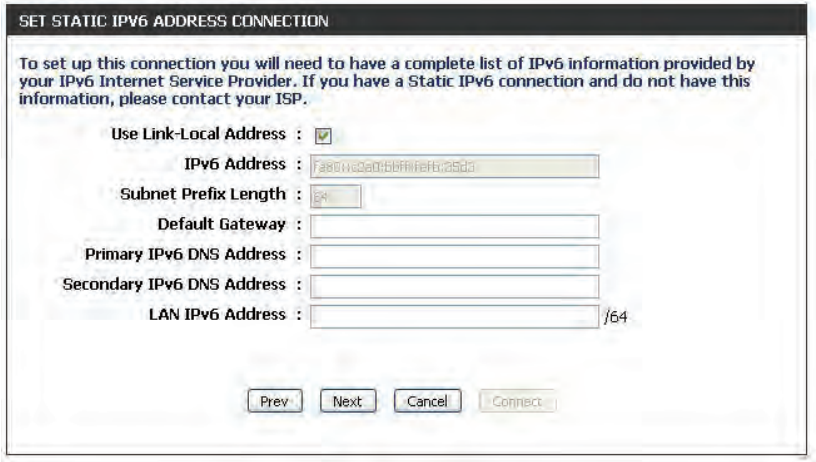
Password: Enter the PPPoE **Password** used here. If you do not know your password, please contact your ISP.

Verify Password: Re-enter the PPPoE **Password** used here.

Service Name: Enter the **Service Name** for this connection here. This field is optional.

Static IPv6 Address Connection

This mode is used when your ISP provides you with a set IPv6 addresses that does not change. The IPv6 information is manually entered in your IPv6 configuration settings. You must enter the IPv6 address, Subnet Prefix Length, Default Gateway, Primary DNS Server, and Secondary DNS Server. Your ISP provides you with all this information.



Use Link-Local Address: The Link-local address is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.

IPv6 Address: Enter the WAN **IPv6 Address** for the router here.

Subnet Prefix Length: Enter the WAN **Subnet Prefix Length** value used here.

Default Gateway: Enter the WAN **Default Gateway** IPv6 address used here.

Primary IPv6 DNS Address: Enter the WAN primary DNS Server address used here.

Secondary IPv6 DNS Address: Enter the WAN secondary DNS Server address used here.

LAN IPv6 Address: These are the settings of the LAN (Local Area Network) IPv6 interface for the router. The router's LAN IPv6 Address configuration is based on the IPv6 Address and Subnet assigned by your ISP. (A subnet with prefix /64 is supported in LAN.)

Tunneling Connection (6rd)

After selecting the Tunneling Connection (6rd) option, the user can configure the IPv6 6rd connection settings.

The following parameters will be available for configuration:

6rd IPv6 Prefix: Enter the 6rd IPv6 address and prefix value used here.

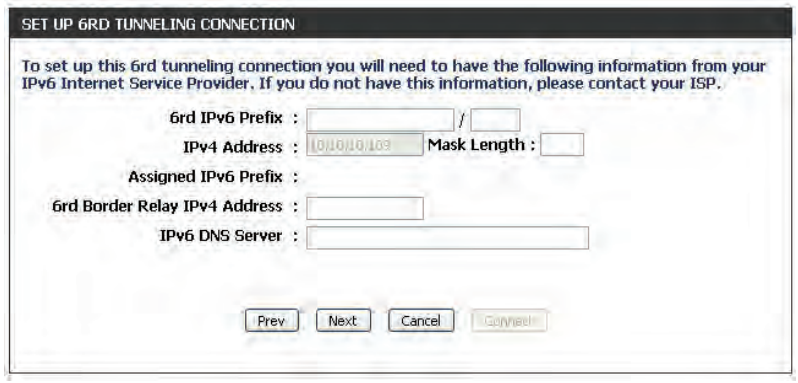
IPv4 Address: Enter the **IPv4 Address** used here.

Mask Length: Enter the IPv4 **Mask Length** used here.

Assigned IPv6 Prefix: Displays the **Assigned IPv6 Prefix** value here.

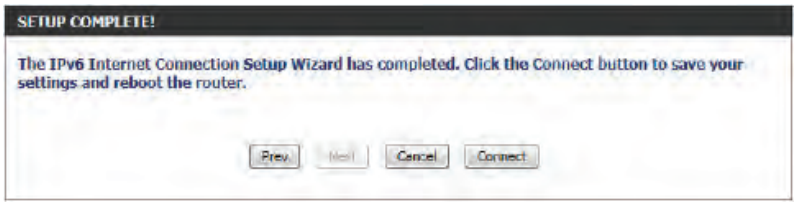
6rd Border Relay IPv4 Address: Enter the **6rd Border Relay IPv4 Address** used here.

IPv6 DNS Server: Enter the primary **iPv6 DNS Server** address used here.



The IPv6 Internet Connection Setup Wizard is complete.

Click on the **Connect** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.



IPv6 Manual Setup

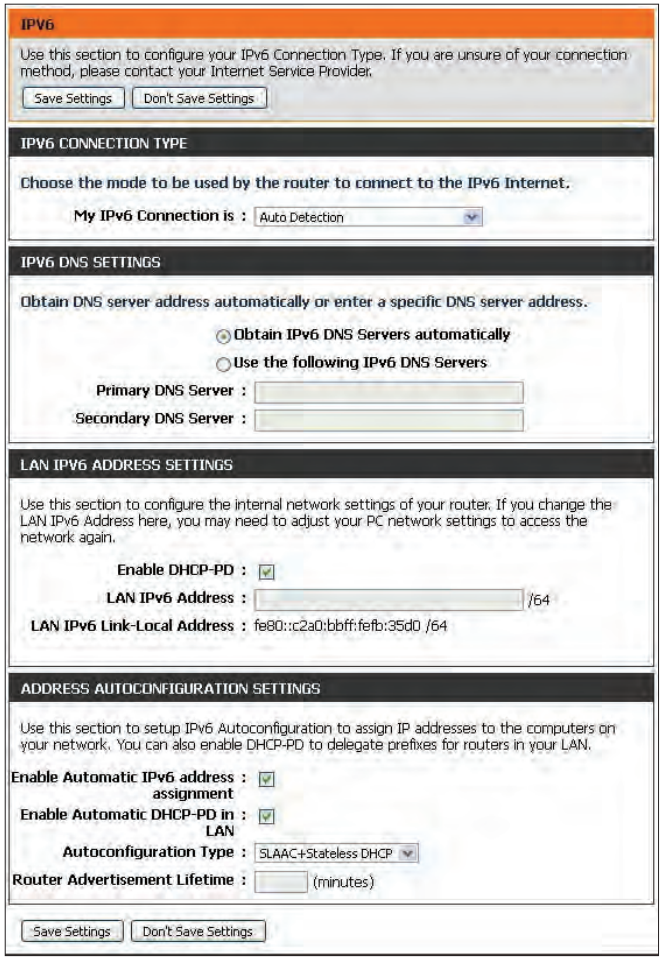
There are several connection types to choose from: **Auto Detection, Static IPv6, Autoconfiguration (SLAAC/DHCPv6), PPPoE, IPv6 in IPv4 Tunnel, 6to4, 6rd,** and **Local Connectivity Only**. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: *If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.*

Auto Detection

Select **Auto Detection** to have the router detect and automatically configure your IPv6 setting from your ISP.

Click **Save Settings**.



Static IPv6

My IPv6 Connection is: Select **Static IPv6** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet Service Provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the router's **LAN IPv6 Link-Local Address**.

Enable Automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

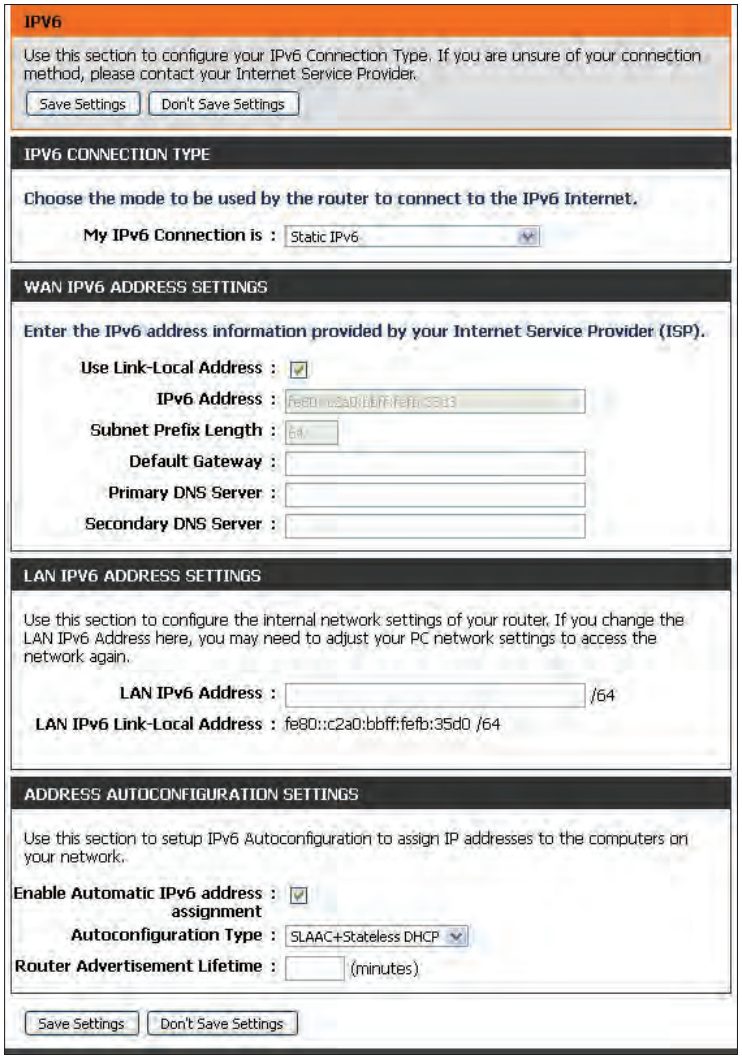
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the **Router Advertisement Lifetime** (in minutes).

Click **Save Settings**.



Autoconfiguration

My IPv6 Connection is: Select **Autoconfiguration (SLAAC/DHCPv6)** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following IPv6 DNS servers**.

Primary/Secondary IPv6 DNS Server: Enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the router's *LAN IPv6 Link-Local Address*.

Enable automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

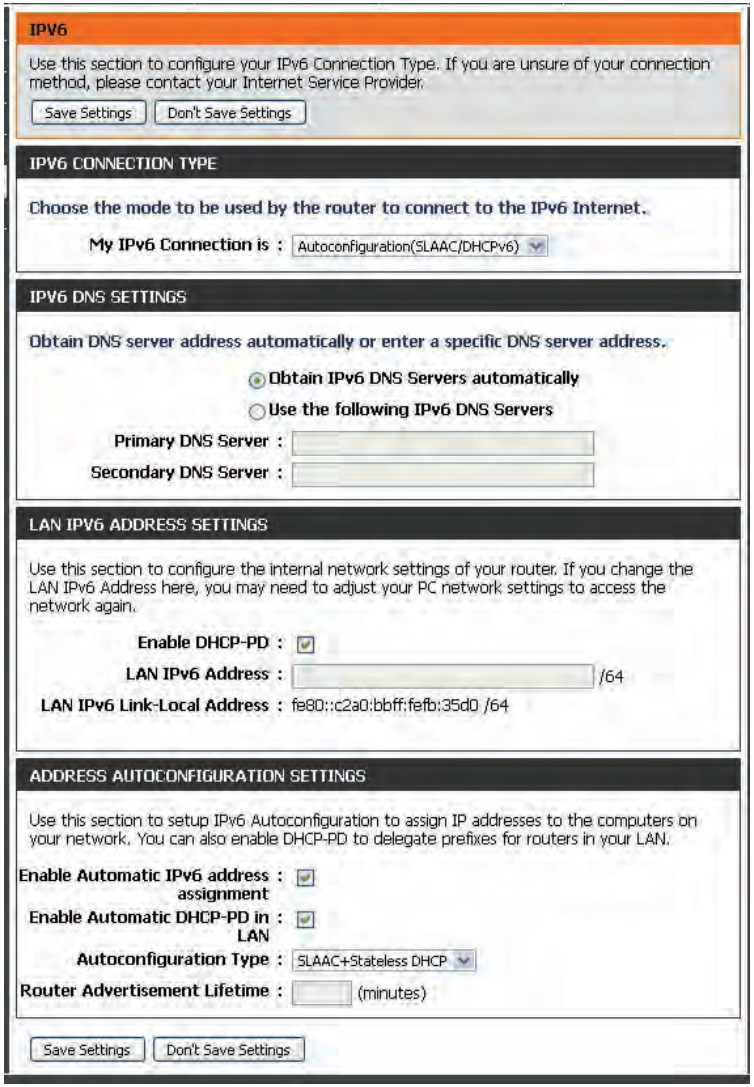
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the **Router Advertisement Lifetime** (in minutes).

Click **Save Settings**.



PPPoE

My IPv6 Connection is: Select **PPPoE** from the drop-down menu.

PPPoE Internet Connection Type: Enter the PPPoE account settings supplied by your Internet provider (ISP).

PPPoE Session: Select **Create a new session** if you have IPv6.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

IP Address: Enter the **IP Address** (Static PPPoE only).

User Name: Enter your PPPoE **Username**.

Password: Enter your PPPoE **Password** and then retype the password in the next box.

Service Name: Enter the ISP **Service Name** (optional).

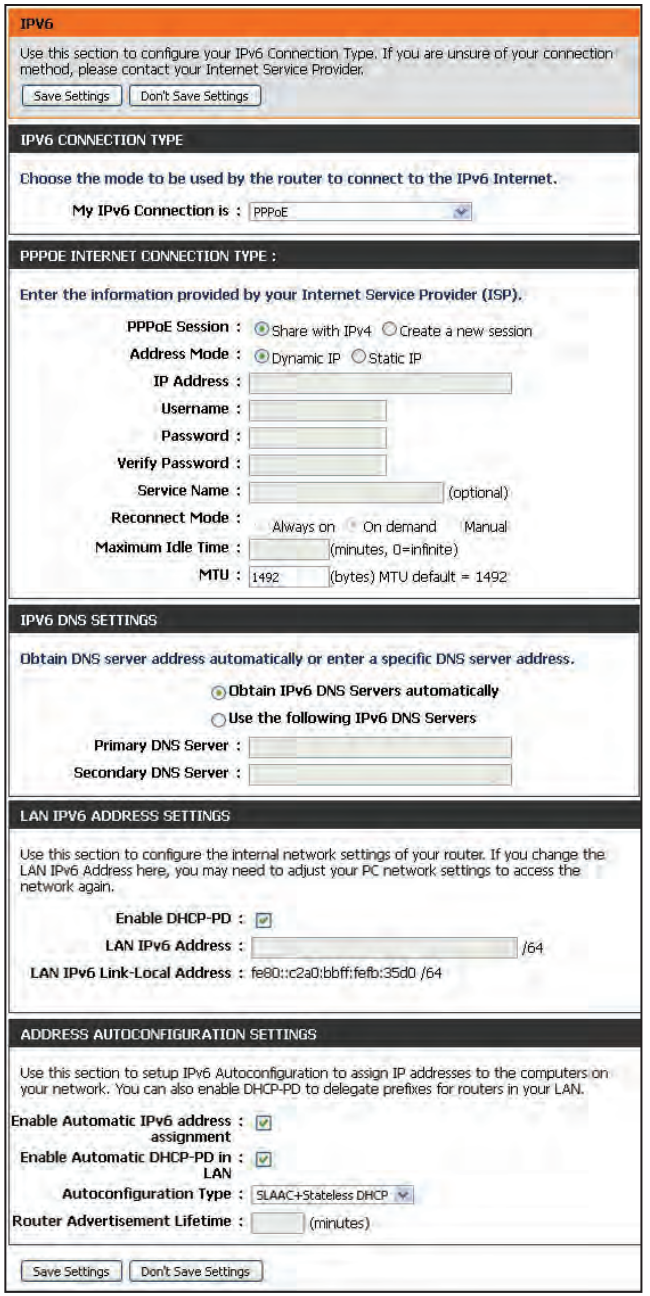
Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a **Maximum Idle Time** during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

IPv6 DNS Settings: Select either **Obtain IPv6 DNS servers automatically** or **Use the following IPv6 DNS servers**

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary DNS server addresses.



Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the router's **LAN IPv6 Link-Local Address**.

Enable Automatic IPv6 address assignment: Check to enable the IPv6 Autoconfiguration.

Enable Automatic DHCP-PD in LAN: Check to enable delegation of prefixes for router addresses.

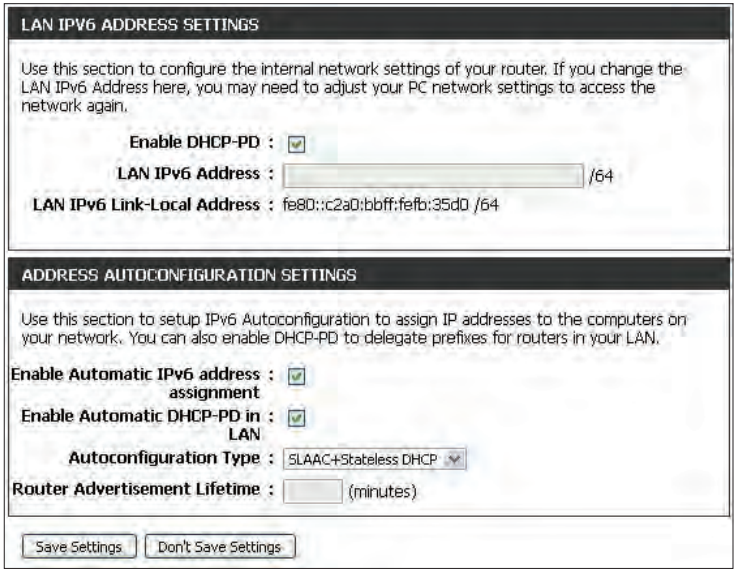
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the **Router Advertisement Lifetime** (in minutes).

Click **Save Settings**.



IPv6 in IPv4 Tunnel

My IPv6 Connection is: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

IPv6 in IPv4 Tunnel Settings: Enter the settings supplied by your Internet provider (ISP).

IPv6 DNS Settings: Select either **Obtain IPv6 DNS server address automatically** or **Use the following IPv6 DNS servers**

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the router's *LAN Link-Local Address*.

Enable Automatic IPv6 Address Assignment: Check to enable the Autoconfiguration feature.

Enable Automatic DHCP-PD in LAN: Check to enable delegation of prefixes for router addresses.

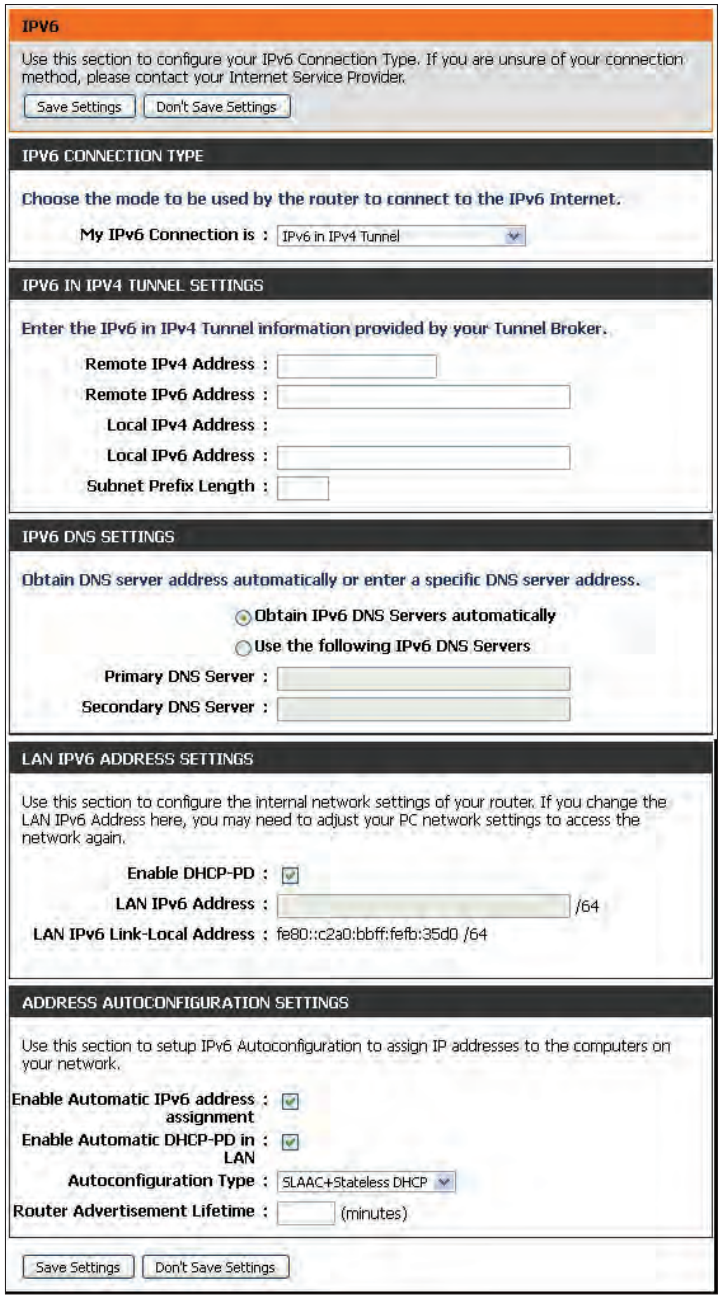
Autoconfiguration Type: Select **Stateful DHCPv6**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCP**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the **Router Advertisement Lifetime** (in minutes).

Click **Save Settings**.



6 to 4 Tunneling

My IPv6 Connection is: Select **6 to 4** from the drop-down menu.

WAN IPv6 AddressSettings: Enter the IPv6 settings supplied by your Internet Service Provider (ISP).

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary IPv6 DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Autoconfiguration feature.

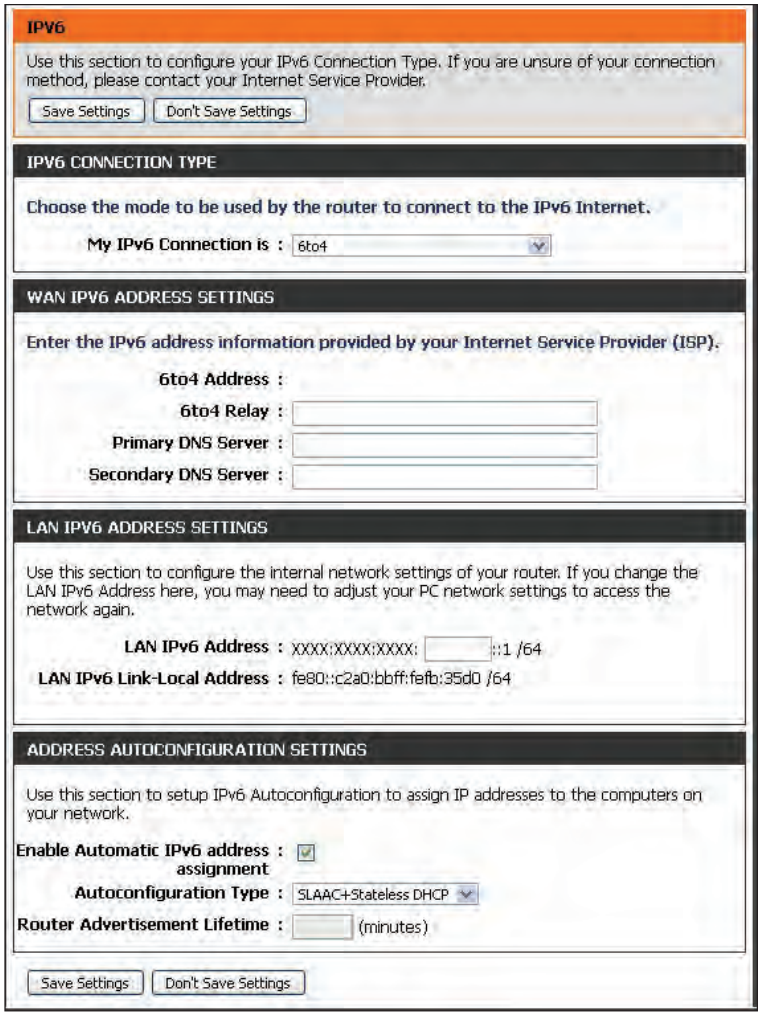
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisemt Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.



6rd

My IPv6 Connection is: Select **6rd** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet Service provider (ISP).

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary IPv6 DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

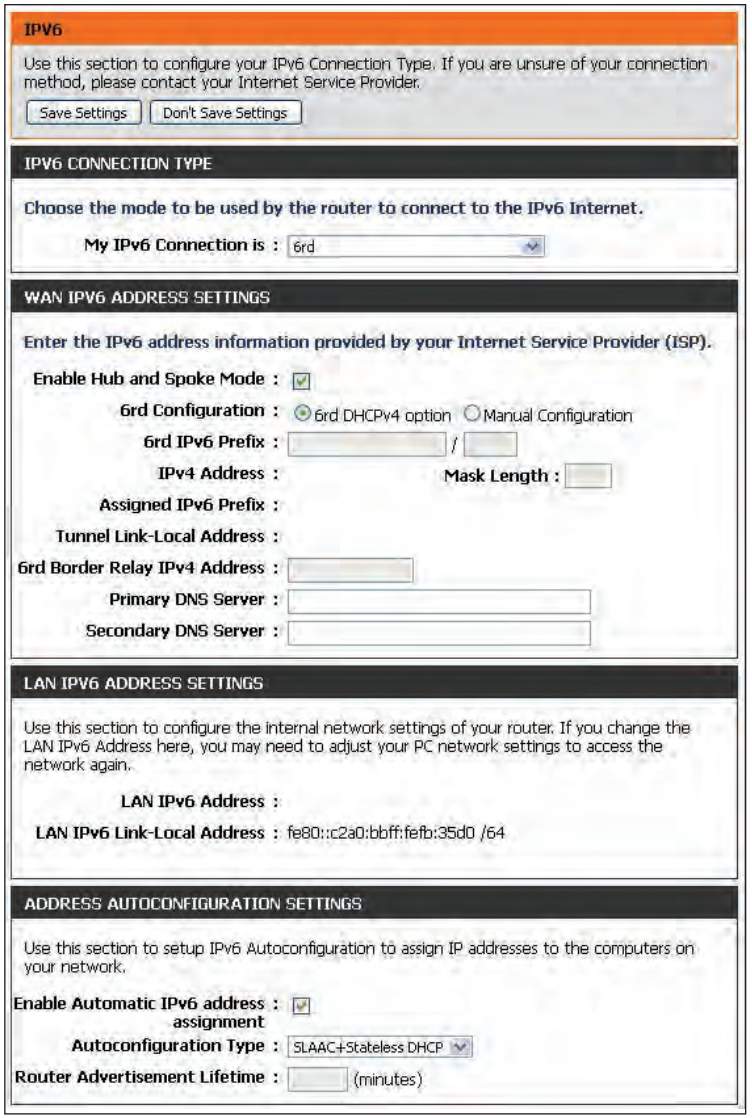
LAN IPv6 Link-Local Address: Displays the router's *LAN IPv6 Link-Local Address.*

Enable Automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6), SLAAC+RDNSS** or **SLAAC + Stateless DHCP.**

Router Advertisement Lifetime: Enter the **Router Advertisement Lifetime** (in minutes).

Click **Save Settings**.



Local Connectivity

My IPv6 Connection is: Select **Local Connectivity Only** from the drop-down menu.

LAN IPv6 Link-Local Address: Displays the *LAN IPv6 Link-Local Address* of the router.

Click **Save Settings**.

mydlink Settings

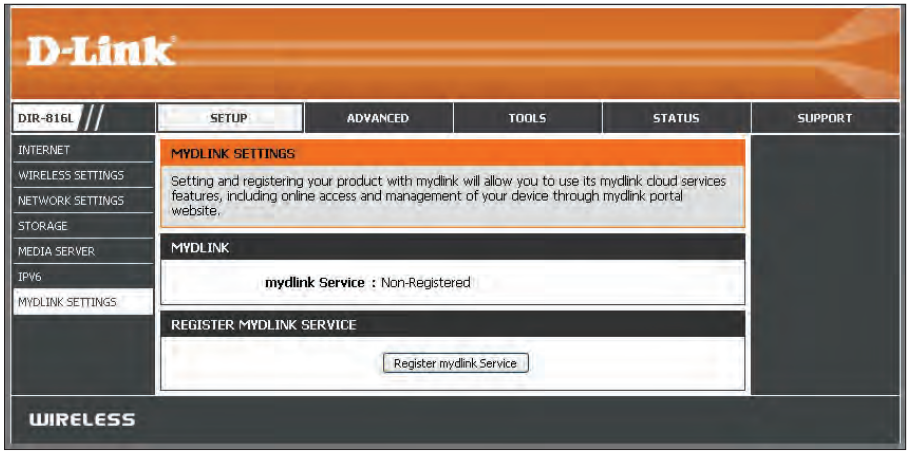
The DIR-817LW features a Cloud Service that pushes information like firmware upgrade notification, user activity, and intrusion alerts to the mydlink™ Lite app on Android and Apple mobile devices. To ensure that your router is up-to-date with the latest features, mydlink will notify you when an update is available for your router. You can also monitor a user's online activity with real-time website browsing history, maintaining a safe and secure environment, especially for children at home.

On this page the user can configure the mydlink settings for this router. This feature will allow us to use the mydlink Cloud Services that includes online access and management of this router through the mydlink portal website or portable device applications like iOS apps and Android applications.

On the mydlink screen, we can view the registration status of your mydlink account. The mydlink Service field will either display *Registered* or *Non-Registered*. In the *Register mydlink Service* section, you can register or modify a mydlink account. Click on **Register mydlink Service** to initiate this procedure.

mydlink Service: Displays whether your device is registered with a mydlink account or not. If you are registered, your mydlink e-mail address will be displayed.

Register mydlink Service: Click **Register mydlink Service** to go to the mydlink website to register or edit your settings. Please refer to page 19 of the Setup Wizard for the registration steps.



Advanced

Virtual Server

This will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

Name: Enter a **Name** for the rule or select an **Application name** from the drop-down menu. Select an **Application name** and click **<<** to populate the **Name** field.

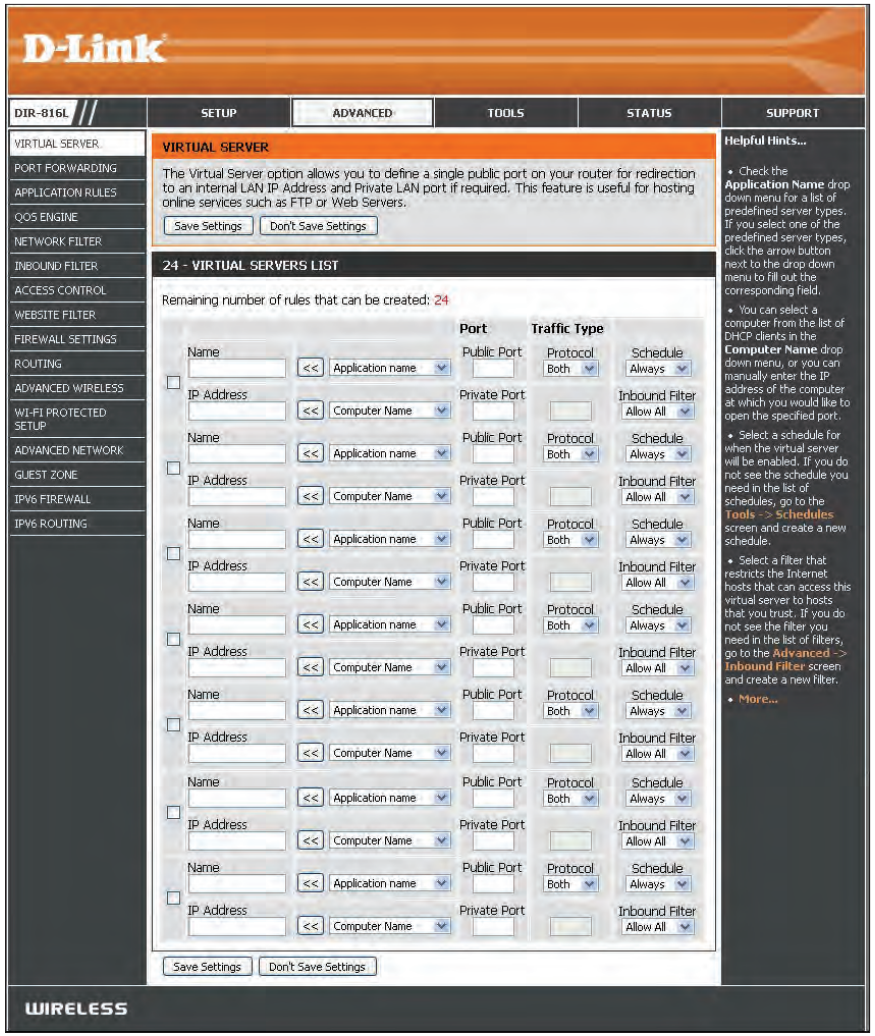
IP Address: Enter the IP **Address** of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the **Computer Name** drop-down menu. Select your **Computer Name** and click **<<**.

Private Port/ Public Port: Enter the port that you want to open next to **Private Port** and Public **Port**. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

Protocol Type: Select **TCP**, **UDP**, or **Both** from the drop-down menu.

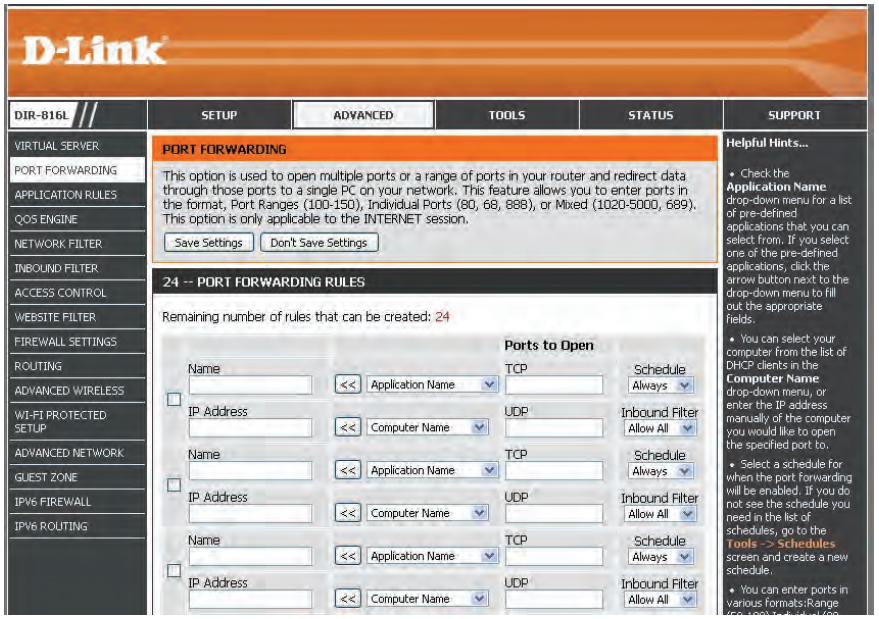
Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own schedules in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters from the **Advanced > Inbound Filter** page.



Port Forwarding

This will allow you to open a single port or a range of ports.



Name: Enter a **Name** for the rule or select an **Application Name** from the drop-down menu. Select an **Application Name** and click **<<** to populate the Name field.

IP Address: Enter the **IP Address** of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the **Computer Name** drop-down menu. Select your **Computer Name** and click **<<**.

Ports to Open TCP/UDP: Enter the **TCP** and/or **UDP** port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma.

Example: 24,1009,3000-4000

Schedule: Select the schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own schedules from the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-817LW. If you need to run applications that require multiple connections, specify the port normally associated with an application in the **Trigger Port** field, select the protocol type as **TCP** or **UDP**, then enter the **Firewall** (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-817LW provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Name: Enter a **Name** for the rule. You may select a pre-defined **Application Name** from the drop-down menu and click **<<**.

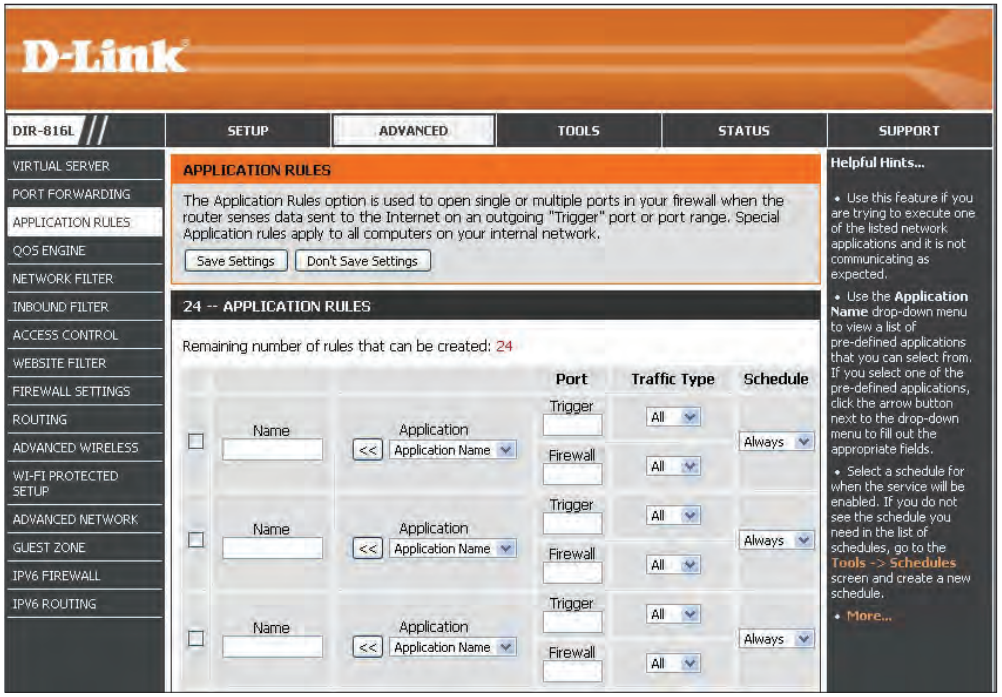
Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

Traffic Type: Select the protocol of the **Trigger** port (**TCP, UDP**, or **Both**).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

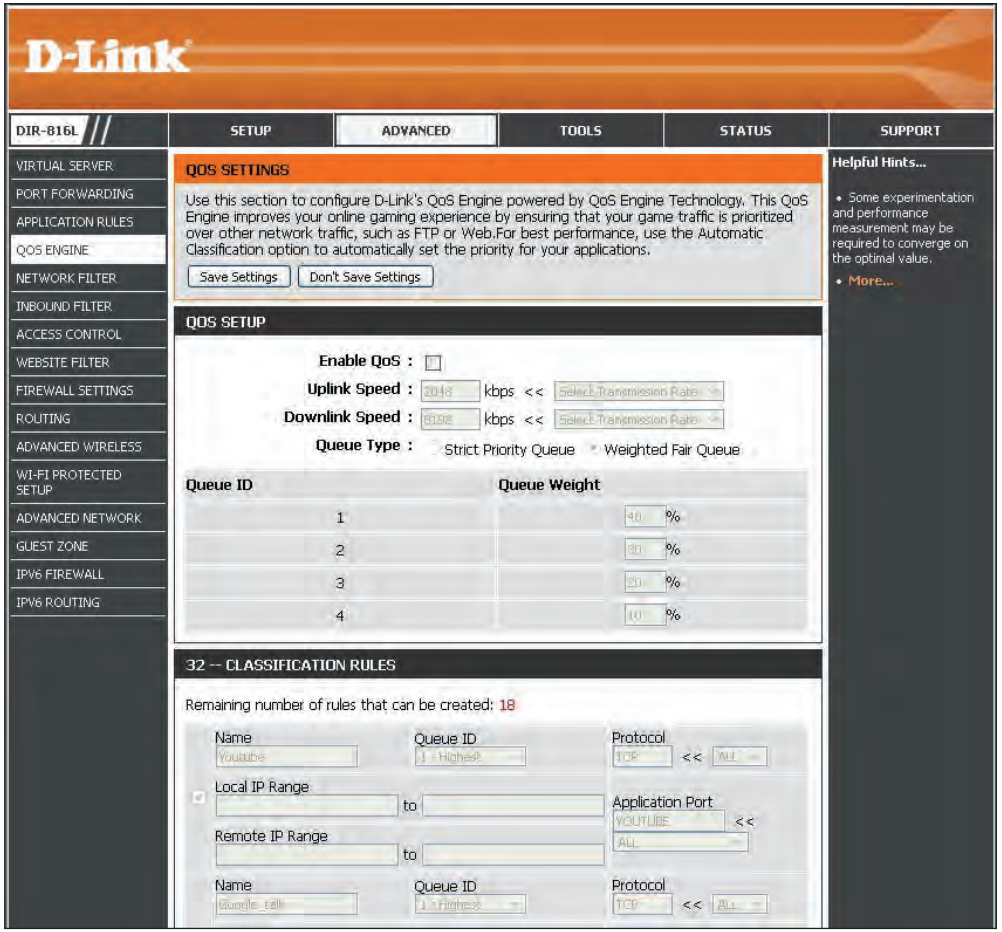
Traffic Type: Select the protocol of the **Firewall** port (TCP, UDP, or Both).

Schedule: The schedule of time when the Application Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own schedule in the **Tools** > **Schedules** section.



QoS Engine

Quality of Service (QoS) assigns priority to specified applications, providing better performance of a data flow. The QoS Engine option helps improve your online gaming experience by prioritizing your game traffic over other network traffic, like FTP. The *Classification Rules* can be used to classify traffic to different queues, then the *Strict Priority Queue* (SPQ) or *Weighted Fair Queue* (WFQ) will do the QoS based on the queue's priority or weight.



Enable QoS: This option is disabled by default. Check the box to enable this option for providing better performance with online games and other interactive applications, such as VoIP.

Uplink Speed: The speed at which data can be transferred from the router to your Internet Service Provider (ISP).

Downlink Speed: The speed at which data can be transferred from the Internet to your router. This is determined by your ISP.

Queue Type: Select either **Strict Priority Queue** (based on traffic priority) or **Weighted Fair Queue** (based on queue weight, by percentage).

Queue ID: The **Queue ID** that is used will be shown in the first column.

Queue Priority: When **Strict Priority Queue** is selected, the Queue Priority will be displayed in the second column.

Queue Weight: When **Weighted Fair Queue** is selected, you will be able to manually enter the **Queue Weight** for each individual Queue ID in the second column.

Classification Rules: The QoS Engine supports overlaps between rules, where more than one rule can match for a specific message flow. If more than one rule is found to match, the rule with the highest priority will be used.

Name: Create a **Name** for the rule that is meaningful to you.

Queue ID: The priority of the message flow is entered here -- 1 receives the highest priority (most urgent) and 255 receives the lowest priority (least urgent).

Protocol: The **Protocol** used by the messages.

Local IP Range: The rule applies to a flow of messages whose LAN-side IP address falls within the range set here.

Remote IP Range: The rule applies to a flow of messages whose WAN-side IP address falls within the range set here.

Application Port: Select a service or port you want to assign to this rule.

Click on **Save Settings**.

Network (MAC) Filters

Use MAC (Media Access Control) Filters to control access to LAN (Local Area Network) computers by using their MAC addresses. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

Configure MAC Filtering: Select **Turn MAC Filtering Off**, **Allow MAC addresses listed below**, or **Deny MAC addresses listed below** from the drop-down menu.

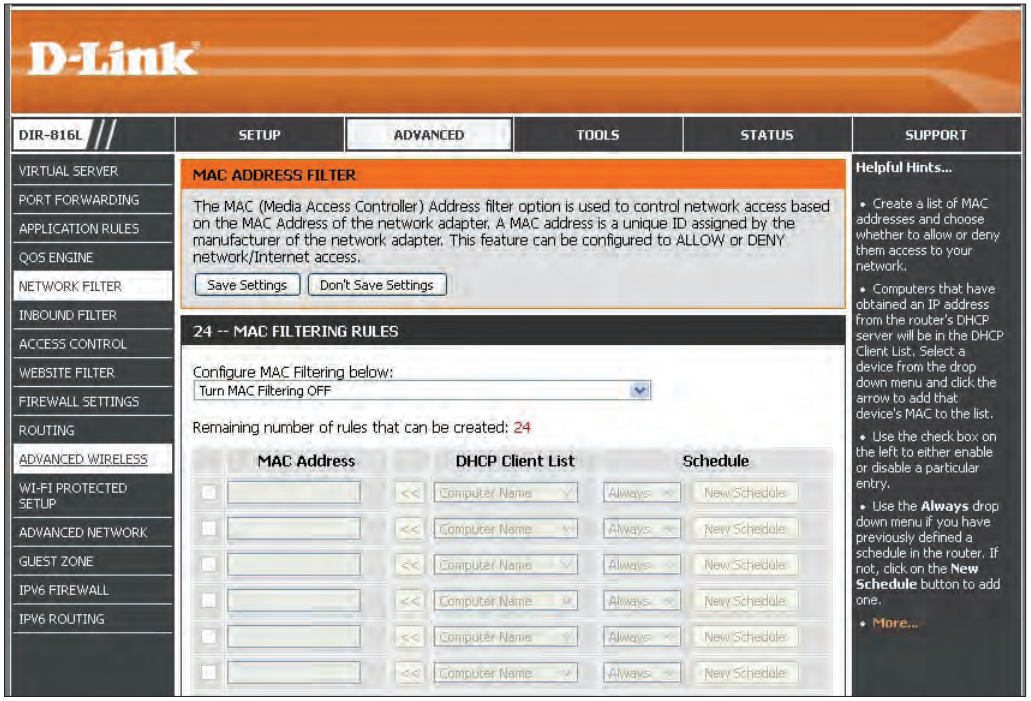
MAC Address: Enter the **MAC Address** you would like to filter. Use the check box on the left to either enable or disable the entry.

Note: *To find the MAC address on a computer, please refer to the* ***Networking Basics*** *section in this manual.*

DHCP Client List: Select a **DHCP Client** from the drop-down menu and click **<<** to copy into the **MAC Address** field.

Schedule: Select a pre-defined schedule or click on **New Schedule** to add one.

Click **Save Settings**.



Inbound Filters

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range. Inbound Filters can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Name: Enter a name for the inbound filter rule.

Action: Select **Allow** or **Deny**.

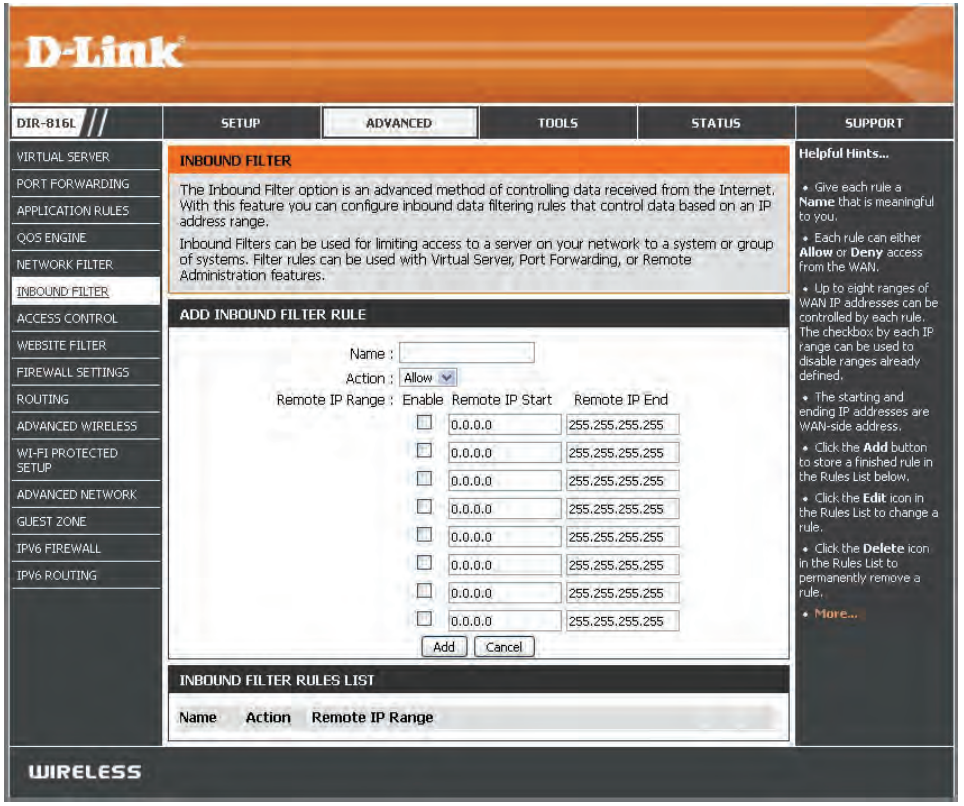
Remote IP Range: Enable: Check the box to enable the rule.

Remote IP Start: Enter the starting IP address.

Remote IP End: Enter the ending IP address.

Add: Click the **Add** button to apply your settings.

Inbound Filter Rules List: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.



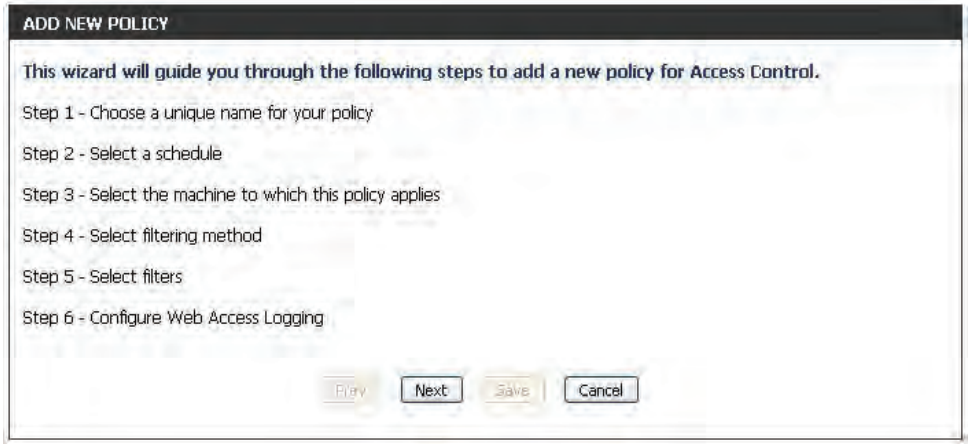
Access Control

The Access Control section allows you to control access in and out of your network. Use this feature as Parental Controls to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

Enable Access Control: Check the **Enable Access Control** box, and then click on **Add Policy** to start the Wizard.

Access Control Wizard

Click **Next** to continue with the wizard.



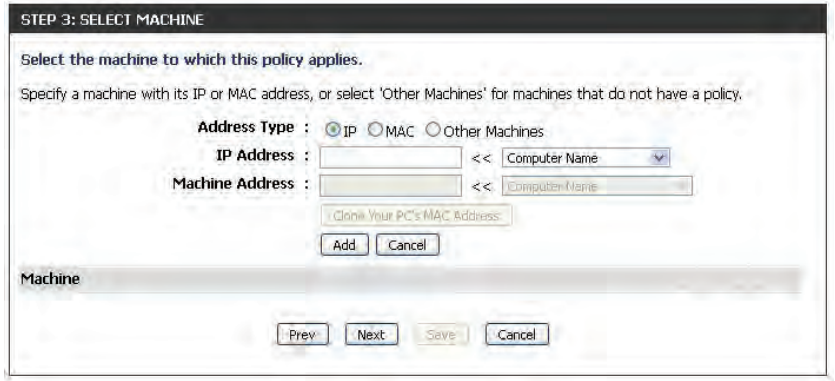
Enter a name for the policy and then click **Next** to continue.

Select a schedule (i.e., **Always**) from the drop-down menu and then click **Next** to continue.

Enter the following information and then click **Next** to continue.

- **Address Type** - Select **IP**, **MAC**, or **Other Machines**.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to, or select **Computer Name**.
- **Machine Address** - Enter the PC MAC address or click on **Clone Your PC's MAC Address**.

Click **Add,** and click **Next** to continue.



Select the filtering method.

If you choose to *Block Some Access*, check **Apply Web Filter** and/or **Apply Advanced Port Filters**.

Click **Next** to continue.

Add Port Filter Rules:

Enable - Check to enable the rule.

Name - Enter a name for your rule.

Dest IP Start - Enter the starting IP address.

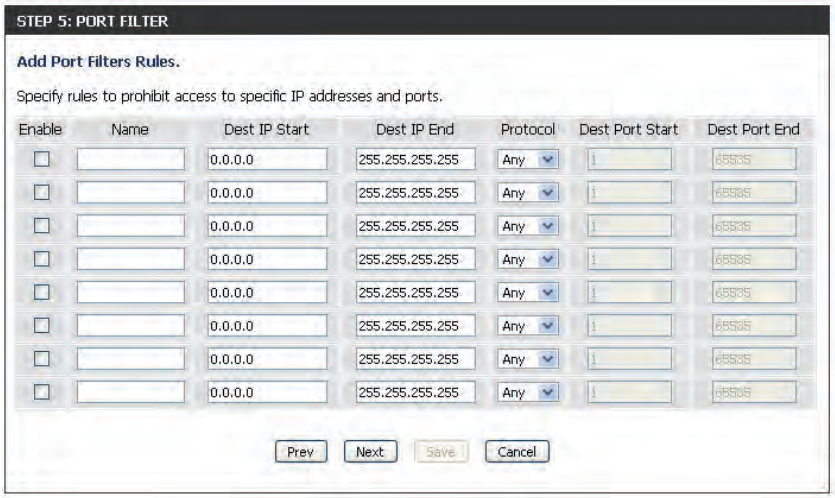
Dest IP End - Enter the ending IP address.

Protocol - Select the protocol.

Dest Port Start - Enter the starting port number.

Dest Port End - Enter the ending port number.

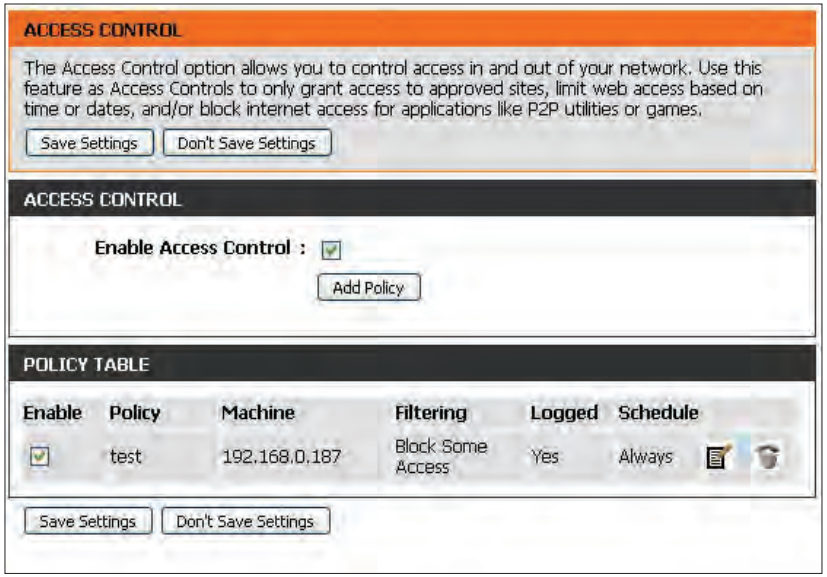
Click **Next.**



To enable **Web Access Logging**, click **Enabled**.

Click **Save** to save the access control rule.

Your newly created policy will now show up under *Policy Table*.



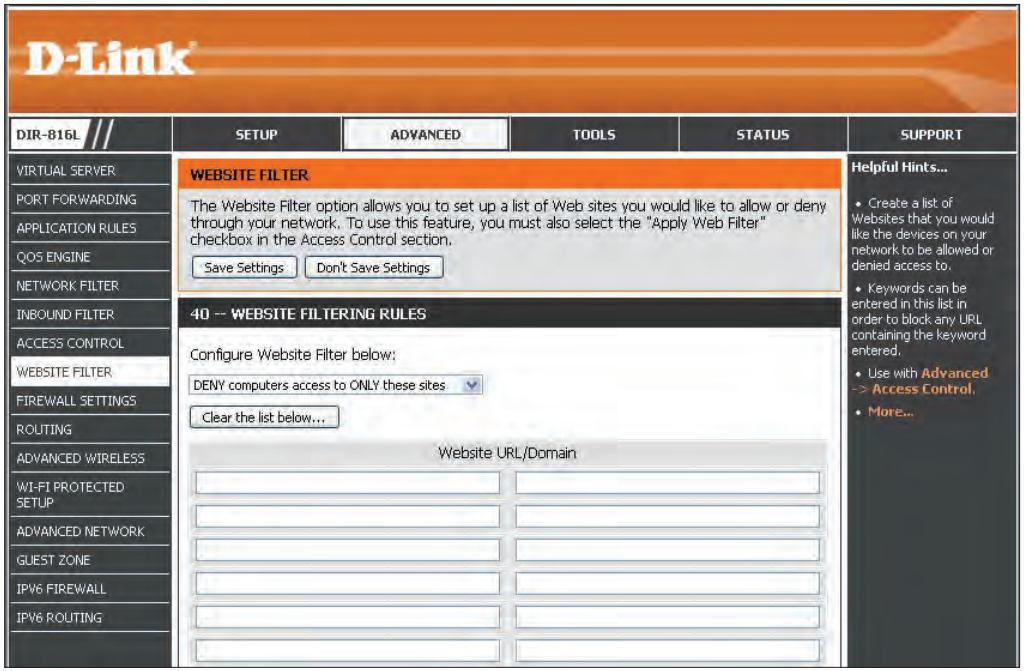
Website Filters

Website Filters allow you to set up a list of Web sites that may be viewed by multiple users, or blocked from users on your network. To use this feature, choose to either allow or deny access, enter the domain or website, and save your settings. You must also select **Apply Web Filter** when you run the *Access Control Wizard* from "Access Control" on page 92.

Configure Website Filter: Select either **DENY computers access to ONLY these sites** or **ALLOW computers access to ONLY these sites**.

Website URL/ Domain: Enter the keywords or URLs that you want to allow or block.

Click **Save Settings**.



Firewall Settings

A firewall protects your network from the outside world. The DIR-817LW offers a firewall-type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. This option will expose the chosen computer completely to the outside world.

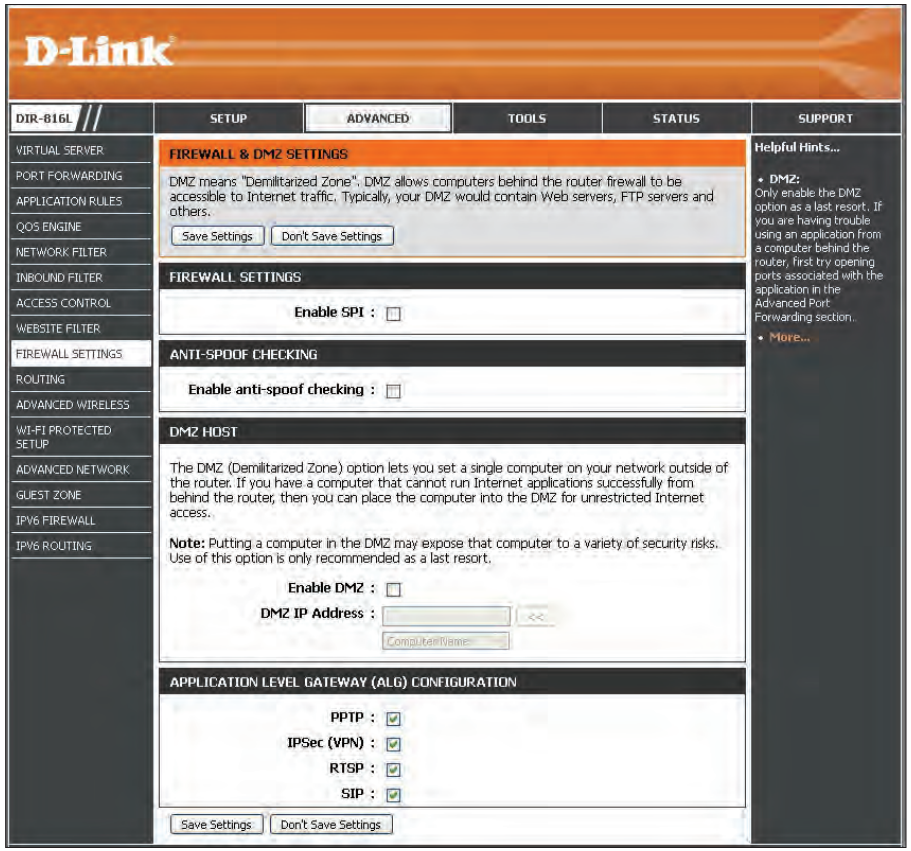
Enable SPI: SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

Enable Anti-Spoof Checking: Enable this feature to protect your network from certain kinds of "spoofing" attacks.

Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: *Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.*

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to allow unrestricted Internet access. If this computer obtains it's IP address automatically using DHCP, be sure to make a static reservation on the **Setup** > **Network Settings** page so that the IP address of the DMZ machine does not change.



PPTP: Allows multiple machines on the LAN to connect to their corporate network using PPTP protocol.

IPSec (VPN): Allows multiple VPN clients to connect to their corporate network using IPSec. Some VPN clients support traversal of IPSec through NAT. This Application Level Gateway (ALG) may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.

RTSP: Allows application that uses Real Time Streaming Protocol to receive streaming media from the Internet. QuickTime and Real Player are some of the common applications using this protocol.

SIP: Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This function may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this option off.

Routing

The Routing option is an advanced method of customizing specific routes of data through your network.

Name: Enter a **Name** for your route.

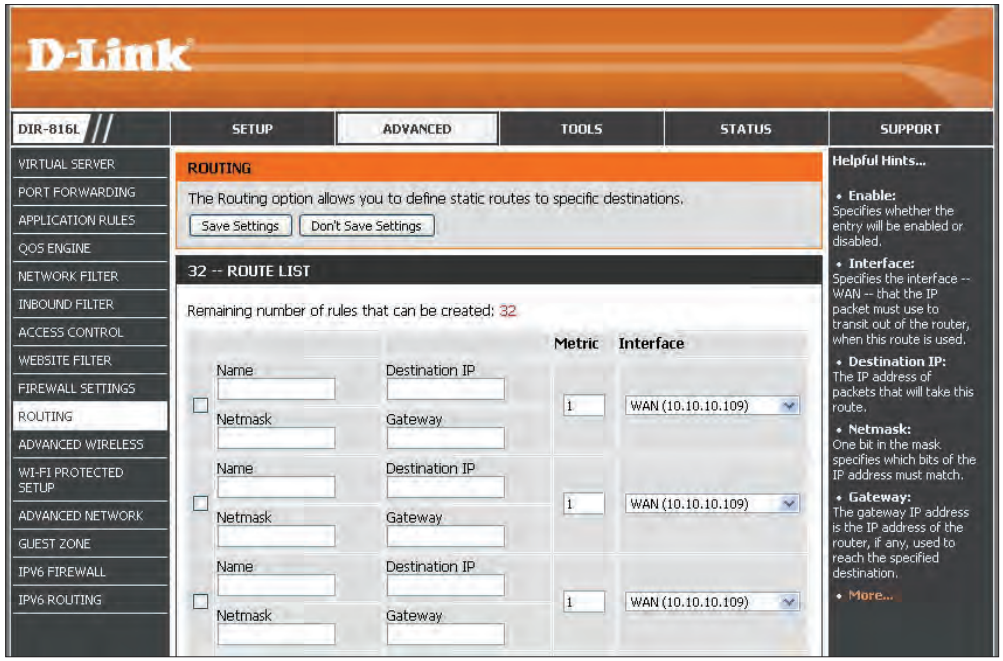
Destination IP: Enter the IP address of packets that will take this route.

Netmask: Enter the **Netmask** of the route, please note that the octets must match your destination IP address.

Gateway: Enter your next hop **Gateway** to be taken if this route is used.

Metric: The route **Metric** is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.

Interface: From the drop-down menu, select the **Interface** that the IP packet must use to transit out of the router when this route is used.



Advanced Wireless

The *Advanced Wireless* options are for users that want to deviate from the standard settings.

Transmit Power: Set the transmit power of the antennas to **High**, **Medium**, or **Low**.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

WMM Enable: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

HT 20/40MHz Coexistence: Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40MHz and there is another wireless network's channel over-lapping and causing interference, the router will automatically change to 20MHz.