D-Link®

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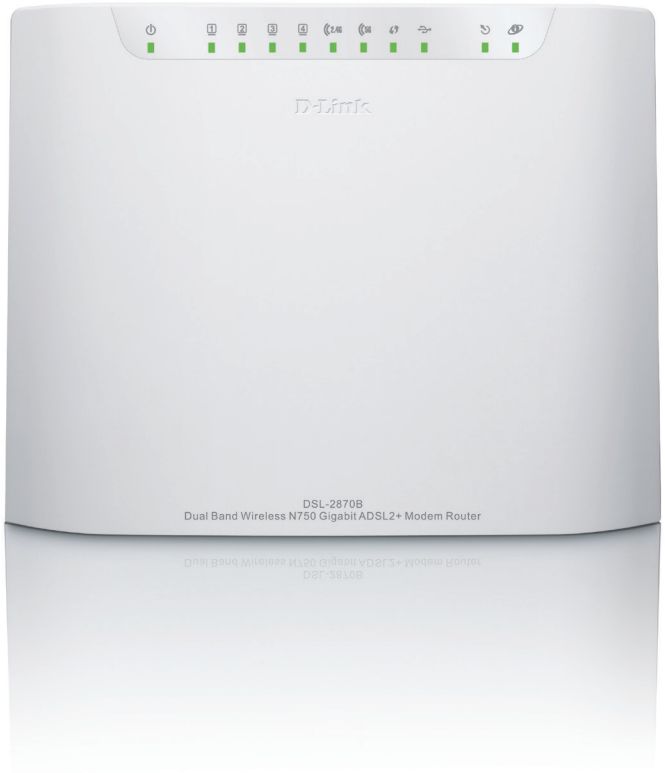


User Manual

Dual Band Wireless N750 Gigabit ADSL2+ Modem Router

DSL-2870B

Table of Contents

Product Overview

Package Contents

This product should contain all of the below mentioned items within its packaging:

- One DSL-2870B Wireless ADSL2+ Router
- One Power Adapter
- One CD containing the User Manual
- One twisted-pair telephone cable used for DSL connection
- One straight-through Ethernet cable
- One Quick Installation 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 DSL-2870B will cause damage to this product and void the warranty for this product.

System Requirements

Network Requirements:	• Ethernet Adapter at 10/100/1000Mbps. • Wireless Adapter with IEEE 802.11n, 802.11a, or 802.11b/g Protocols.
Web User Interface Requirements:	• Windows®, Macintosh, or Linux-based Operating System. • Internet Browser like Internet Explorer 7 or higher, Firefox 3.5 or higher, Safari 4 or higher, or Chrome 8 or higher.
Internet Requirements:	• ADSL Internet Connection Service from an ISP.

Features

- **Faster Wireless Networking** - The DSL-2870B provides up to 300Mbps* for the 2.4GHz band and 450Mbps* for the 5GHz band wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- **Compatible with 802.11b and 802.11g Devices** - The DSL-2870B is still fully compatible with the IEEE 802.11b and IEEE 802.11g standards, so it can connect with existing 802.11b and 802.11g PCI, USB and Cardbus adapters.
- **DHCP Support** - Dynamic Host Configuration Protocol automatically and dynamically assigns all LAN IP settings to each host on your network. This eliminates the need to reconfigure every host whenever changes in network topology occur.
- **Network Address Translation (NAT)** - For small office environments, the DSL-2870B allows multiple users on the LAN to access the Internet concurrently through a single Internet account. This provides Internet access to everyone in the office for the price of a single user. NAT improves network security in effect by hiding the private network behind one global and visible IP address. NAT address mapping can also be used to link two IP domains via a LAN-to-LAN connection.
- **Precise ATM Traffic Shaping** - Traffic shaping is a method of controlling the flow rate of ATM data cells. This function helps to establish the Quality of Service for ATM data transfer.
- **High Performance** - Very high rates of data transfer are possible with the router. Up to 24Mbps downstream bit rate using the G.dmt standard. (For ADSL2+)
- **Full Network Management** - The DSL-2870B incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management via a Telnet connection.
- **Easy Installation** - The DSL-2870B uses a web-based graphical user interface program for convenient management access and easy set up. Any common web browsing software can be used to manage this router.
- **USB Support**- The DSL-2870B provides a USB port to easily share files and printers. The DSL-2870B supports a USB storage option that shares files through a SAMBA file server and in addition also supports sharing USB printers to network members. Please note that the USB storage device is not included in this package and must be bought separately.

* Maximum wireless signal rate derived from IEEE standard 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 factors will adversely affect wireless signal range.

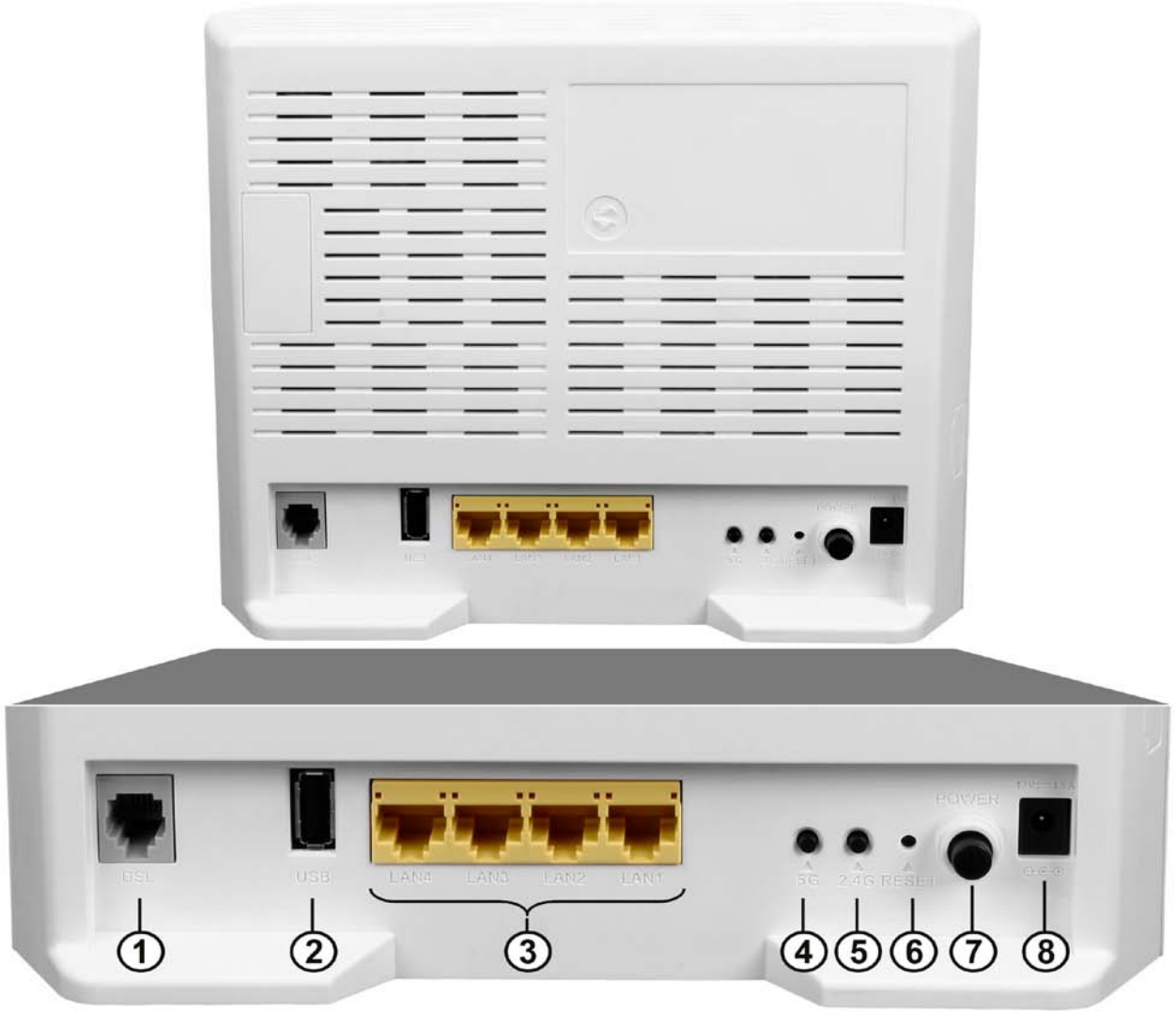
Hardware Overview

Front Panel

Number	Description
1	**Power** - A steady green light indicates the unit is powered on. When the device is powered off this remains dark. During the Power On Self Test this light will be red. If this light remains red after the POST, a malfunction has occurred.
2	**LAN** - A solid light indicates a valid link on startup. This light will blink when there is activity currently passing through the Ethernet port. A green light will be illuminated for a 10/100Mbps connection and an amber light will be illuminated for a 1000Mbps connection.
3	**2.4GHz WLAN** - Steady green light indicates a wireless connection. A blinking green light indicates activity on the WLAN
4	**5GHz WLAN** - Steady green light indicates a wireless connection. A blinking green light indicates activity on the WLAN
5	**WPS** - The light will flash while a WPS connection is being established. The light will light solid for 5 seconds if a successful WPS connection has been made.
6	**USB** - Steady green light indicates a successful USB connection. Dark if no USB device is connected.
7	**DSL** - Steady green light indicates a valid ADSL connection. This will light after the ADSL negotiation process has been settled. A blinking green light indicates activity on the WAN (ADSL) interface.
8	**Internet** - Steady green light indicates a successful Internet connection. Steady red light indicates failed Internet connection. Dark if no WAN protocol is configured.

Rear Panel

Number	Description
1	**ADSL Port** - Use the DSL cable to connect to your telephone line (RJ-11 port).
2	**USB Port** - Use the USB port to connect your USB device.
3	**Ethernet Ports** - Use the Ethernet ports to connect the router to your Ethernet LAN or Ethernet devices.
4	**5GHz Wireless On/Off Switch Button** - Please press and hold on for 3 seconds to turn on/turn off.
5	**2.4GHz Wireless On/Off Switch Button** - Please press and hold on for 3 seconds to turn on/turn off.
6	**Reset Button** - Press and hold the button for 10-15 seconds to restore the device to its original factory default settings.
7	**Power Button** - Push in to power-on the router. Push again to power-off the router.
8	**Power Receptor** - Receptor for the supplied power adapter.



Basic 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 read and make sure you understand all the prerequisites for proper installation of your new router. Have all the necessary information and equipment on hand before beginning the installation.

Installation Notes

In order to establish a connection to the Internet it will be necessary to provide information to the router that will be stored in its memory. For some users, only their account information (Username and Password) is required. For others, various parameters that control and define the Internet connection will be required.

Low Pass Filters

Since ADSL and telephone services share the same copper wiring to carry their respective signals, a filtering mechanism may be necessary to avoid mutual interference. A low pass filter device can be installed for each telephone that shares the line with the ADSL line. These filters are easy to install passive devices that connect to the ADSL device and/or telephone using standard telephone cable. Ask your service provider for more information about the use of low pass filters with your installation.

Operating Systems

The DSL-2870B uses an HTML-based web interface for setup and management. The Web configuration manager may be accessed using any operating system capable of running web browser software, including Windows®, Macintosh, and Linux-based Operating Systems.

Web Browser

Any common Web browser can be used to configure the router using the Web configuration management software. The program is designed to work best with more recently released browsers such as Internet Explorer 7 or higher, Firefox 3.5 or higher, Safari 4 or higher, or Chrome 8 or higher.. The Web browser must have JavaScript enabled. JavaScript is enabled by default on many browsers. Make sure JavaScript has not been disabled by other software (such as virus protection or web user security packages) that may be running on your computer.

Ethernet Port (NIC Adapter)

Any computer that uses the router must be able to connect to it through one of the Ethernet ports on the router. This connection is an Ethernet connection and therefore requires that your computer be equipped with an Ethernet port as well. Most notebook computers are now sold with an Ethernet port already installed. Likewise, most fully assembled desktop computers come with an Ethernet adapter as standard equipment. If your computer does not have an Ethernet port, you must install an Ethernet NIC adapter before you can use the router. If you must install an adapter, follow the installation instructions that come with the Ethernet NIC adapter.

Additional Software

It may be necessary to install software on your computer that enables the computer to access the Internet. Additional software must be installed if you are using the device a simple bridge. For a bridged connection, the information needed to make and maintain the Internet connection is stored on another computer or gateway device, not in the router itself.

If your ADSL service is delivered through a PPPoE or PPPoA connection, the information needed to establish and maintain the Internet connection can be stored in the router. In this case, it is not necessary to install software on your computer. It may however be necessary to change some settings in the device, including account information used to identify and verify the connection.

All connections to the Internet require a unique global IP address. For bridged connections, the global IP settings must reside in a TCP/IP enabled device on the LAN side of the bridge, such as a PC, a server, a gateway device such as a router or similar firewall hardware. The IP address can be assigned in a number of ways. Your network service provider will give you instructions about any additional connection software or NIC configuration that may be required.

Information you will need from your ADSL service provider

Username

This is the Username used to log on to your ADSL service provider's network. Your ADSL service provider uses this to identify your account.

Password

This is the Password used, in conjunction with the Username above, to log on to your ADSL service provider's network. This is used to verify the identity of your account.

WAN Setting / Connection Type

These settings describe the method your ADSL service provider uses to transport data between the Internet and your computer. Most users will use the default settings. You may need to specify one of the following WAN Setting and Connection Type configurations (Connection Type settings listed in parenthesis):

- PPPoE/PPPoA (PPPoE LLC, PPPoE VC-Mux, PPPoA LLC or PPPoA VC-Mux)
- Static IP Address (1483 Routed IP LLC or 1483 Routed IP VC-Mux)
- Bridge Mode (1483 Bridged IP LLC or 1483 Bridged IP VC-Mux)

Modulation Type

ADSL uses various standardized modulation techniques to transmit data over the allotted signal frequencies. Some users may need to change the type of modulation used for their service. The default DSL modulation (Autosense) used for the router automatically detects all types of ADSL, ADSL2, and ADSL2+ modulation.

Security Protocol

This is the method your ADSL service provider will use to verify your Username and Password when you log on to their network. Your router supports the PAP and CHAP protocols.

VPI

Most users will not be required to change this setting. The Virtual Path Identifier (VPI) is used in conjunction with the Virtual Channel Identifier (VCI) to identify the data path between your ADSL service provider's network and your computer. If you are setting up the router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

VCI

Most users will not be required to change this setting. The Virtual Channel Identifier (VCI) used in conjunction with the VPI to identify the data path between your ADSL service provider's network and your computer. If you are setting up the router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

Information you will need about this Router

Username

This is the Username needed access the router's web management interface. When you attempt to connect to the device through a web browser you will be prompted to enter this Username. The default Username for the router is "**admin**".

Password

This is the Password you will be prompted to enter when you access the router's web management interface. The default Password is "**admin**".

LAN IP Addresses for the DSL-2870B

This is the IP address you will enter into the Address field of your web browser to access the router's configuration Graphical User Interface (GUI) using a web browser. The default IP address is **192.168.1.1**. This may be changed to suit any IP address scheme the user desires. This address will be the base IP address used for DHCP service on the LAN when DHCP is enabled.

LAN Subnet Mask for the DSL-2870B

This is the subnet mask used by the DSL-2870B, and will be used throughout your LAN. The default subnet mask is **255.255.255.0**. This can be changed later.

Information you will need about your LAN or computer

Ethernet NIC

If your computer has an Ethernet NIC, you can connect the DSL-2870B to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the DSL-2870B to connect to other computer or Ethernet devices.

DHCP Client status

Your DSL-2870B ADSL router is configured, by default, to be a DHCP server. This means that it can assign an IP address, subnet mask, and a default gateway address to computers on your LAN. The default range of IP addresses the DSL-2870B will assign are from **192.168.1.2 to 192.168.1.254**. Your computer (or computers) needs to be configured to obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

Once you have the above information, you are ready to setup and configure your DSL-2870B ADSL router.

Device Installation

The DSL-2870B connects two separate physical interfaces, an ADSL (WAN) and an Ethernet (LAN) interface. Place the router in a location where it can be connected to the various devices as well as to a power source. The router should not be located where it will be exposed to moisture or excessive heat. Make sure the cables and power cord are placed safely out of the way so they do not create a tripping hazard. As with any electrical appliance, observe common sense safety procedures.

The router can be placed on a shelf or desktop, ideally you should be able to see the LED indicators on the front if you need to view them for troubleshooting.

Power on Router

The router must be used with the power adapter included with the device.

1. Insert the AC Power Adapter cord into the power receptacle located on the rear panel of the router and plug the adapter into a suitable nearby power source.
2. Press the Power button into the on position. You should see the Power LED indicator light up and remain lit.
3. If the Ethernet port is connected to a working device, check the Ethernet LED indicators to make sure the connection is valid. The router will attempt to establish the ADSL connection, if the ADSL line is connected and the router is properly configured this should light up after several seconds. If this is the first time installing the device, some settings may need to be changed before the router can establish a connection.

Factory Reset Button

The router may be reset to the original factory default settings by using a ballpoint pen or paperclip to gently push down the reset button in the following sequence:

1. Press and hold the reset button while the device is powered on for 10-15 seconds.
2. Release the reset button.

Remember that this will wipe out any settings stored in flash memory including user account information and LAN IP settings. The device settings will be restored to the factory default IP address **192.168.1.1** and the subnet mask is **255.255.255.0.** The default management username is “**admin**” and the default password is “**admin**”.

Network Connections

Connect ADSL Line

Use the ADSL cable included with the router to connect it to a telephone wall socket or receptacle. Plug one end of the cable into the ADSL port (RJ-11 receptacle) on the rear panel of the router and insert the other end into the RJ-11 wall socket. If you are using a low pass filter device, follow the instructions included with the device or given to you by your service provider. The ADSL connection represents the WAN interface, the connection to the Internet. It is the physical link to the service provider's network backbone and ultimately to the Internet.

Connect Router to Ethernet

The router may be connected to a single computer or Ethernet device through the Ethernet ports on the rear panel. Any connection to an Ethernet concentrating device such as a switch or hub must operate at a speed of 10/100/1000Mbps. When connecting the router to any Ethernet device that is capable of operating at speeds higher than 10Mbps, be sure that the device has auto-negotiation (NWay) enabled for the connecting port. Use standard twisted-pair cable with RJ-45 connectors. The RJ-45 ports on the router are a crossed port (MDI-X). Follow standard Ethernet guidelines when deciding what type of cable to use to make this connection. When connecting the router directly to a PC or server use a normal straight-through cable. You should use a crossed cable when connecting the router to a normal (MDI-X) port on a switch or hub. Use a normal straight-through cable when connecting it to an uplink (MDI-II) port on a hub or switch. The rules governing Ethernet cable lengths apply to the LAN to router connection. Be sure that the cable connecting the LAN to the router does not exceed 100 meters.

Hub or Switch to Router Connection

Connect the router to an uplink port (MDI-II) on an Ethernet hub or switch with a straight-through cable. If you wish to reserve the uplink port on the switch or hub for another device, connect to any on the other MDI-X ports (1x, 2x, etc.) with a crossed cable.

Computer to Router Connection

You can connect the router directly to an Ethernet adapter card (NIC) installed on a PC using the Ethernet cable provided.

Getting Started

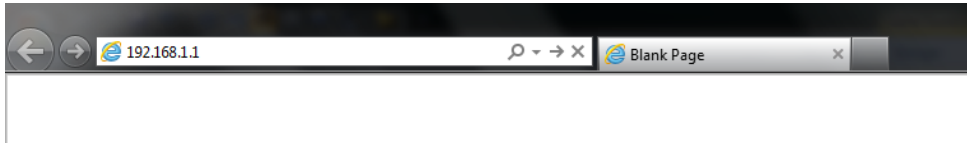
This section will show you how to set up and configure your new D-Link router using the Web-based configuration utility.

How to connect to the Web User Interface

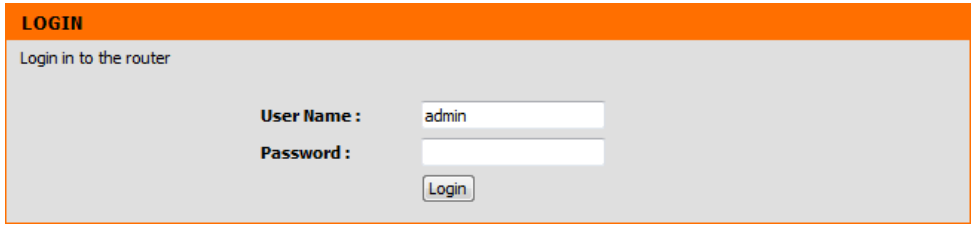
Connect to the Router

To configure the WAN connection used by the router it is first necessary to communicate with the router through its management interface, which is HTML-based and can be accessed using a web browser. The easiest way to make sure your computer has the correct IP settings is to configure it to use the DHCP server in the router.

To access the web user interface, open a web-browser such as Internet Explorer and enter the IP address of the router (**192.168.1.1**) into the address bar and press the *Enter* key on your keyboard.



Type "**admin**" in the User Name field and "**admin**" in the Password field, and click the **Login** button to proceed. If you get a *Page Cannot be Displayed* error, please refer to the Troubleshooting section for assistance.



Web User Interface Configuration

After successfully logging into the Web User Interface, the following page will be displayed. This page is divided into clickable components that make the configuration of this device easier and more understandable.

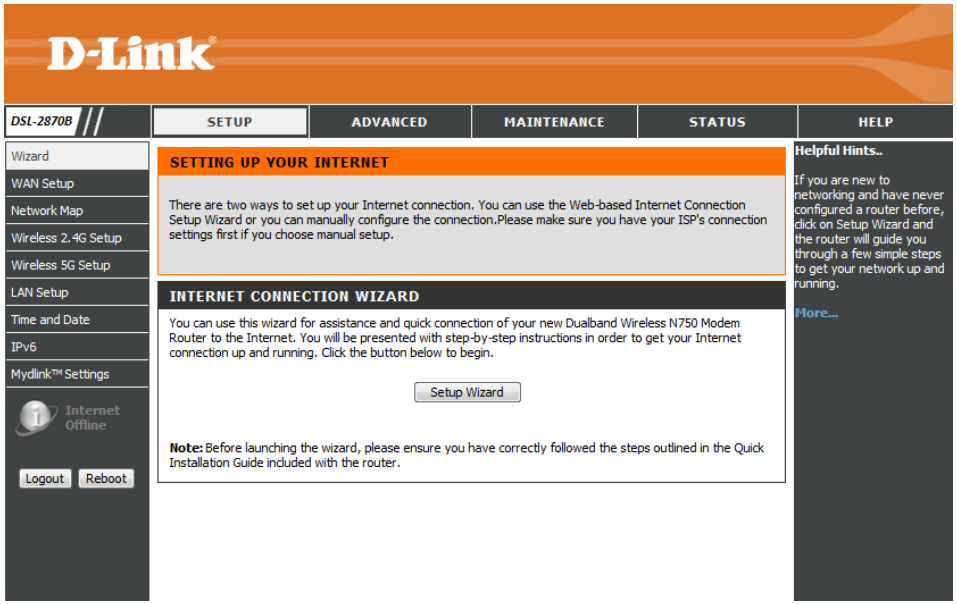
The top menu lists out the **Categories** available for configuration. The categories available to configure on this device are **Setup**, **Advanced**, **Maintenance**, **Status** and **Help**.

The left menu lists out the **Pages** available, for each individual category, for configuration. In this example, we observe the pages available in the **Setup** category. The pages available here are **Wizard**, **WAN Setup**, **Network Map**, **Wireless 2.4G Setup**, **Wireless 5G Setup**, **LAN Setup**, **Time and Date, IPv6** and **Mydlink™ Settings**.

Every category will have a **Internet Offine** option at the bottom of all the pages. This option can be used to display the internet status.

Every category will have a **Logout** option at the bottom of all the pages. This option can be used to log out from the web user interface and also close the browser.

Every category will have a **Reboot** option at the bottom of all the pages. This option can be used to reboot the router.

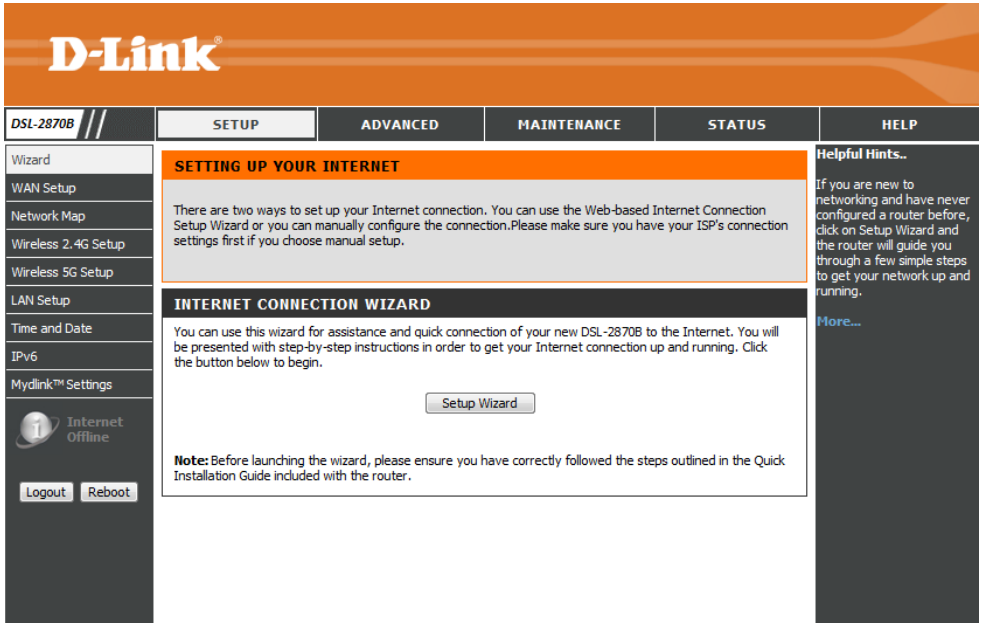


Setup Category

The **Setup** category is designed to assist the user with essential configurations, concerning the initial setup of this product.

The following pages can be found in the **Setup** category:

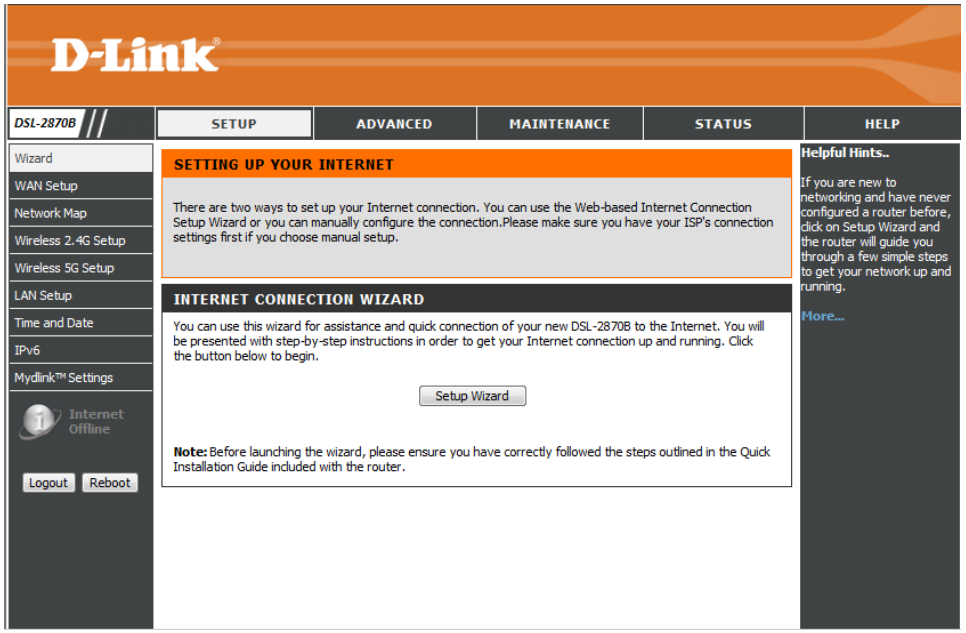
- Wizard – On this page the user can easily configure some essential settings available on this router by following a step-by-step wizard.
- WAN Setup– On this page the user can configure services related to the WAN connectivity of this product.
- Network Map– On this page is intended to provide user with a view of all connected devices within networks, such ad CPE information, network devices' IP and MAC address. With graphics and easy-to understand user interface, users can easily manage device settings.
- Wireless 2.4G Setup– On this page the user can configure services related to the Wireless 2.4GHz connectivity of this product.
- Wireless 5G Setup– On this page the user can configure services related to the Wireless 5GHz connectivity of this product.
- LAN Setup– On this page the user can configure services related to the LAN connectivity of this product.
- Time and Date – On this page, the user can configure services related to the time and date feature of this product. **Time Servers** and a **Time Zone** can be specified here.
- IPv6–On this page the user can configure services related to the IPv6 connectivity of this product.
- Mydink™ Settings–On this page the user can configure services related to the mydlink settings connectivity of this product.



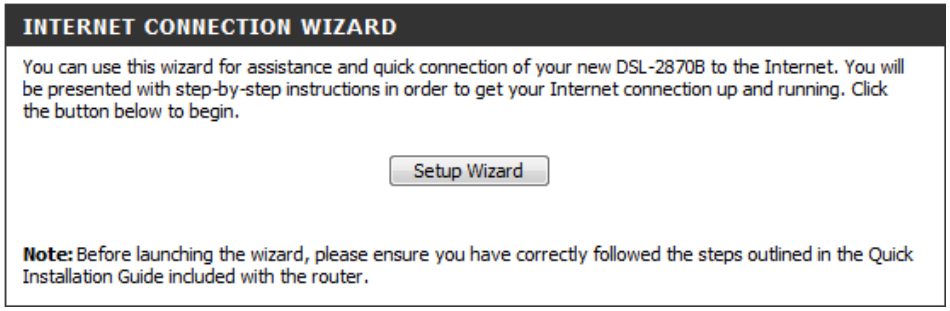
Wizard

To access the **Wizard** page, click on the **Setup** menu link, at the top, and then click on the **Wizard** menu link, on the left.

On this page the user can easily configure some essential settings available on this router by following a step-by-step wizard.



Click on the **Setup Wizard** button to initiate the setup wizard.



Welcome to the Setup Wizard

This wizard will guide user through a step-by-step wizard, divided into 7steps, to configure this router and to connect to the Internet.

Click the **Next** button to continue to the next page.

Click the **Cancel** button to discard the changes made and return to the main page.

Step 1: SET YOUR PASSWORD

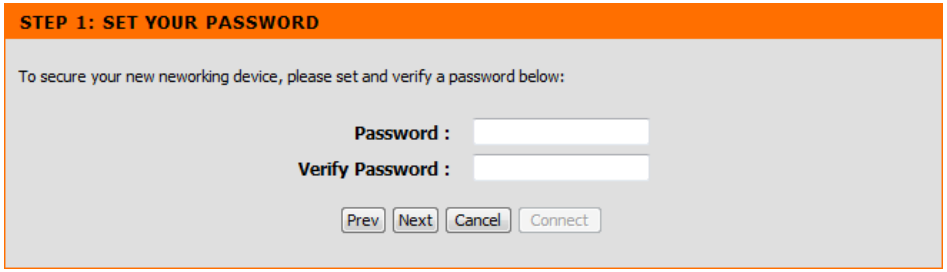
In this step, the user can configure the web user interface login password. Enter the **Password** and **Verify Password** here.

Click the **Prev** button to discard the changes made and return to the previous page.

Click the **Next** button to continue to the next page..

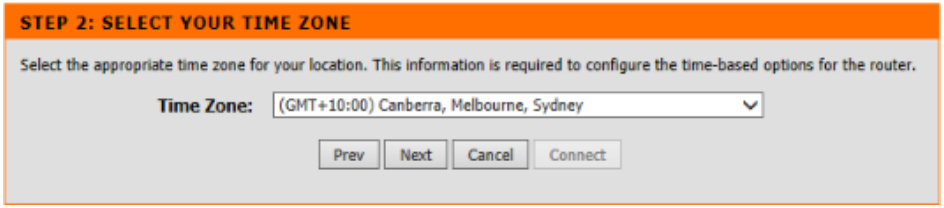
Click the **Cancel** button to discard the changes made and return to the main page.

Click the **Connect** button to connect to the router



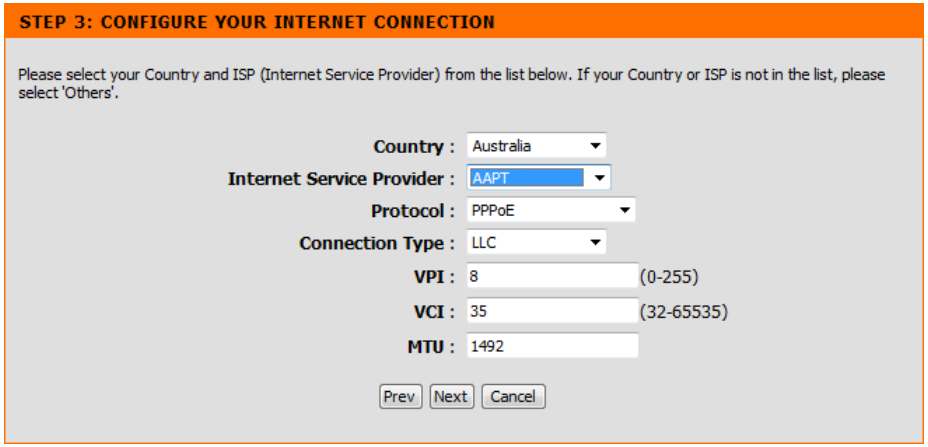
Step 2: Set YOUR TIME ZONE

In this step the user can configure the time zone settings that will be used by this router.



Step 3: CONFIGURE YOUR INTERNET CONNECTION

In this step, the user can configure the Internet connection settings used by this router.



In this section, we can configure the following parameters.

Country: In this drop-down menu, the user can select one of two country options. They are **Australia** and **New Zealand**. To manually configure this connection, the user can choose the third option called **Other**.

Internet Service Provider: After selecting a country, in the previous option, a list of ISP connections will be available here. If your ISP is in the list, select it here and the correct parameters will be entered for the rest of the page. However, if your ISP is not listed here, you can choose the **Other** option.

Protocol: Select the appropriate protocol to use here. Options to choose from are **Dynamic IP Address, Static IP Address, PPPoE, PPPoA** and **Bridge.**

Connection Type: Select the appropriate connection type to use here. Options to choose from are **VC-Mux** and **LLC.**

VPI: Enter the correct Virtual Path Identifier (VPI) value for your ISP here.

VCI: Enter the correct Virtual Channel Identifier (VCI) value for your ISP here.

MTU: Enter the maximum transmission unites.

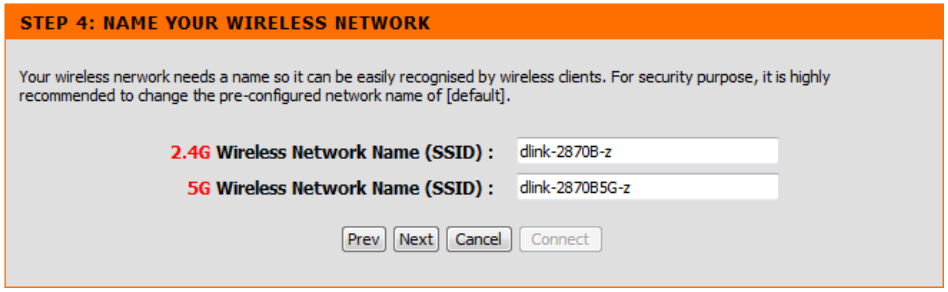
Click the **Prev** button to discard the changes made and return to the previous page.

Click the **Next** button to continue to the next page.

Click the **Cancel** button to discard the changes made and return to the main page.

Step 4: Configure Wireless Netw

In this step, the user can configure the wireless configuration for this router.



In this section we can configure the following parameters.

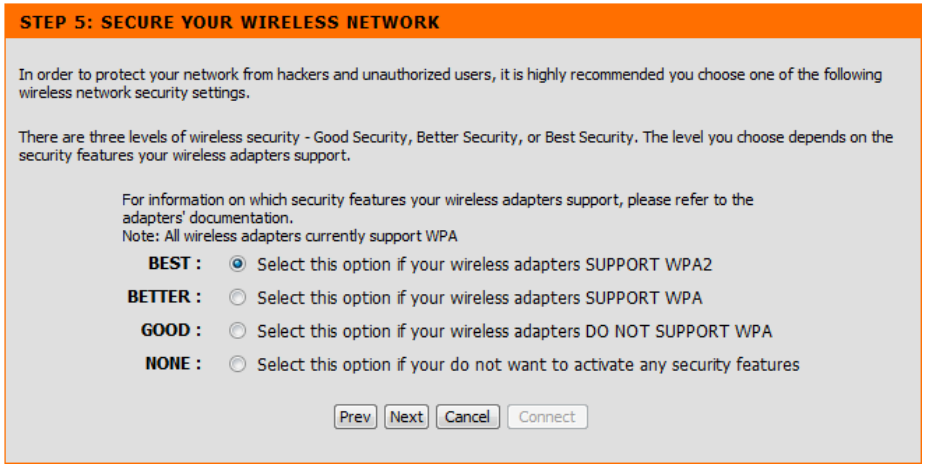
2.4GWireless Network Name (SSID): In this textbox, we can enter the wireless networks name (SSID) for the wireless network, hosted by this router. This name will be visible for all wireless clients to see before initiating a connection to this router.

5GWireless Network Name (SSID): In this textbox, we can enter the wireless networks name (SSID) for the wireless network, hosted by this router. This name will be visible for all wireless clients to see before initiating a connection to this router

Click the **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to continue to the next page.
Click the **Cancel** button to discard the changes made and return to the main page.
Click the **Connect** button to connect to the router

Step 5: SECURE YOUR WIRELLESS NETWORK

In this step, we can configure the wireless network security settings for this router here.



In this section, we can configure the following parameters.

BEST: Select this option if your wireless adapters SUPPORT WPA2
BETTER: Select this option if your wireless adapters SUPPORT WPA
GOOD: Select this option if your wireless adapters DO NOT SUPPORT WPA
NONE: Select this option if your do not want to activate any security featur

Click **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to continue to the next page.
Click the **Cancel** button to discard the changes made and return to the main page.
Click the **Connect** button to connect to the router

Step 6: SET YOUR WIRELESS SECURITY PASSWORD

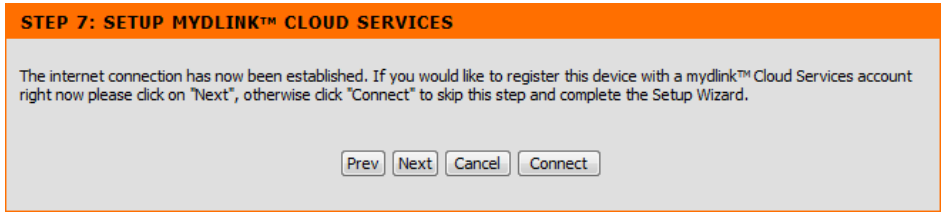
In this step, we can set the wireless security password

In this section, we can configure the following parameters.

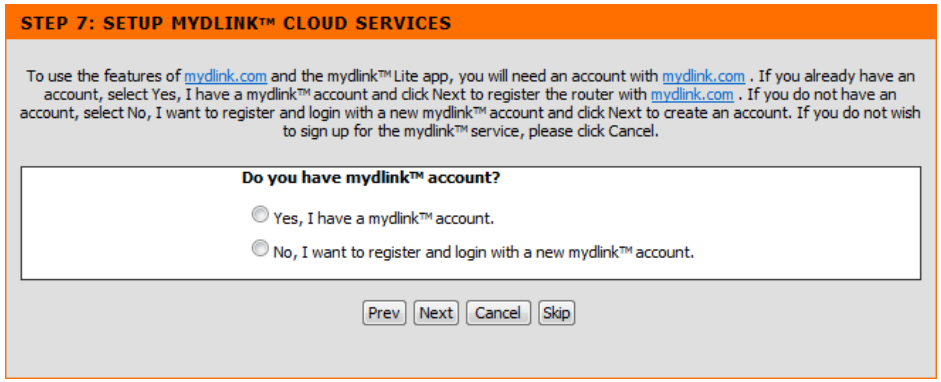
2.4G Wireless Security Password: Enter the 2.4G wireless security password
5 Wireless Security Password: Enter the 5G wireless security password

Click **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to continue to the next page.
Click the **Cancel** button to discard the changes made and return to the main page.

Step 7:SETUP MYDLINK CLOUD SERVICES

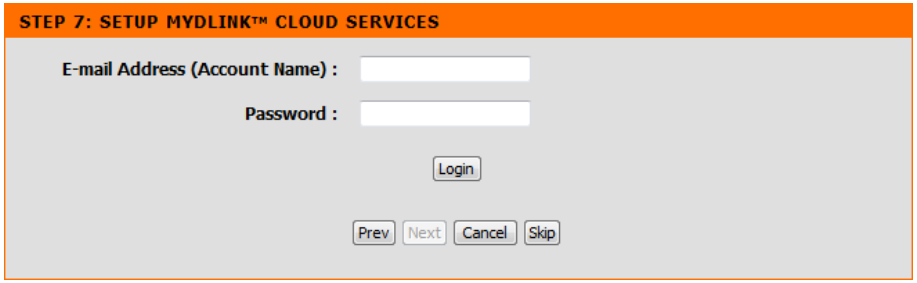


Click the **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to register this divice with a mydlink Cloud Services account.
Click the **Cancel** button to discard the changes made and return to the main page.
Click the **Connect** button to connect to the router.



Click the **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to register this divice with a mydlink Cloud Services account.
Click the **Cancel** button to discard the changes made and return to the main page.
Click the **Skip** button to ignore this step and continue to the next page.

When select the 'Yes, I have a mydlink™ account"
In this section, we can configure the following parameters.



E-mail Address (Account Name): Enter the e-mail address(account name)
Password: Enter the password.

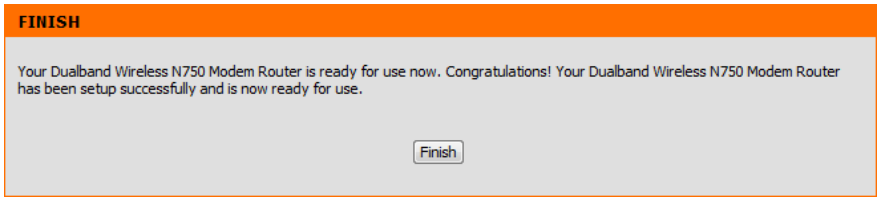
Click the **Login** button to login in
Click the **Prev** button to discard the changes made and return to the previous page.
Click the **Next** button to login in this divice with a mydlink Cloud Services account.
Click the **Cancel** button to discard the changes made and return to the main page
Click the **Skip** button to ignore this step and continue to the next page.

When select the 'No, I want to register and login with a new mydlink™ account."

In this section, we can configure the following parameters.

E-mail Address (Account Name): Enter the e-mail address(Account Name)
Password: Enter the password
Confirm Password : Enter the confirm passwor
First Name: Enter the first name
Last Name: Enter the last name
Click the **Sign up** button to sign in this divice with a mydlink Cloud Services account.

Click the **Finish** button to complete setup the dualband wireless N750 Modem Router.



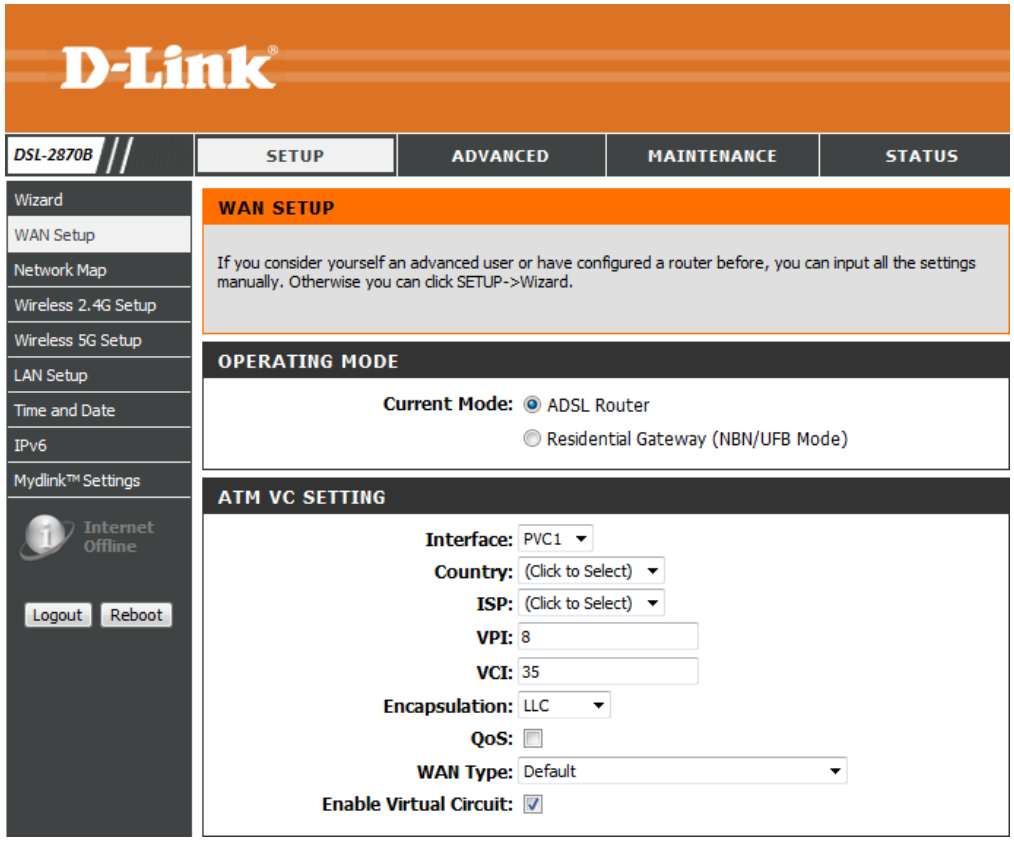
WAN Setup

To access the **WAN Setup** page, click on the **Setup** menu link, at the top, and then click on the **WAN Setup** menu link, on the left.

On this page, the user can configure services related to the WAN connectivity of this product.

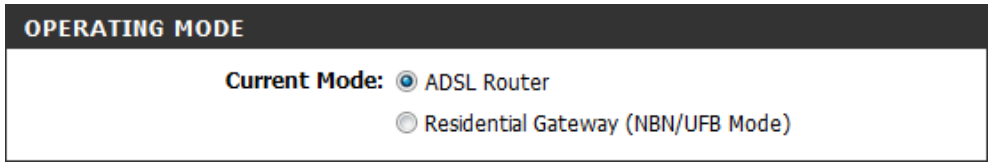
Services available for configuration are the following:

- Operating Mde
- ATM VC Setting
- WAN Setting
- WAN



Operating Mode

The current mode is ADSL Router or Residential Gateway (NBN/UFB Mode)



ATM VC SETTING

In this section, we can configure the following parameters.

Interface: Select the ATM VC setting interface.

Country: In this drop-down menu, the user can select one of two country options. They are **Australia** and **New Zealand**. To manually configure this connection, the user can choose the third option called **Other**.

ISP: Select the ISP.

VPI: Enter the VPI values.

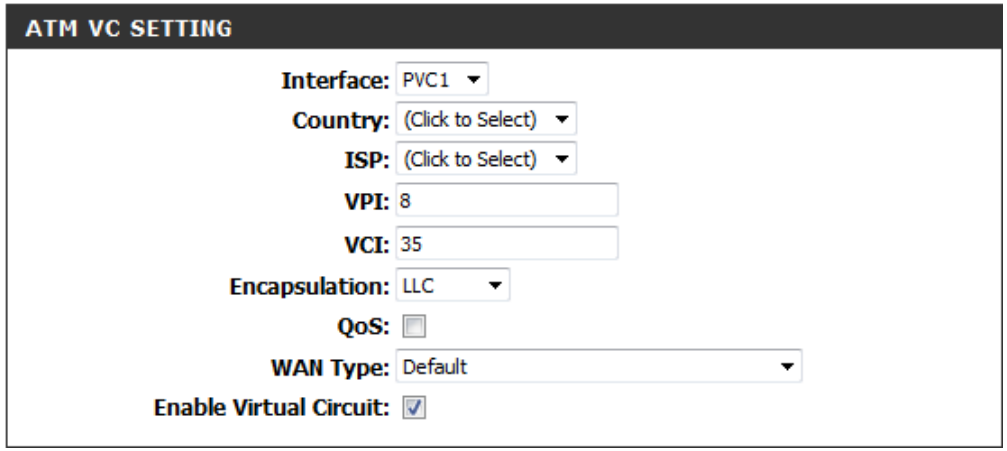
VCI: Enter the VCI values.

Encapsulation: Select the encapsulation mode.

QoS: Enable the QoS

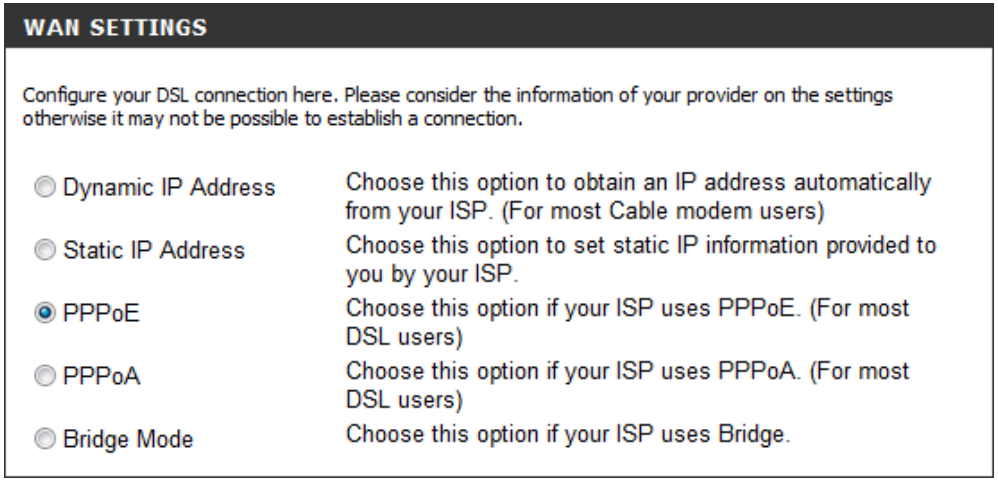
WAN Type: Select the WAN type.

Enable Virtual Circuit: Enable the virtual circuit.



WAN SETTINGS

In the **WAN Setting** section, options to choose from are **Dynamic IP Address, Static IP Address, PPPoE, PPPoA** and **Bridge Mode.**



WAN

In this section, we can configure the following parameters.

Username: Enter the username.

Password: Enter the password

Confirm Password: Enter the confirm password

Service Name: Enter the service name.

AC name: Enter the AC name.

IP Control: Select the IP control.

Static IP Address: Enter the static IP address.

MTU: Enter the MTU

Auto DNS: Select this option to enable or disable the Auto DNS option

NAT: Select this option to enable or disable the NAT option

Firewall: Select this option enable or disable the firewall for this interface.

Default Route: Select this option enable or disable the default route for this interface.

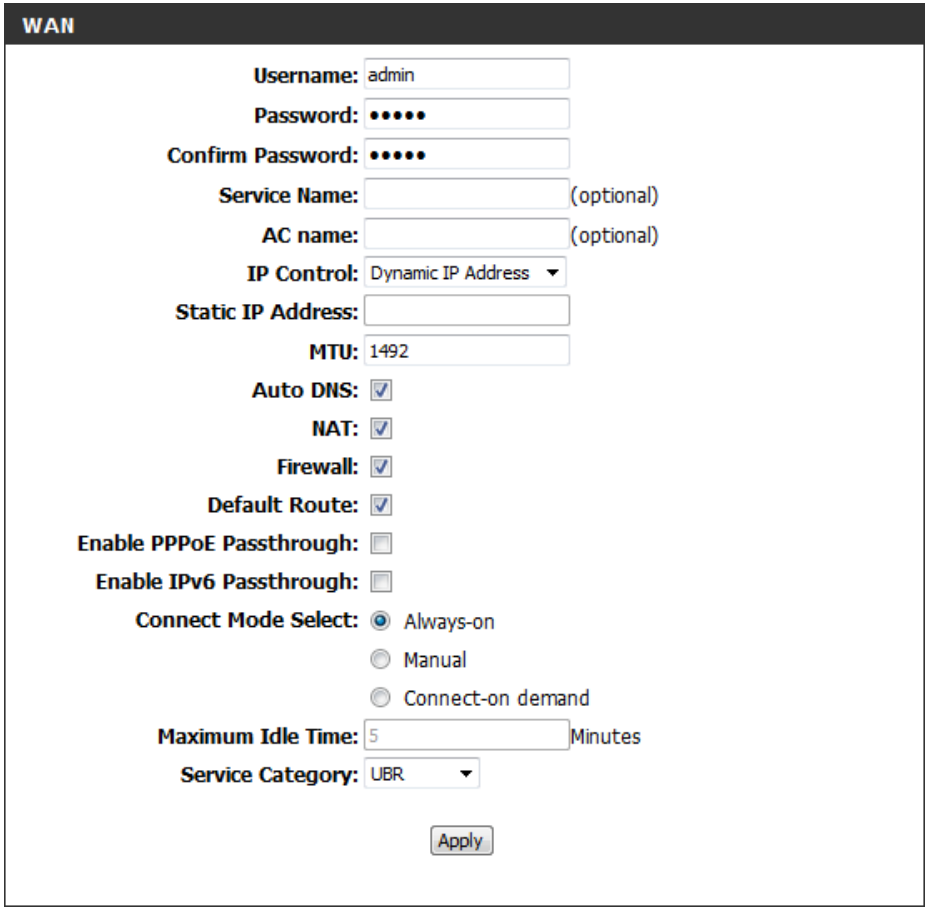
Enable PPPoE Passthrough: Select this option enable or disable the enable PPPoE passthrough for this interface.

Enable IPv6 Passthrough: Select this option enable or disable the enable IPv6 passthrough for this interface.

Connect Mode Select: Select the connect mode, options to choose from are Always- on, Manual and Connect –on demand.

Maximun Idle Time: Enter the maximun Idle time

Sevice Category: Select the service category.

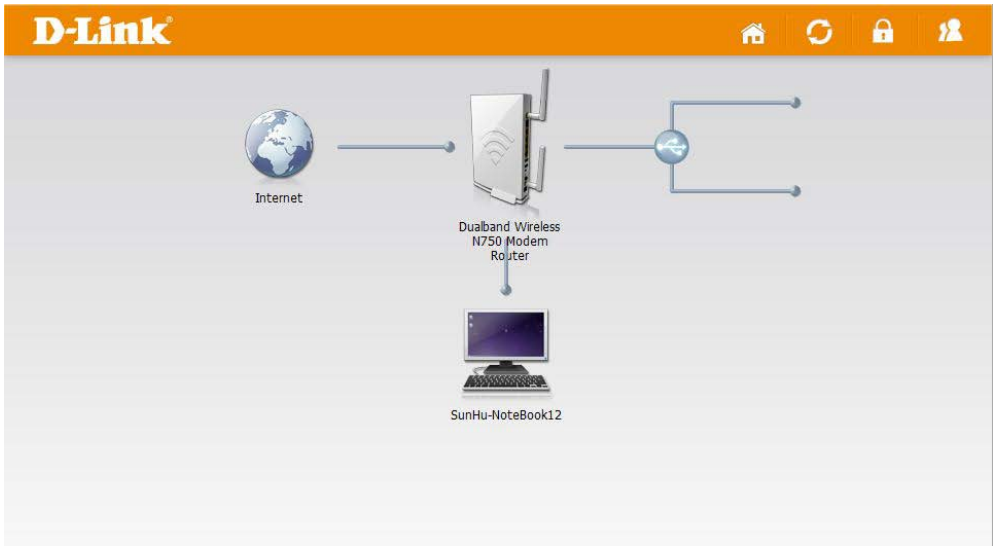


After clicking the **Apply** button, the Configuration page will be available.

Network Map

To access the **Network Map** page, click on the **Setup** menu link, at the top, and then click on the **Network Map** menu link, on the left.

On this page the user can easily manage device setting and view all connected devices within network, and the user can configure the URL filter, schedules and wireless security etc. such as router information, network devices' IP address and MAC address. With graphics and easy-to-understand user interface.



Click router icon, the router configuration page will be pop-up.

In this section, we can view the information of this router, and configure wireless setting and wireless security.

Click **Backup Configuration** button to backup configuration of router to local PC.

Click **Wireless Setting** button, the Wireless Setting page will be pop-up.

In the section, we can enable or disable 2.4GHz/5GHz wireless, and configure wireless SSID for this router.

Click **Apply** button to commit the configuration.
Click **Back** button to return to router information page.

Click **Wireless Security Setting,** The Wireless Security page will be pop-up.

In the section, we can configure 2.4GHz or 5GHz wireless security.

Click **Apply** button to commit the configuration.
Click **Back** button to return to router information page.

Click client icon**,** The client configuration page will be pop-up.

In the section, we can view information of the client, and the user can block internet access, configure the URL filter and schedule.

Click **Block Internet Access** button, “Are you sure want to block this device?” dialog will be pop-up.

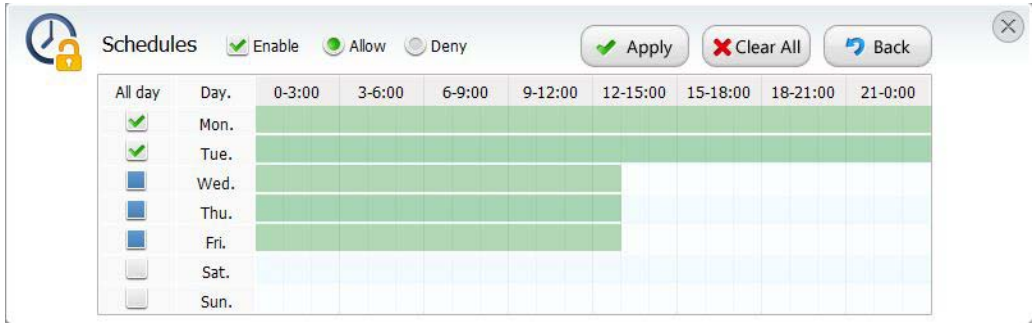
Click **URL Filter** icon**,** The URL Filter configuration page will be pop-up.

In the section, we can view URL filter list, and the user can add or delete the URL filter.

Enable: Enable or disable URL filter function for this router.
Allow: To set up a list of allowed web sites.
Deny: To set up a list of denied web sites.

Click **Add** button to add a URL filter for the client.
Click **Delete All** button to delete all URL filter from the list.
Click **Back** button to return to client information page

Click **Schedules** icon**,** The Schedules configuration page will be pop-up.



In the section, we can configure schedules for this router.

Enable: Enable or disable Schedules function for this router.
Allow: To set up a list of allowed web sites.
Deny: To set up a list of denied web sites.

Click **Apply** button to commit the configuration.
Click **Clear All** button to clear all of the timeframes.
Click **Back** button to return to client information page.

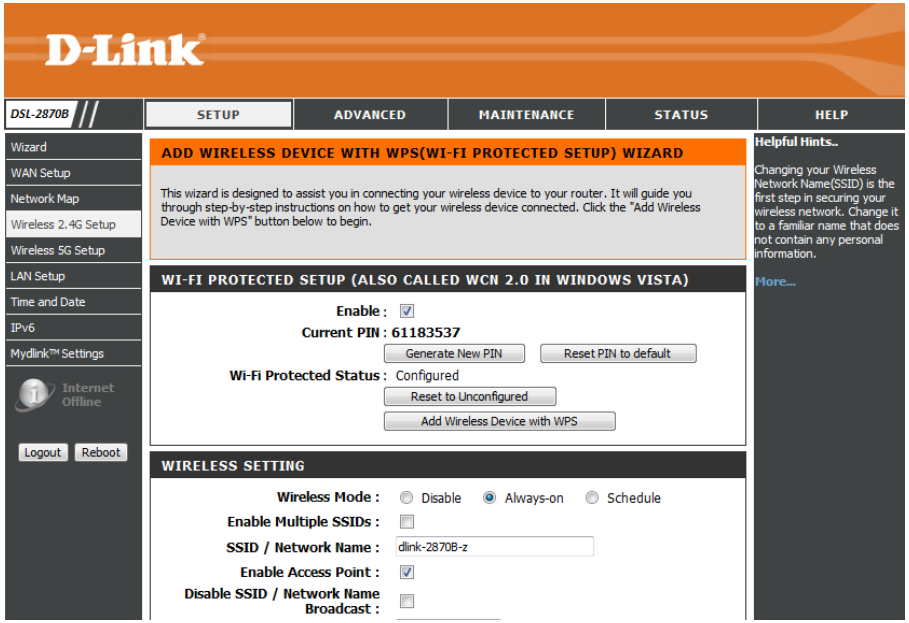
Wireless 2.4G Setup

To access the **Wireless 2.4G Setup** page, click on the **Setup** menu link, at the top, and then click on the **Wireless 2.4G Setup** menu link, on the left.

On this page the user can configure services related to the Wireless 2.4GHz connectivity of this product.

Services available for configuration are the following:

- Add Wireless Device with WPS
- Wireless Setting
- WPA Setting



Add Wireless Device with WPS

The Wireless Device, with WPS, Wizard is designed to assist the user in configuring a connection between this router and a wireless client by means of the WPS wireless connection method.

In this section, we can configure the following parameters.

Enable: Tick this option to enable the WPS feature.

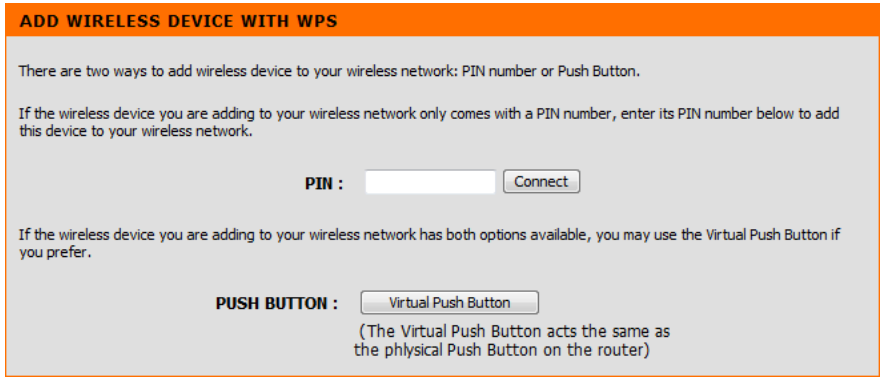
Disable WPS-PIN Method: Tick this option to disable the WPS-PIN Method.

Current PIN: Here a PIN number will be displayed that we can use for the WPS connection. To generate a new PIN number, click on the **Generate New PIN** button. To reset this option, click on the **Reset PIN to default** button.

Wi-Fi Protected Status: Here the Wi-Fi Protected Status will be displayed. By default, this option is 'Configured'. To reset this option to 'Unconfigured', click on the **Reset to Unconfigured** button.

Click the **Add Wireless Device with WPS** button to initiate the wizard.

After click the **Add Wireless Device with WPS** button, the following page will be available.

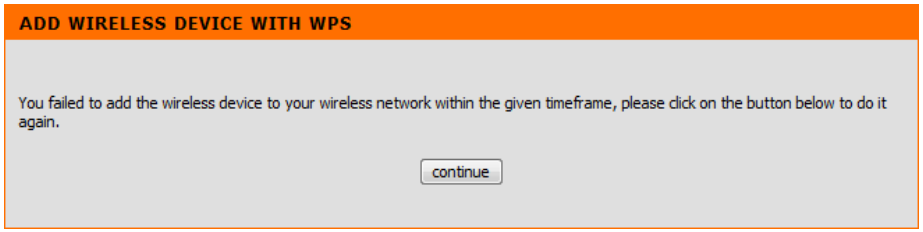


PIN: Enter its PIN number below to add this device to your wireless network.

Virtual Push Button: If the wireless device you are adding to your wireless network has both options available, you may use the Virtual Push Button if you prefer.

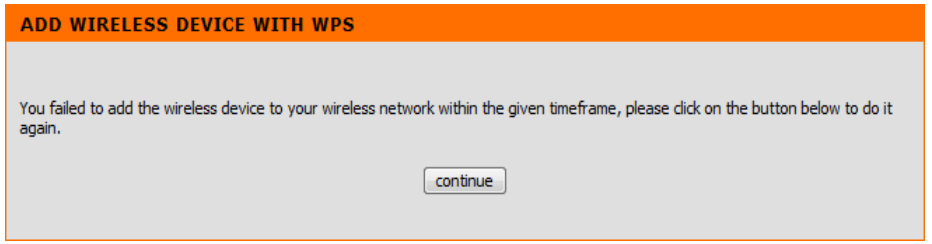
Enter the current PIN, click the **Connect** button, this page will be available.

Click the **Continue** button to continue



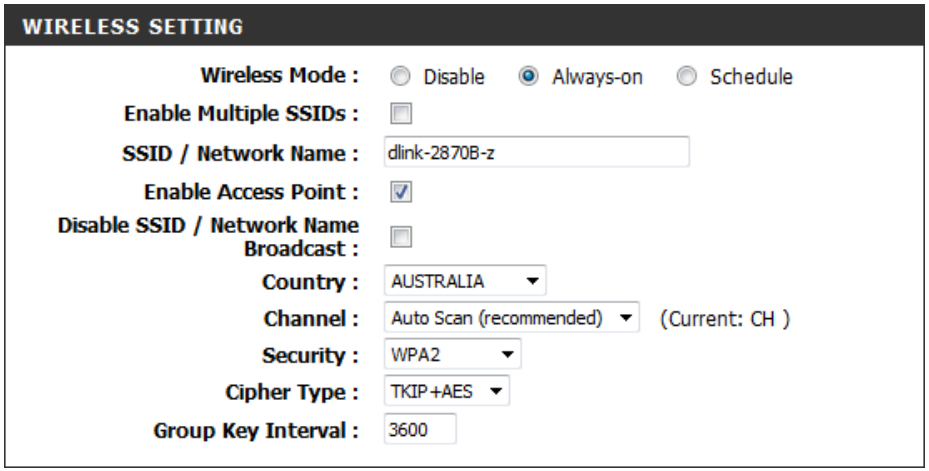
After clicking the **Virtual Push Button** button, this page will be available.

Click the **Continue** button to continue



Wireless SETTING

If your wireless adapter doesn't support the WPS connection methods, we can configure the Wireless Connection manually here.



In this section, we can configure the following parameters.

Wireless Mode: This router supports three wireless mode options available .They are Disable Always-on and Schedule.

Enable Multiple SSIDs: Select this option enable or disable the enable multiple SSIDs for this interface.

SSID/Network Name: Enter the Wireless name (SSID) here. This name will be available when wireless clients scan for available wireless networks.

Enable Access Point: Select this option enable or disable the enable access point for this interface.

Disable SSID/Network Name Broadcast: Select this option enable or disable SSID/Network Name Broadcast for this interface.

Country: Select your country from the drop-down menu here.

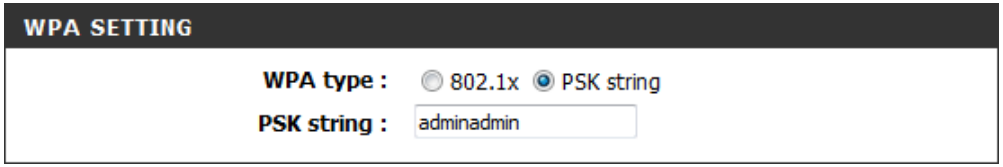
Channel: Here we can select a wireless channel manually, or select the **Auto** option to allow the router to automatically select the channel with the least interference.

Security: This router supports five wireless security mode options available in the **Security** drop-down menu. Options to choose from are **None, WEP, WPA, WPA2** and **WPA/WPA2.**

Cipher Type: Option to choose from are TKIP, AES and TKIP+AES.

Group Key Update Interval: Enter the group key update interval value here.

WPA SETTING



In this section, we can configure the following parameters.

WPA type: Options to choose from are **802.1x** and **PSK string.**

PSK string: Enter the PSK string

Click the **Apply** button to accept the changes.

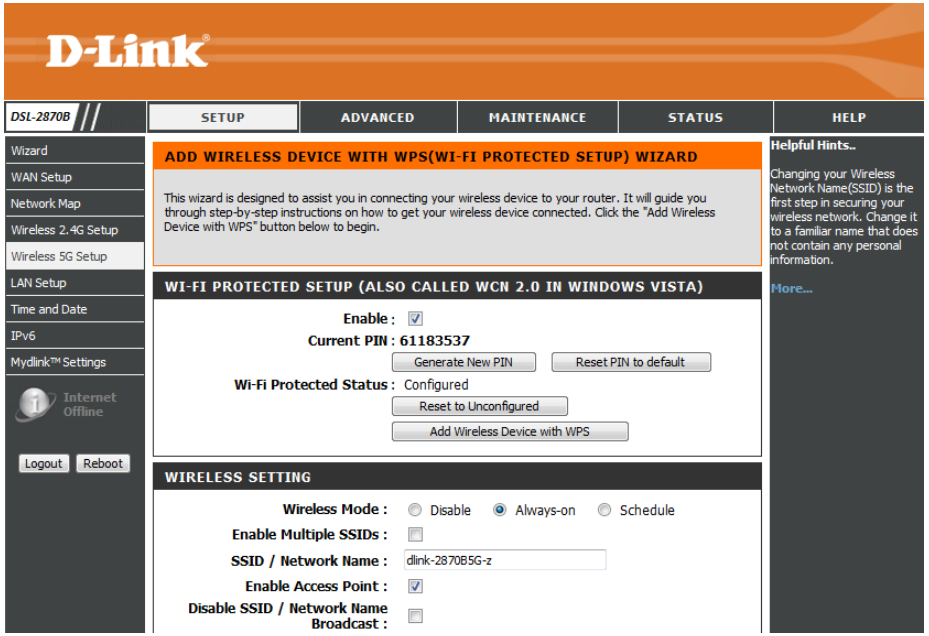
Wireless 5G Setup

To access the **Wireless 5G Setup** page, click on the **Setup** menu link, at the top, and then click on the **Wireless 5G Setup** menu link, on the left.

On this page the user can configure services related to the Wireless 5GHz connectivity of this product.

Services available for configuration are the following:

- Add Wireless Device with WPS
- Wireless Setting
- WPA Setting



Add Wireless Device with WPS

The Wireless Device, with WPS, Wizard is designed to assist the user in configuring a connection between this router and a wireless client by means of the WPS wireless connection method.

In this section we can configure the following parameters.

Enable: Tick this option to enable the WPS feature.

Disable WPS-PIN Method: Tick this option to disable the WPS-PIN Method.

Current PIN: Here a PIN number will be displayed that we can use for the WPS connection. To generate a new PIN number, click on the **Generate New PIN** button. To reset this option, click on the **Reset PIN to default** button.

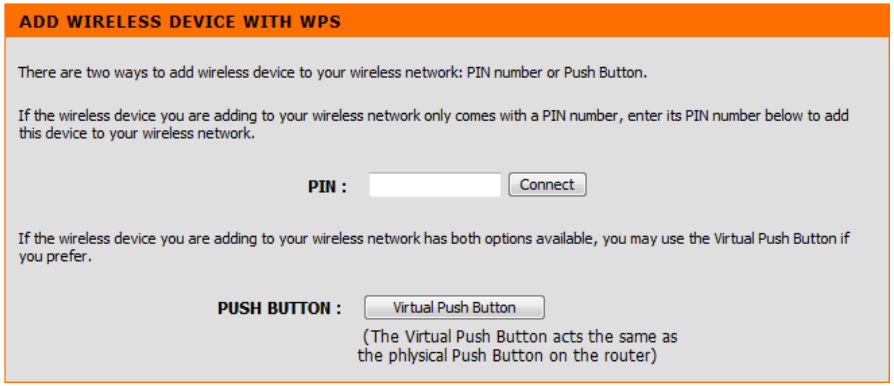
Wi-Fi Protected Status: Here the Wi-Fi Protected Status will be displayed. By default, this option is 'Configured'. To reset this option to 'Unconfigured', click on the **Reset to Unconfigured** button.

Click the **Add Wireless Device with WPS** button to initiate the wizard.

After click the **Add Wireless Device with WPS** button, the following page will be available.

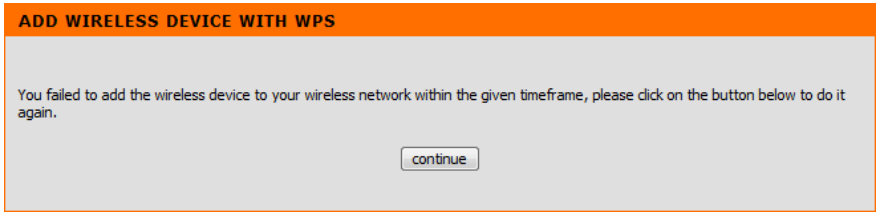
PIN: Enter its PIN number below to add this device to your wireless network.

Virtual Push Button: If the wireless device you are adding to your wireless network has both options available, you may use the Virtual Push Button if you prefer.



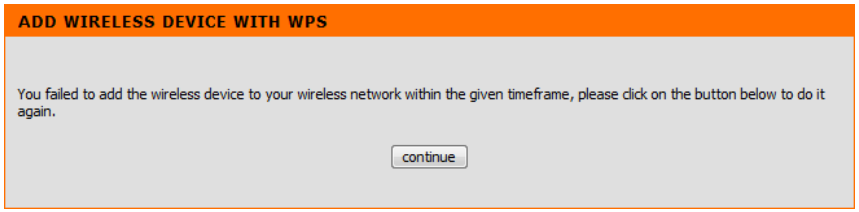
Enter the current PIN; click the **Connect** button, this page will be available.

Click the **Continue** button to continue



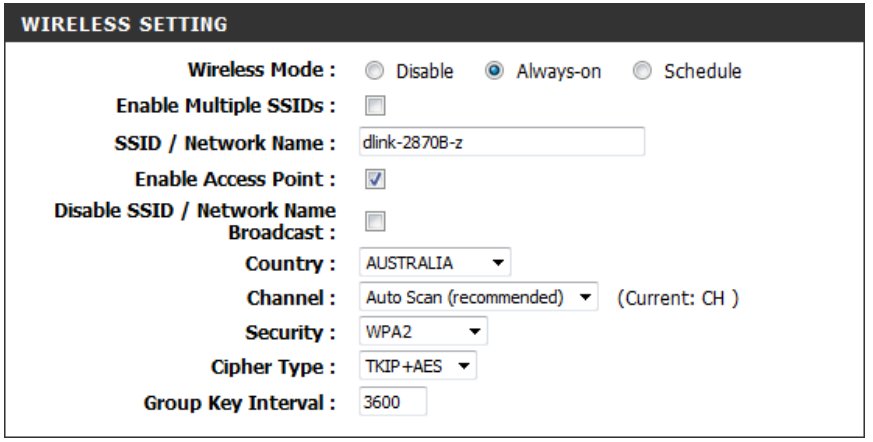
After clicking the **Virtual Push** button, this page will be available

Click the **Continue** button to continue



Wireless SETTING

If your wireless adapter doesn't support the WPS connection methods, we can configure the Wireless Connection manually here.



In this section we can configure the following parameters.

Wireless Mode: This router supports three wireless mode options available .They are Disable Always-on and Schedule.

Enable Multiple SSIDs: Select this option enable or disable the enable multiple SSIDs for this interface.

SSID/Network Name: Enter the Wireless name (SSID) here. This name will be available when wireless clients scan for available wireless networks.

Enable Access Point: Select this option enable or disable the enable access point for this interface.

Disable SSID/Network Name Broadcast: Select this option enable or disable SSID/Network Name Broadcast for this interface.

Country: Select your country from the drop-down menu here.

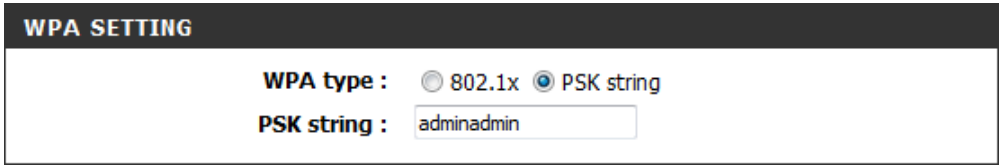
Channel: Here we can select a wireless channel manually, or select the **Auto** option to allow the router to automatically select the channel with the least interference.

Security: This router supports five wireless security mode options available in the **Security** drop-down menu. Options to choose from are **None, WEP, WPA, WPA2** and **WPA/WPA2.**

Cipher Type: Option to choose from are TKIP, AES and TKIP+AES.

Group Key Update Interval: Enter the group key update interval value here.

WPA SETTING



In this section we can configure the following parameters.

WPA type: Options to choose from are **802.1x** and **PSK string.**

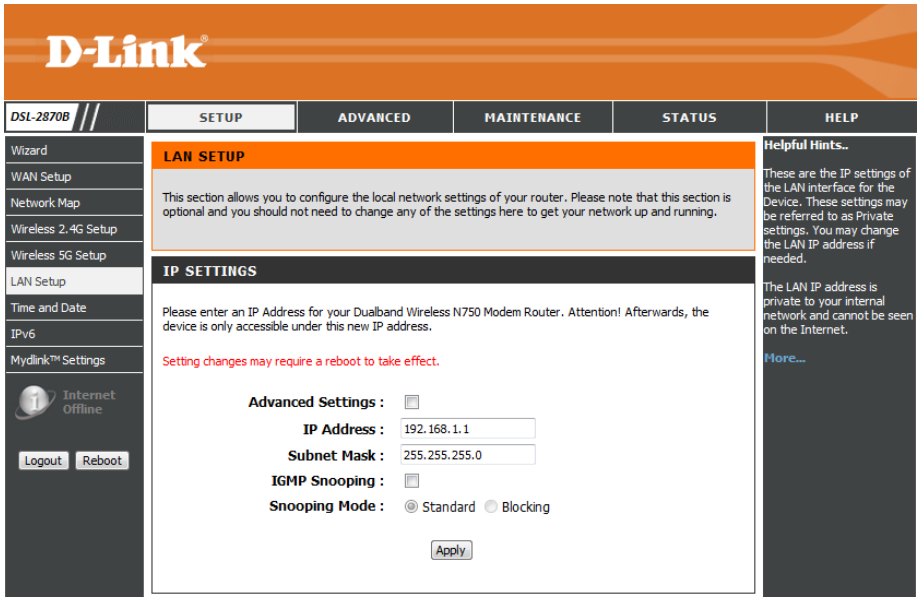
PSK string: Enter the PSK string

Click the **Apply** button to accept the changes.

LAN Setup

To access the **LAN Setup** page, click on the **Setup** menu link, at the top, and then click on the **LAN Setup** menu link, on the left.

On this page the user can configure services related to the LAN Setup connectivity of this product. Services available for configuration are IP Settings Interface configuration DHCP Server and Add Static IP Address configuration.



In this section, we can configure the IP Settings parameters.

Advanced Settings: Select this option to enable the Advanced Settings option.

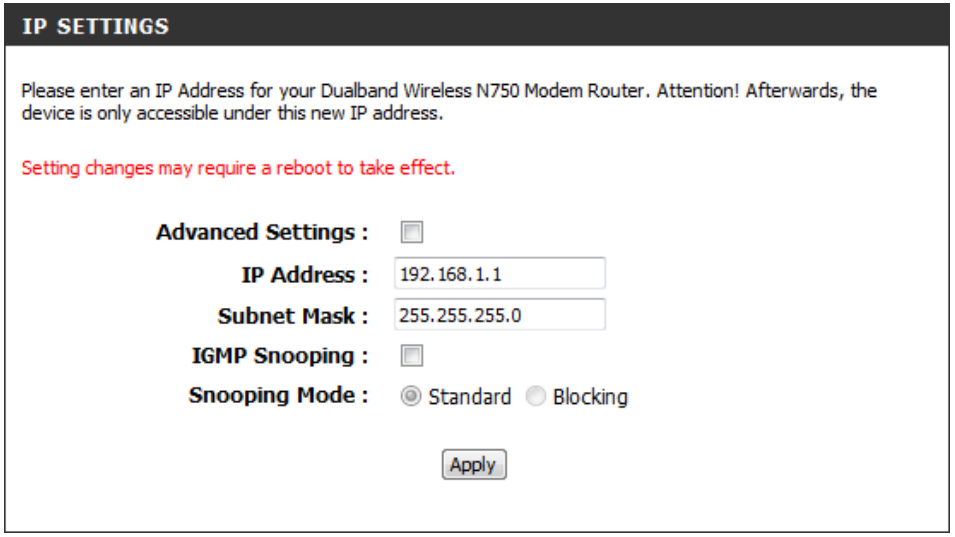
IP Address: Enter the local IP address for this router here. The IP address is also used to connect to this device's Web User Interface. **Please note** that after changing the IP address you will be forced to log into the Web User Interface again, using the new IP address.

Subnet Mask: Enter the subnet mask used here.

IGMP Snooping: Select this option to enable the IGMP snooping option.

Snooping Mode: Options to choose from are Standard and Blocking.

Click the **Apply** button to accept the changes.



In this section we can configure the DHCP Server parameters.

DHCP Server: Options to choose from are Disable, Enable and Relay.

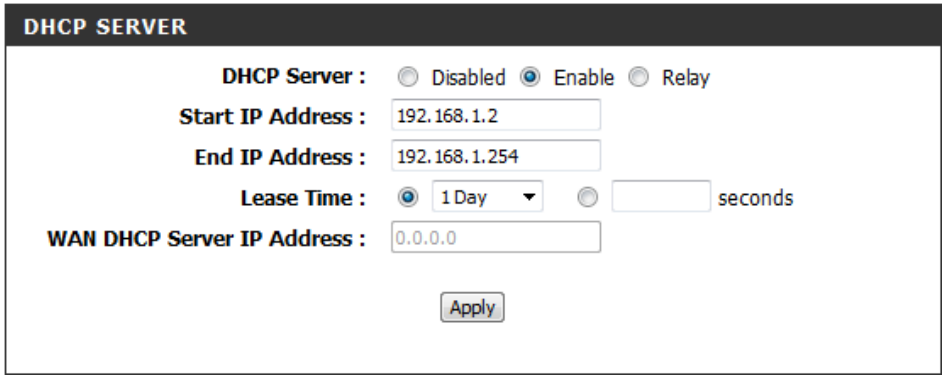
Start IP Address: Enter the start IP address.

End IP Address: Enter the end IP address

Lease Time: Set the lease time.

WAN DHCP Server IP Address: Enter the WAN DHCP server IP address.

Click the **Apply** button to accept the changes.

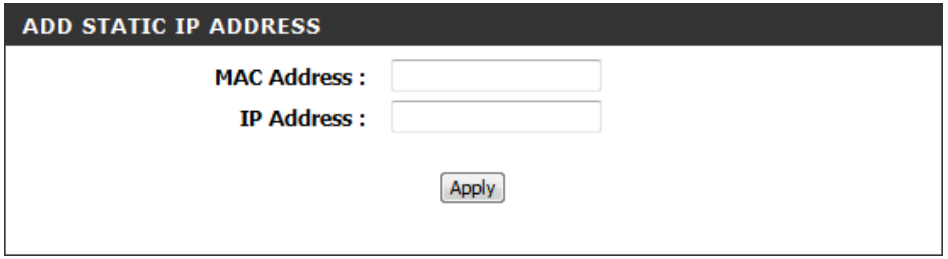


In this section, we can configure the ADD Static IP Address parameters.

MAC Address: Enter the MAC address.

IP Address: Enter the IP address.

Click the **Apply** button to accept the changes.

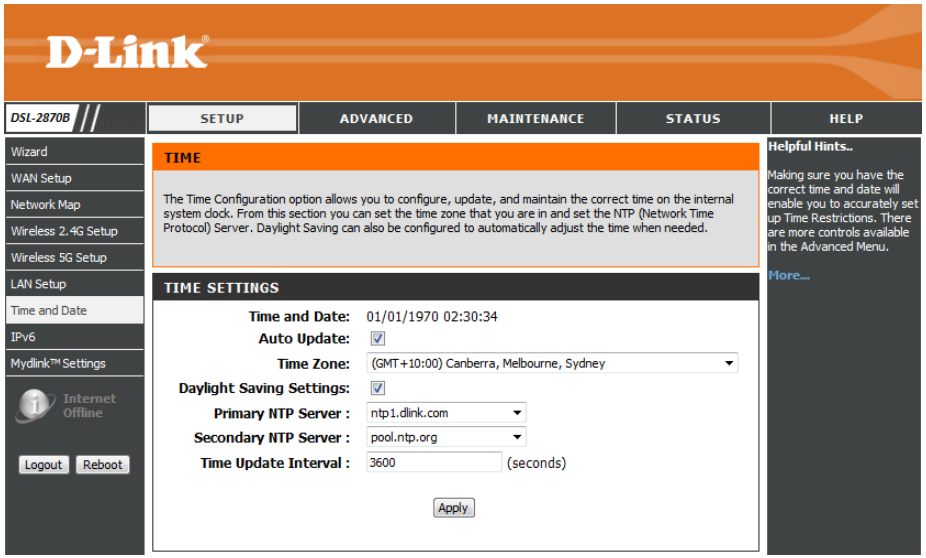


Time and Date

To access the **Time and Date** page, click on the **Setup** menu link, at the top, and then click on the **Time and Date** menu link, on the left.

On this page, the user can configure services related to the time and date feature of this product.

Time Servers and a Time Zone can be specified here.



In this section, we can configure the **Time Settings** for this router.

Time and Date: Display the time and date.

Auto Update: Tick this option to enable the auto update feature.

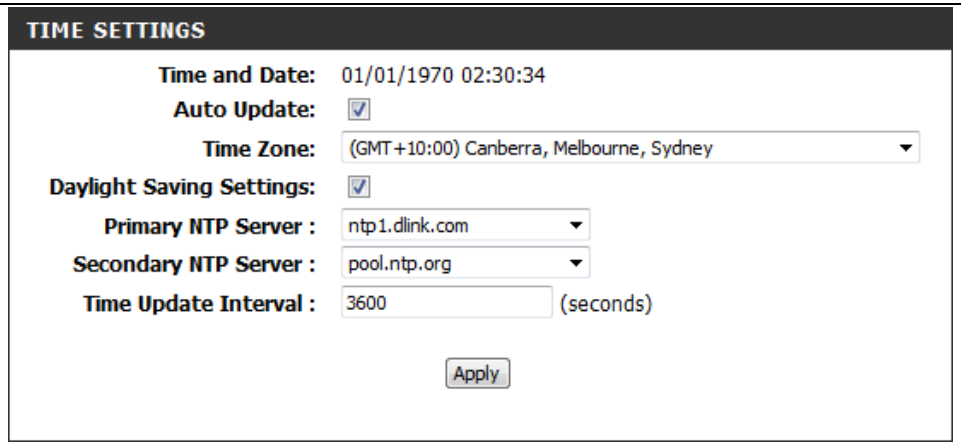
Time Zone: Select the time zone.

Daylight Saving Settings: Select this option to enable the Daylight Saving Settings option.

Primary NTP Server: Select the primary NTP server.

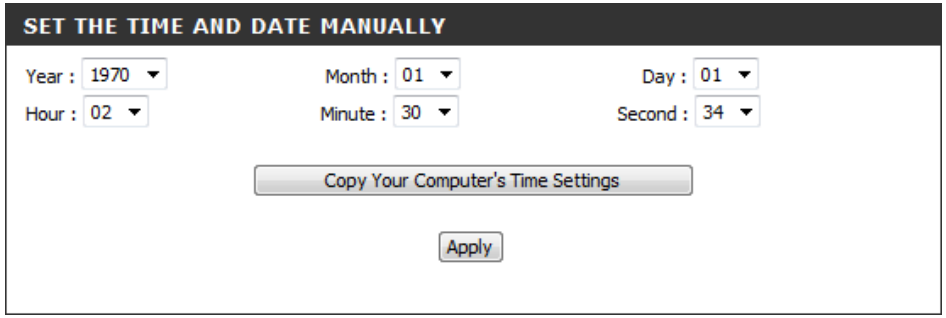
Secondary NTP Server: Select the secondary NTP server.

Time Update Interval: Enter the time update interval.



Click the **Apply** button to accept the changes.

In this section we can manually configure the time and date settings used by this router. Manually select the **Year**, **Month**, **Day**, **Hour**, **Minute**, and **Second** option here.



Alternatively we can copy the local computer's time and date settings to this router by simply clicking on the **Copy Your Computer's Time Settings** button.

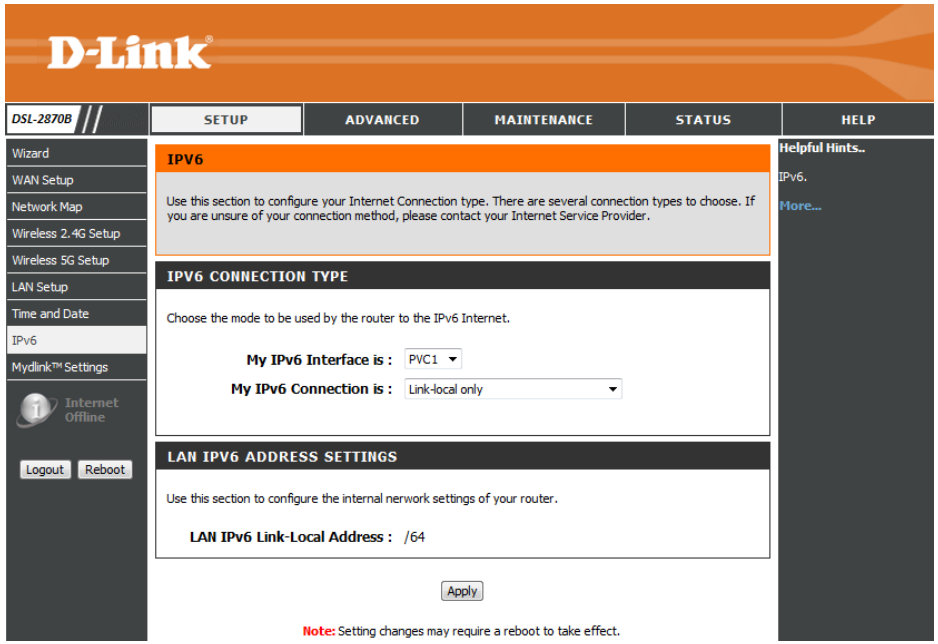
Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

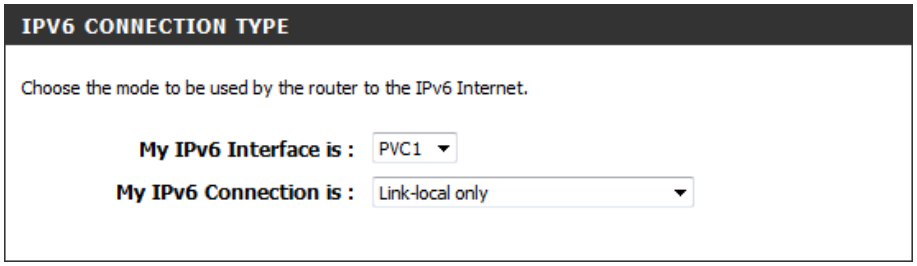
IPv6

To access the **IPv6** page, click on the **Setup** menu link, at the top, and then click on the **IPv6** menu link, on the left.

On this page, the user can configure services related to the IPv6 connectivity of this product.

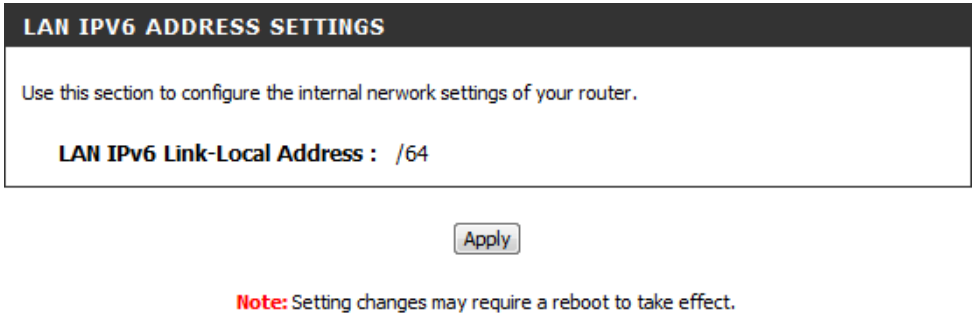


In this section we can enter the **My IPv6 Interface is** and **My IPv6 Connection is** used here.



Use this section to configure the internal network settings of your router.

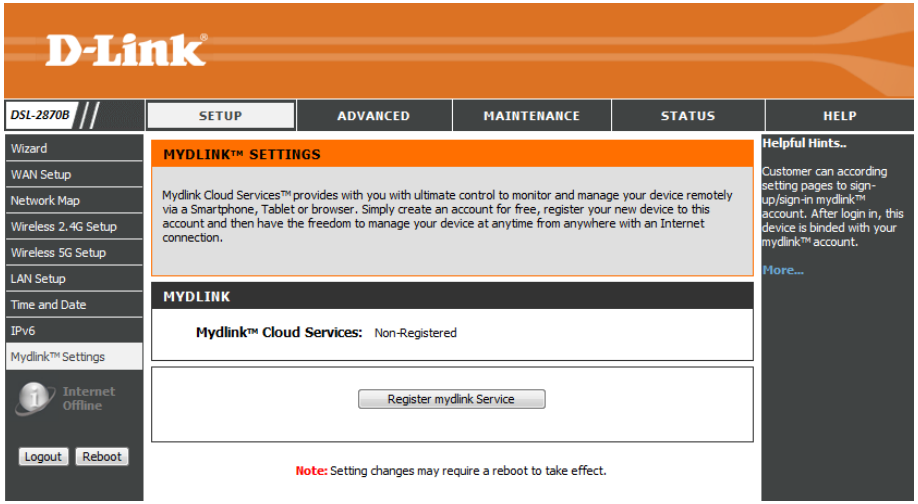
Click the **Apply** button to accept the changes.



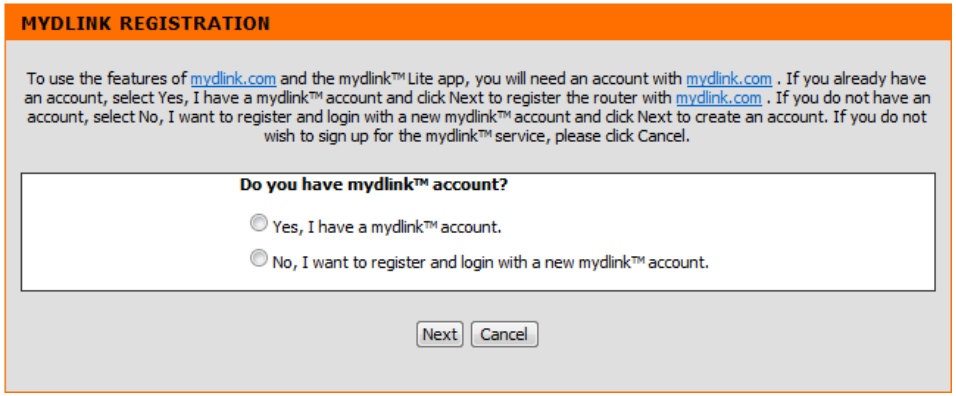
Mydlink™ Settings

To access the **mydlink™ Settings** page, click on the **Setup** menu link, at the top, and then click on the **mydlink™ Settings** menu link, on the left.

On this page, the user can register mydlink service.



Click the **Register mydlink Service** button to register mydlink service.



Select the “Yes, I have a mydlink ™account”, click **next** button, this page will be available

In this section, we can configure the following parameters.

E-mail Address (Account Name): Enter the account name.

Password: Enter the password.

Click the **Prev** button to discard the changes made and return to the previous page.

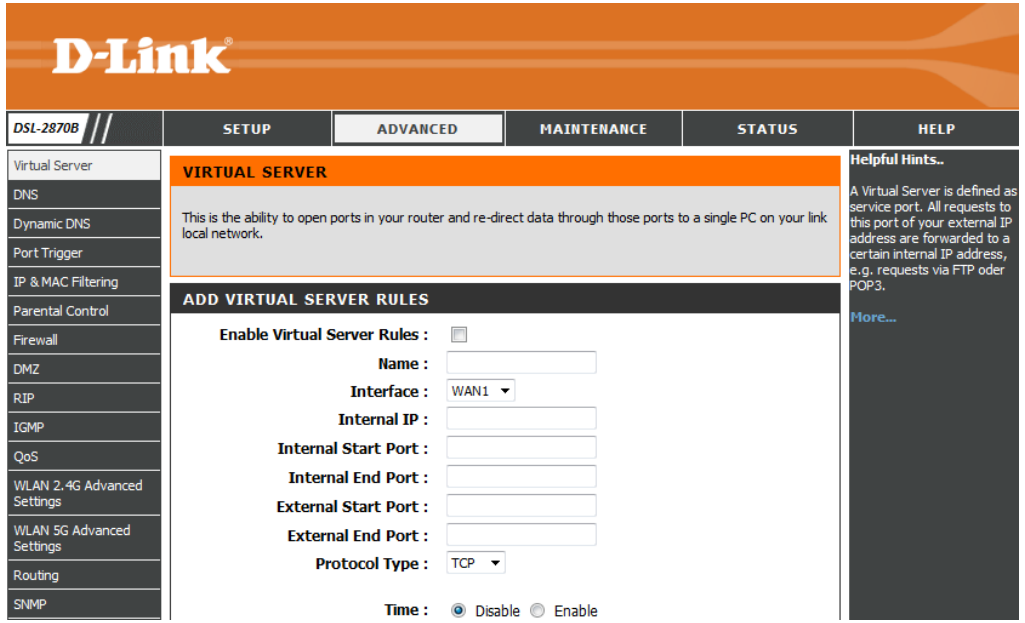
Click the **Login** button to login in

Click the **Cancel** button to discard the changes made and return to the main page

Advanced Category

The **Advanced** category is designed to assist the user with more advanced configurations, concerning the other features found on this product.

The following pages can be found in the **Advanced** category:



- Virtual Server– On this page the user can configure advanced services related to the Virtual Server connectivity of this product.
- DNS– On this page the user can configure advanced services related to the DNS connectivity of this product.
- Dynamic DNS– On this page the user can configure services related to the Dynamic DNS feature of this product.
- Port Trigger – On this page the user can configure services related to the port trigger feature of this product.
- IP&MAC Filtering– On this page the user can configure services related to the IP&MAC filtering feature of this product.
- Parental Control – On this page the user can configure services related to the parental control feature of this product. Services available for configuration are URL Blocking and Domain Blocking.
- Firewall– On this page the user can configure services related to the firewall feature of this product.
- DMZ – On this page the user can configure services related to the DMZ feature of this product.
- RIP– On this page the user can configure services related to the RIP feature of this product.
- IGMP– On this page the user can configure IGMP related to the port triggering feature of this product.
- QoS– On this page the user can configure services related to the QoS feature of this product.
- WLAN 2.4G Advanced Settings– On this page the user can configure services related to the WLAN 2.4G Advanced Settings feature of this product.
- WLAN 5G Advanced Settings– On this page the user can configure services related to the WLAN 5G Advanced Settings feature of this product.
- Routing – On this page the user can configure services related to the Routing feature of this product. Services available for configuration is **Static Route**, **Default Gateway**, and **RIP**.
- SNMP– On this page the user can configure services related to the SNMP feature of this product.

- UPnP– On this page the user can configure services related to the UPnP available on this product, include UpnP IGD and UpnP AV functions.
- Samba – On this page the user can configure services related to the Samba connectivity of this product.
- DSL Line Settings– On this page the user can configure services related to the DSL Line Settings feature of this product.
- URL Redirect– On this page the user can configure services related to the URL Redirect feature of this product.
- ALG Setting– On this page the user can configure services related to the ALG Setting feature of this product.
- Budget Quota– On this page the user can configure services related to the Budget Quota feature of this product.

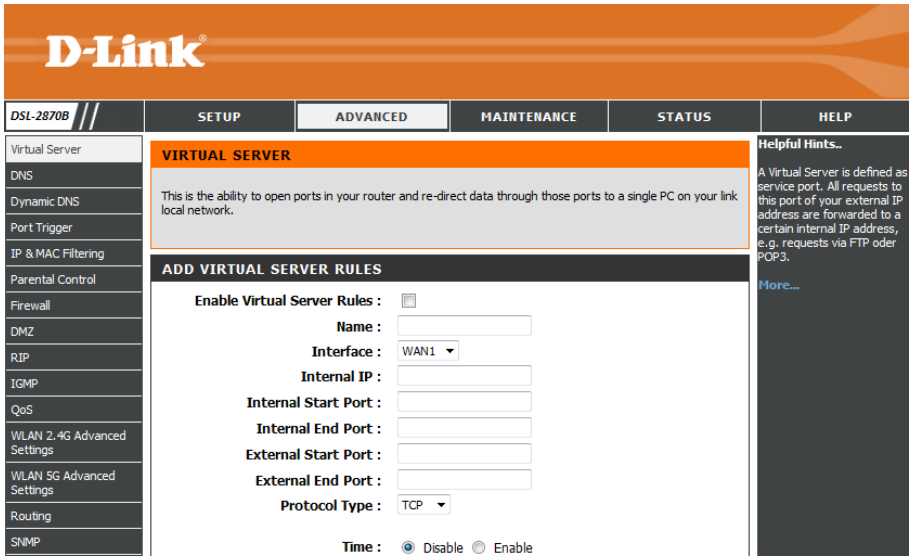
Virtual Server

To access the **Virtual Server** page, click on the **Advanced** menu link, at the top, and then click on the **Virtual Server** menu link, on the left.

On this page the user can configure advanced services related to the Virtual Server connectivity of this product.

Services available for configuration are the following:

- Add Virtual Server Rules



Add Virtual Server Rules

In this section, we can configure the following parameters.

Enable Virtual Server Rules: Select this option to enable the Daylight Saving Settings option.

Name: Enter the account name.

Interface: Select the interface. Options to choose from are **WAN1**, **WAN2**, **WAN3**, **WAN4**, **WAN5**, **WAN6**, **WAN7** and **WAN8**.

Internal IP: Enter the internal IP

Internal Start Port: Enter the internal start port.

Internal End Port: Enter the internal end port.

External Start Port: Enter the external start port.

External End Port: Enter the external end port.

Protocol Type: Select the protocol type. Options to choose from are **Both, TCP and UDP.**

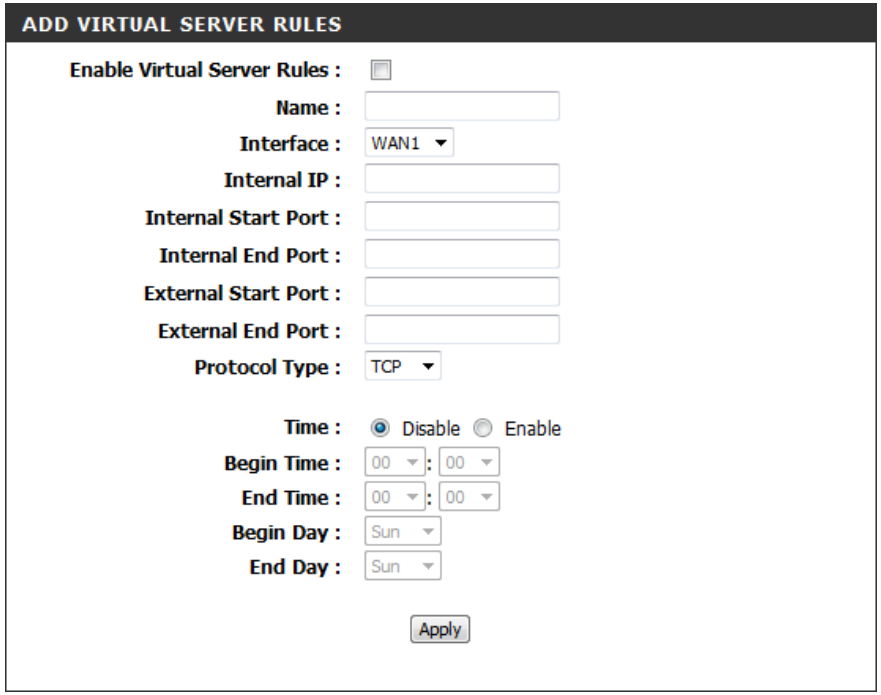
Time: Select this option to enable or disable the time option.

End Time: Set the end time.

Begin Day: Set the begin day

End Day: Set the end day.

Click the **Apply** button to accept the changes.



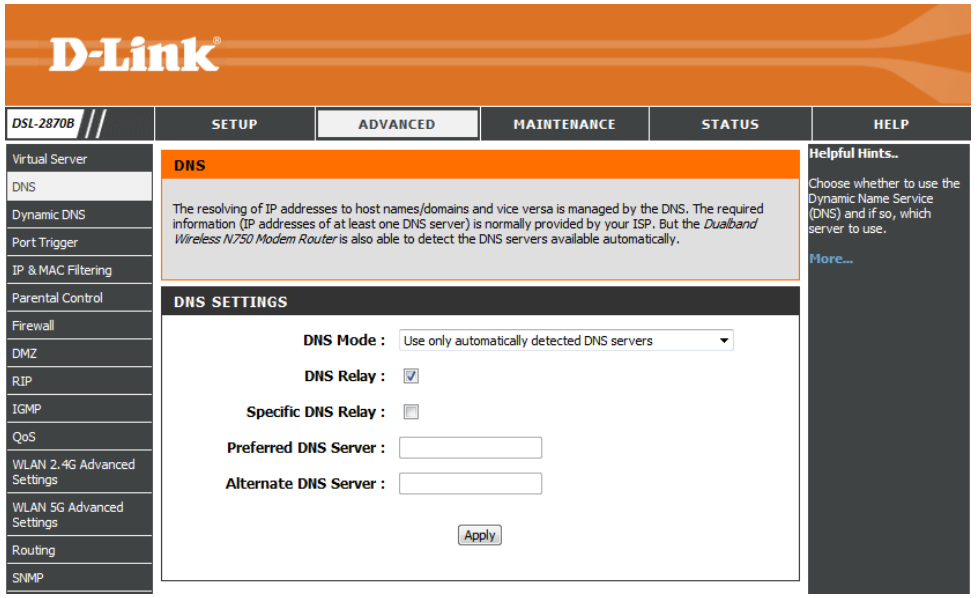
DNS

To access the **DNS** page, click on the **Advanced** menu link, at the top, and then click on the **DNS** menu link, on the left.

On this page the user can configure advanced services related to the DNS connectivity of this product.

Services available for configuration are the following:

- DNS Settings



DNS Settings

In this section, we can configure the following parameters.

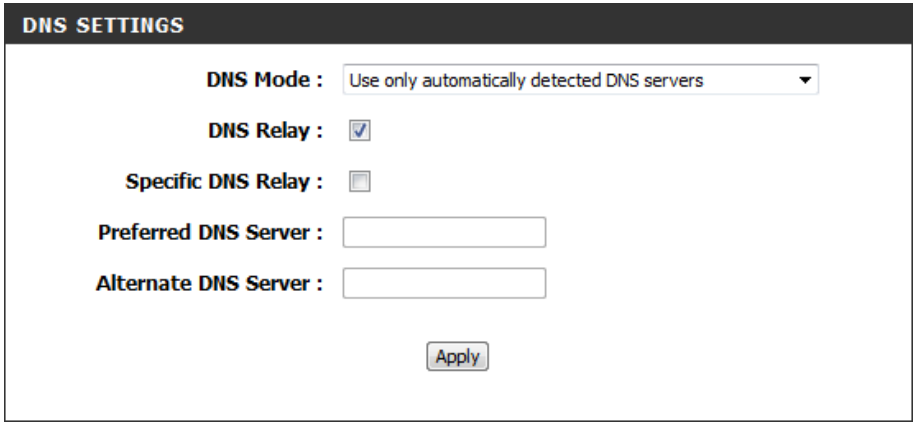
DNS Mode: Select the DNS Mode. Options to choose from are **Disable DNS, Use Auto/User Discovered DNS servers, Use only automatically detected DNS servers, Use only manually specified DNS servers.**

DNS Relay: Select this option to enable the DNS relay option.

Specific DNS Relay: Select this option to enable the specific DNS relay option.

Preferred DNS Server: Enter the preferred DNS server.

Alternate DNS Server: Enter the alternate DNS server.



Click the **Apply** button to accept the changes.

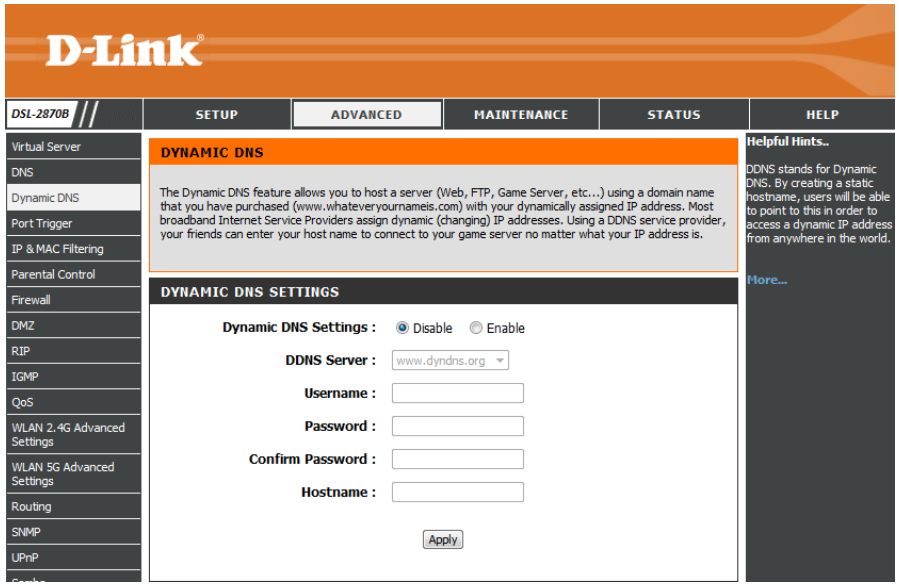
Dynamic DNS

To access the **Dynamic DNS** page, click on the **Advanced** menu link, at the top, and then click on the **Dynamic DNS** menu link, on the left.

On this page, the user can configure services related to the Dynamic DNS feature of this product.

Services available for configuration are the following:

- Dynamic DNS Settings



Dynamic DNS Settings

In this section, we can configure the following parameters.

Dynamic DNS Settings: Select this option to enable or disable the Dynamic DNS Settings option.

DDNS Server: Enter the DDNS server

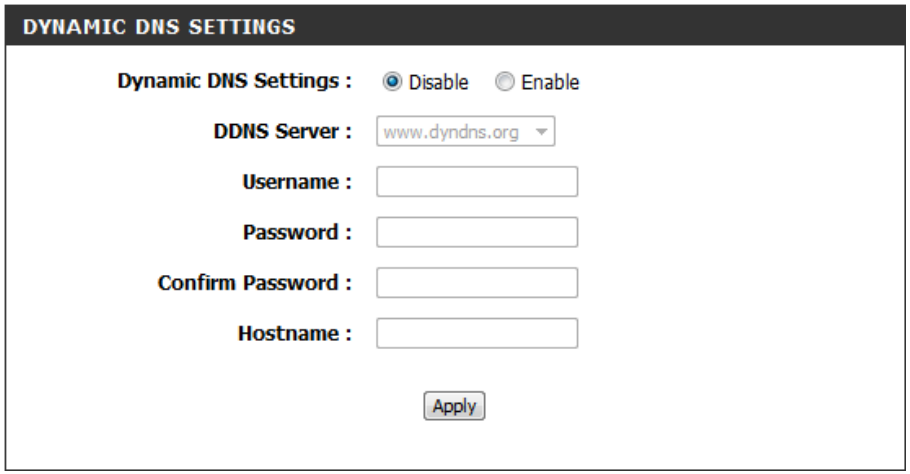
Username: Enter the username.

Password: Enter the password

Confirm Password: Enter the confirm password.

Hostname: Enter the hostname.

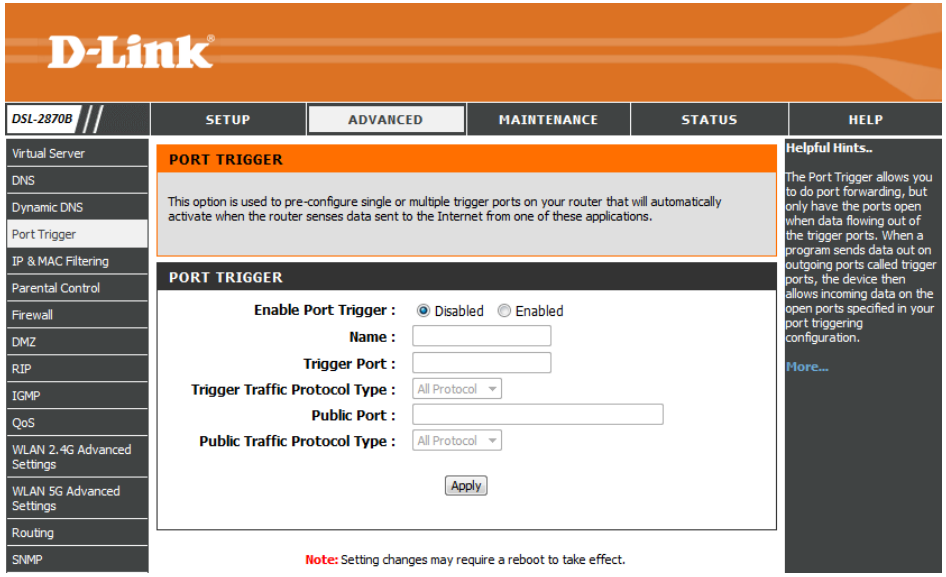
Click the **Apply** button to accept the changes.



Port Triggering

To access the **Port Triggering** page, click on the **Advanced** menu link, at the top, and then click on the **Port Triggering** menu link, on the left.

On this page, the user can configure services related to the port triggering feature of this product.



Services available for configuration are the following:

- Port Trigger

Port Trigger

In this section we can configure the following parameters.

Enable Port Trigger: Select this option to enable or disable the enable port trigger option.

Name: Enter the name here.

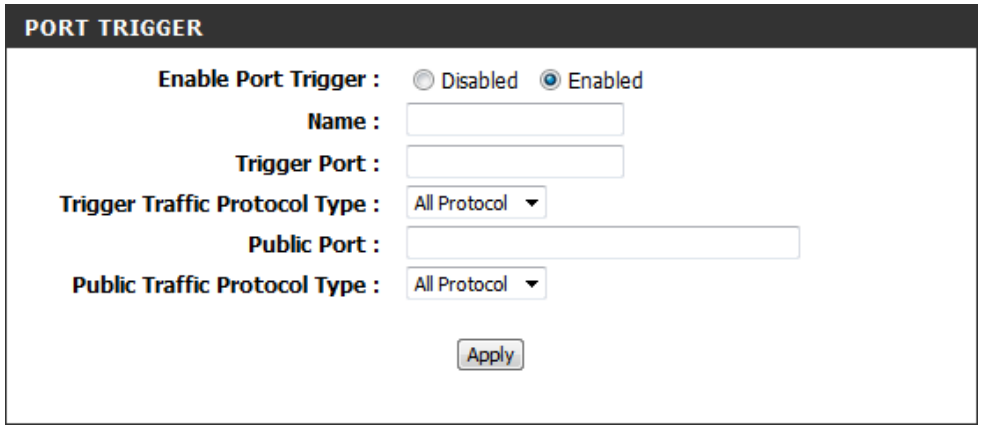
Trigger Port: Enter the trigger port number here.

Trigger Traffic Protocol Type: Select the trigger traffic protocol type used here. Options to choose from are **All Protocol**, **TCP**, and **UDP**.

Public Port: Enter the public port here.

Public Traffic Protocol Type: Select the public traffic protocol type used here. Options to choose from are **All Protocol**, **TCP**, and **UDP**.

Click the **Apply** button to accept the changes made.



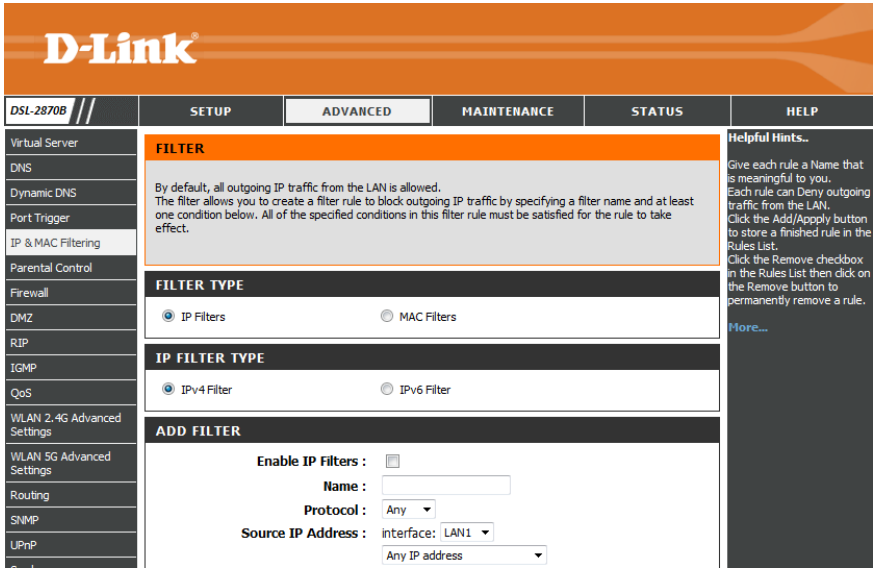
IP&MAC Filtering

To access the **IP&MAC Filtering** page, click on the **Advanced** menu link, at the top, and then click on the **IP&MAC Filtering** menu link, on the left.

On this page the user can configure services related to the IP&MAC Filtering feature of this product.

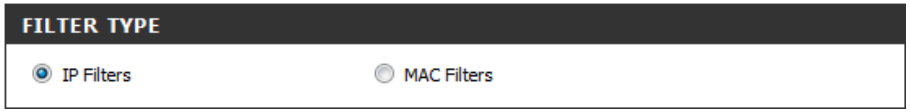
Services available for configuration are the following:

- Filter Type
- IP Filter Type
- Add Filter



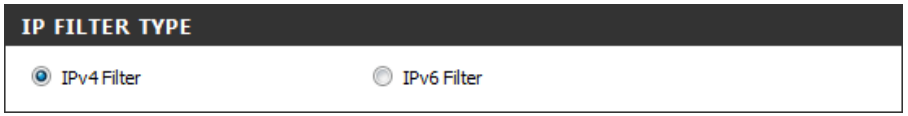
Filter Type

In this section, we can configure the Filter Type. Options to choose from are **IP Filters** and **MAC Filters.**



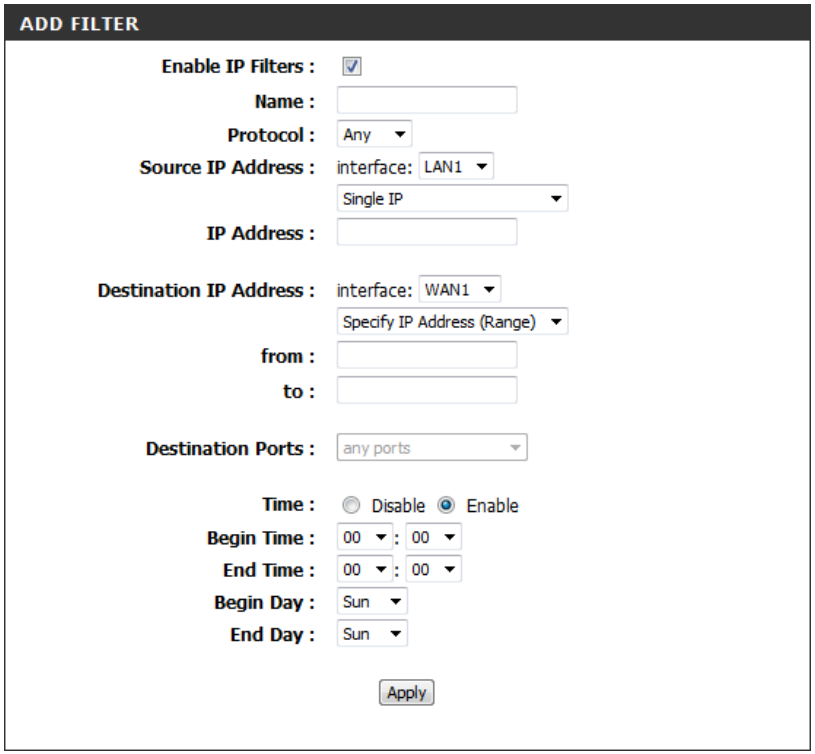
IP Filter Type

In this section, we can configure the IP Filter Type. Options to choose from are **IPv4 Filter** and **IPv6 Filter.**



Add Filter

In this section, we can configure the following parameters.



Enable IP Filters: Select this option to enable or disable the IP filters option.

Name: Enter the name here.

Protocol: Select the protocol used here. Options to choose from are **Any**, **TCP**, **UDP** and **ICMP.**

Source IP Address: Select the source IP address used here. Options of the interface to choose from are **LAN1**, **LAN2**, **LAN3** and **LAN4** options to choose from are **Any IP address, Single IP** and **Specify IP Address (Range) IP Address**

IP Address: Enter the IP address for the filter.

Destination IP Address: Configure the destination IP address here. Enter the Destination IP Address in **from** and **to**

Destination Ports: Configure the destination ports here.

Time: Select this option to enable or disable the time option.

Begin Time: Enter the begin time here.

End Time: Enter the end time here.

Begin Day: Enter the begin day here.

End Day: Enter the end day here

Click the **Apply** button to accept the changes made.

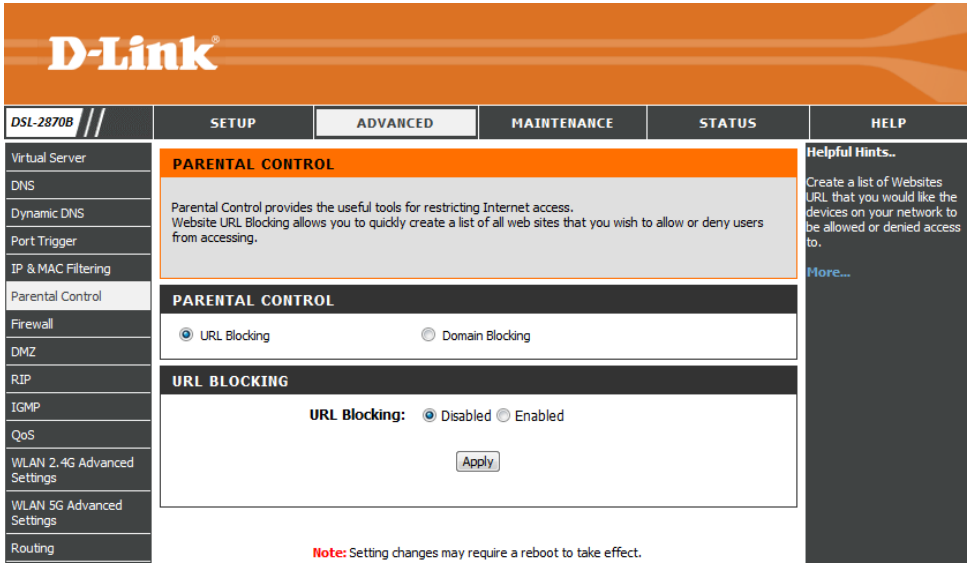
Parental Control

To access the **Parental Control** page, click on the **Advanced** menu link, at the top, and then click on the **Parental Control** menu link, on the left.

On this page, the user can configure services related to the Parental Control feature of this product.

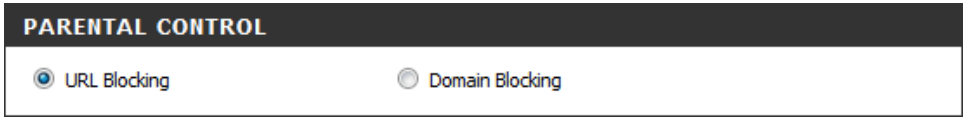
Services available for configuration are the following:

- Parental Control
- URL Blocking



Parental Control

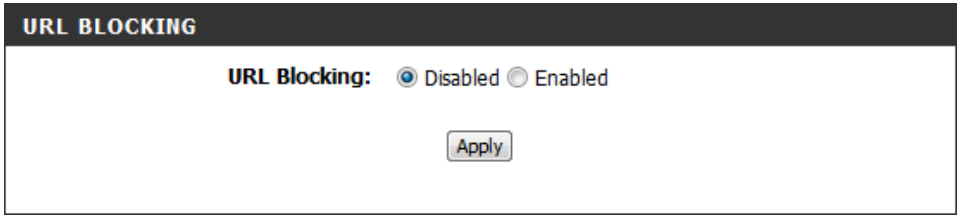
In this section, we can configure the Parental Control. Options to choose from are **URL Blocking and Domain Blocking.**



URL Blocking

In this section, we can configure the following parameters.

URL Blocking: Select this option to enable or disable the URL blocking option.

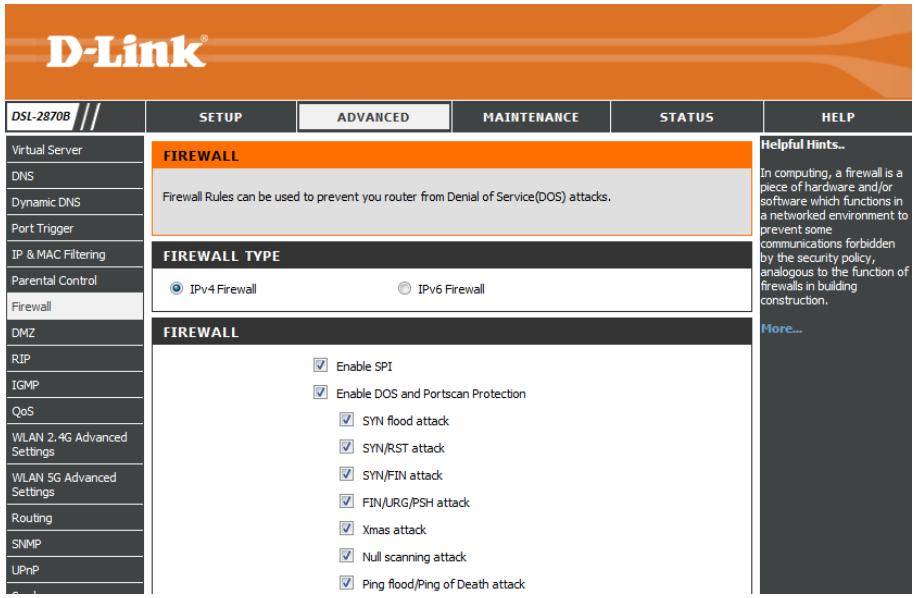


Click the **Apply** button to accept the changes made.

Firewall

To access the **Firewall** page, click on the **Advanced** menu link, at the top, and then click on the **Firewall** menu link, on the left.

On this page the user can configure services related to the Firewall feature of this product.

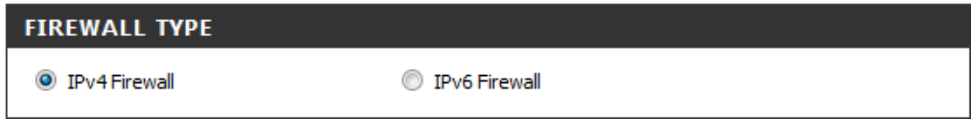


Services available for configuration are the following:

- Firewall Type
- Firewall

Firewall Type

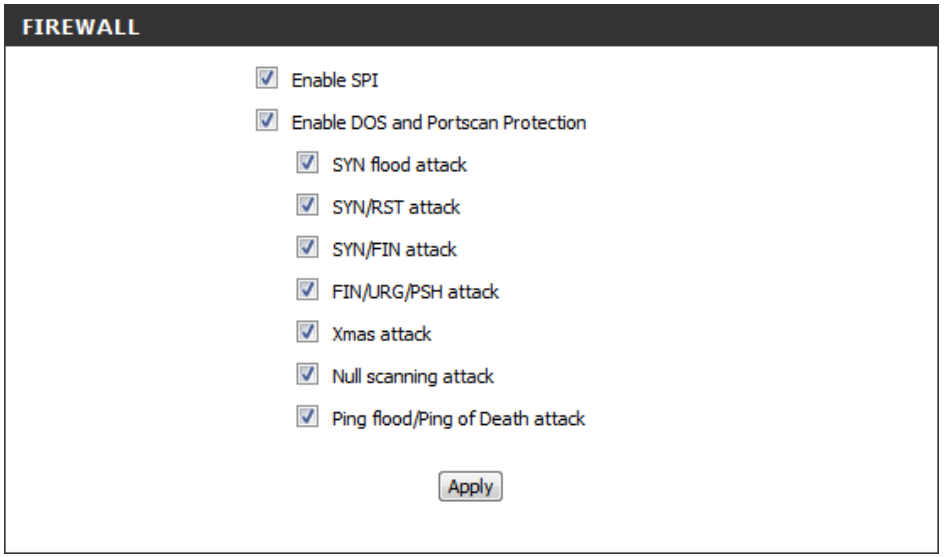
In this section, we can configure the Firewall Type. Options to choose from are **IPv4 Firewall** and **IPv6 Firewall.**



Firewall

In this section, we can configure the Firewall. Options to choose from are **Enable SPI**, **Enable DOS** and **Port scan Protection**, **SYN flood attack**, **SYN/RST attack**, **SYN/FIN attack**, **FIN/URG/PSH attack**, **Xmas attack**, **Null scanning attack** and **Ping flood/Ping of Death attack**.

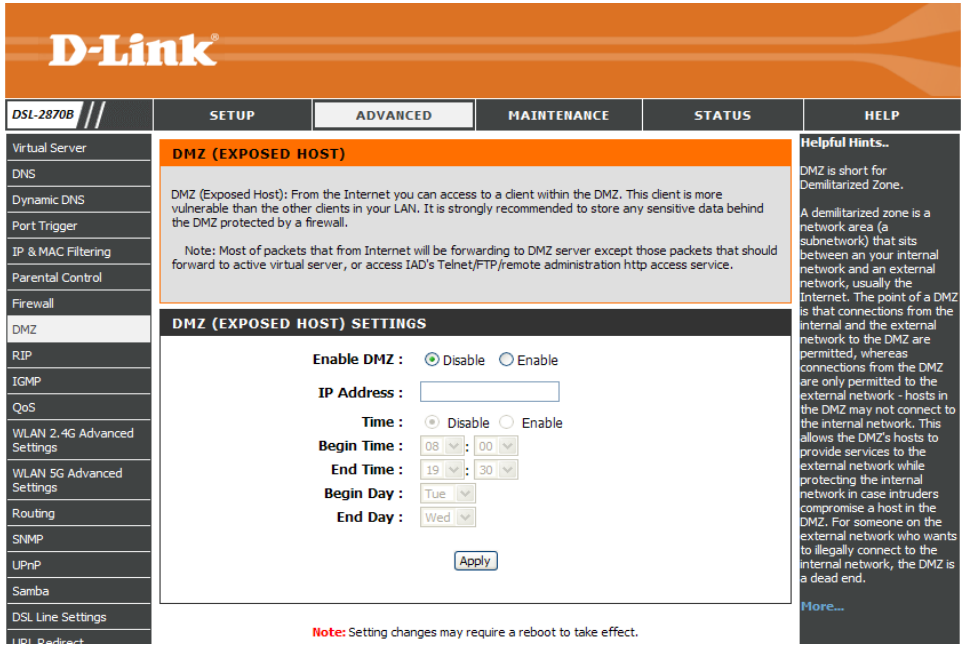
Click the **Apply** button to accept the changes



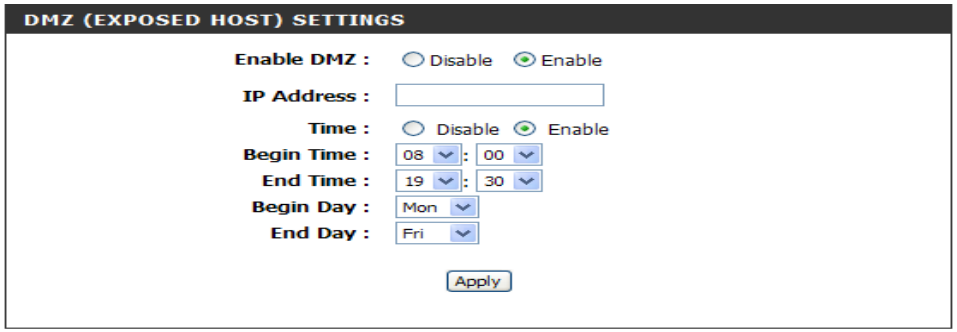
DMZ

To access the **DMZ** page, click on the **Advanced** menu link, at the top, and then click on the **DMZ** menu link, on the left.

On this page the user can configure services related to the DMZ feature of this product.



In this section we can configure the **DMZ Host** by entering the **IP Address** here and the work time by change **Time** settings.



Enable DMZ: Enable or disable the DMZ function for this router.

IP Address: Enter an IP address of the device you have connected to the router.

Time: Enable or disable the time scheduler, when this options is enabled, the internet client can access the server within a set time.

Begin Time: Specify a begin time for the DMZ rule.

End Time: Specify an end time for the DMZ rule.

Begin Day: Specify a begin day for the DMZ rule.

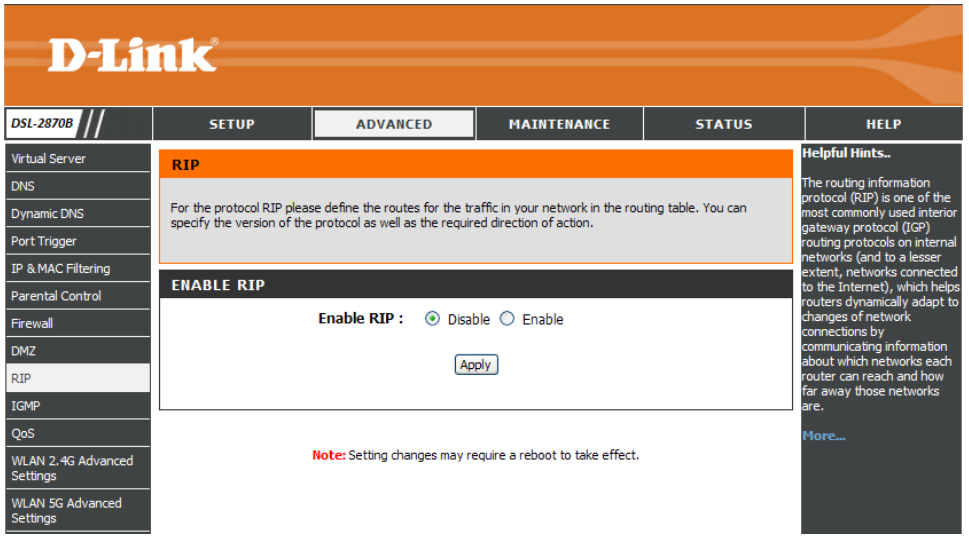
End Day: Specify an end day for the DMZ rule.

Click the **Apply** button to accept the changes made.

RIP

To access the **RIP** page, click on the **Advanced** menu link, at the top, and then click on the **RIP** menu link, on the left.

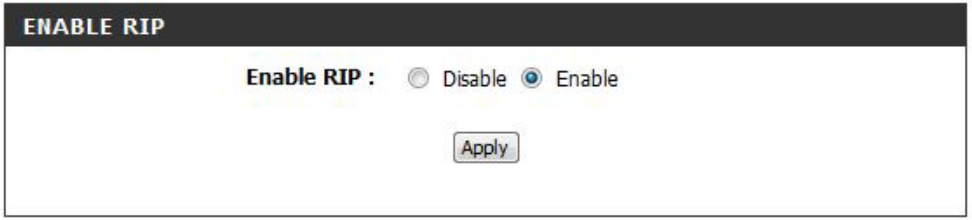
On this page, the user can configure services related to the RIP feature of this product.



In this section, we can enable RIP and configure it.

Enable RIP: Enable or disable RIP function for this router.

Click the **Apply** button to accept the changes made.



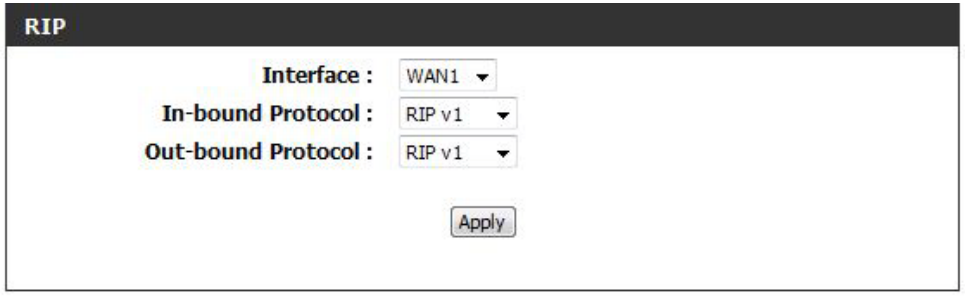
In this section, we can configure the RIP function.

Interface: Specify the interface to run RIP function.

In-bound Protocol: Specify the in-bound protocol, the option includes: **Disable**, **RIPv1**, **RIPv2** or **RIP Both**.

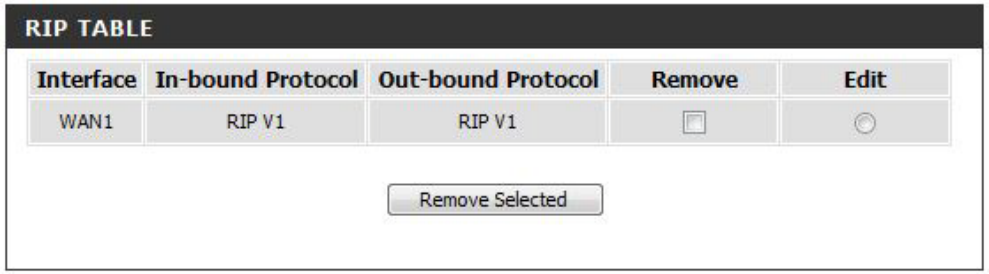
Out-bound Protocol: Specify the out-bound protocol, the option includes: **Disable**, **RIPv1**, **RIPv2** or **RIP Both**.

Click **Apply** button to commit the configuration



In this section, we can view the RIP table.

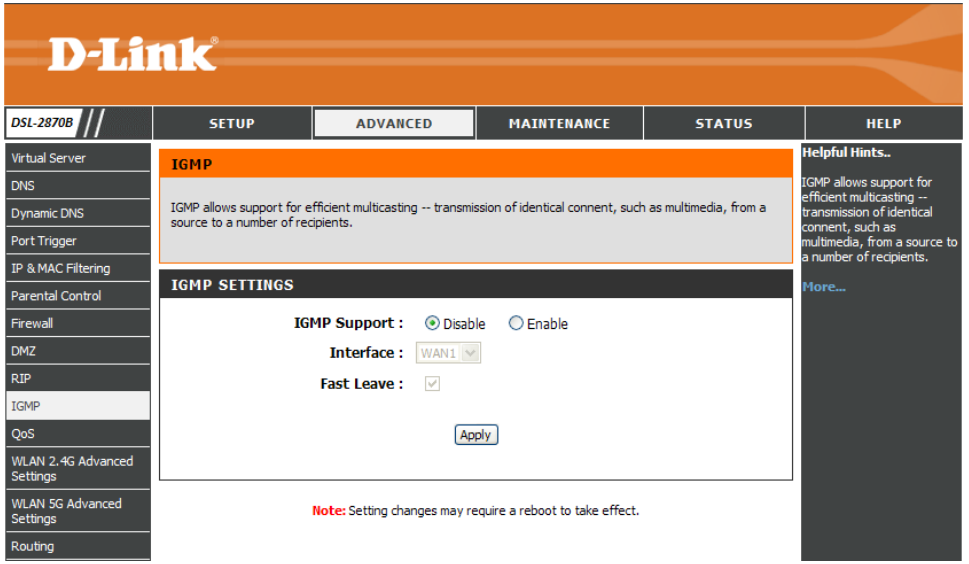
Click **Remove Selected** button, the selected entry will be removed.



IGMP

To access the **IGMP** page, click on the **Advanced** menu link, at the top, and then click on the **IGMP** menu link, on the left.

On this page, the user can configure services related to the IGMP feature of this product.



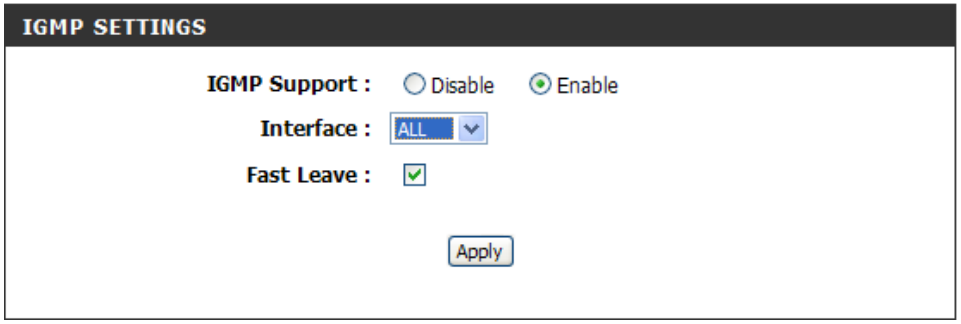
In this section, we can enable IGMP and configure it.

IGMP Support: Enable or disable IGMP function for this router.

Interface: Specify the interface for the IGMP function.

Fast Leave. Enable or disable fast leave function.

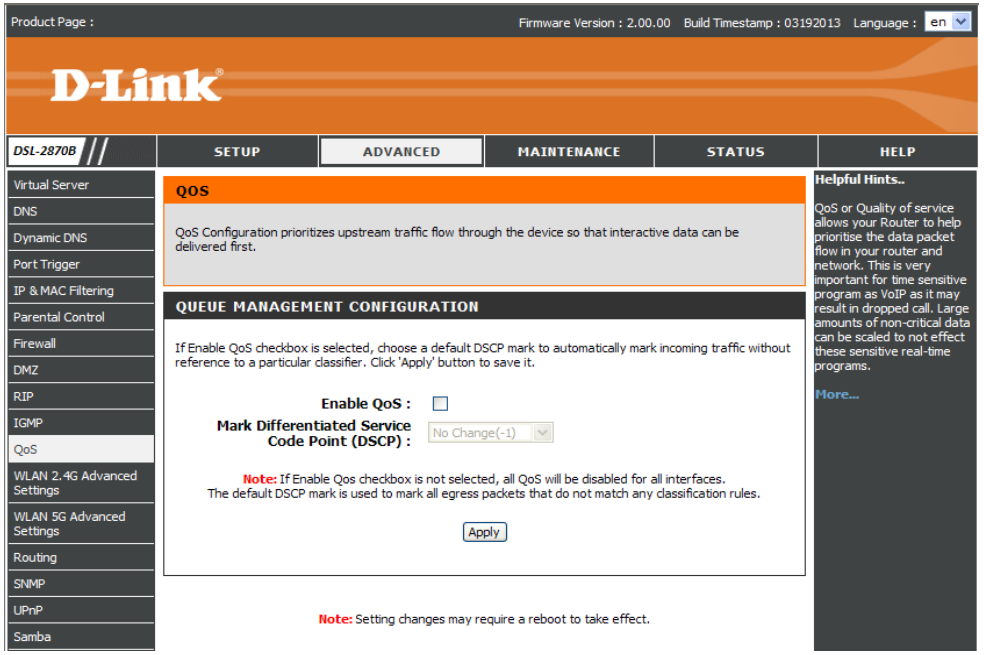
Click the **Apply** button to accept the changes made.



QoS

To access the **QoS** page, click on the **Advanced** menu link, at the top, and then click on the **QoS** menu link, on the left.

On this page, the user can configure services related to the QoS feature of this product.



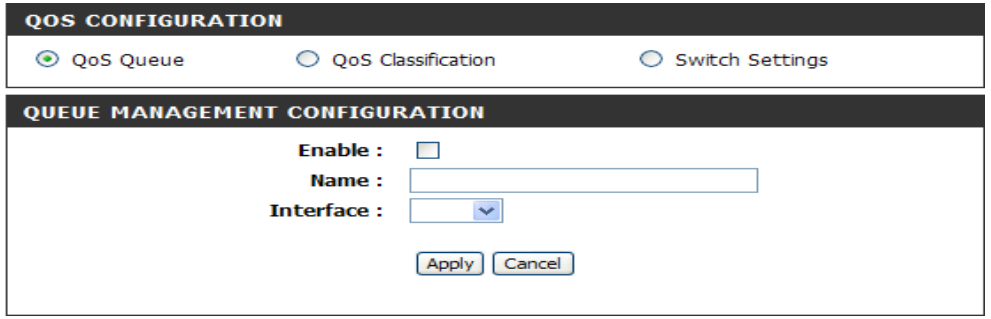
In this section, we can enable QoS and configure it.

Enable QoS: Enable or disable **QoS** function for this Router

Mark Differentiated Service Code Point (DSCP): this option is to select a default DSCP mark to automatically mark incoming traffic without reference to a particular classifier.

Click the **Apply** button to accept the changes made.

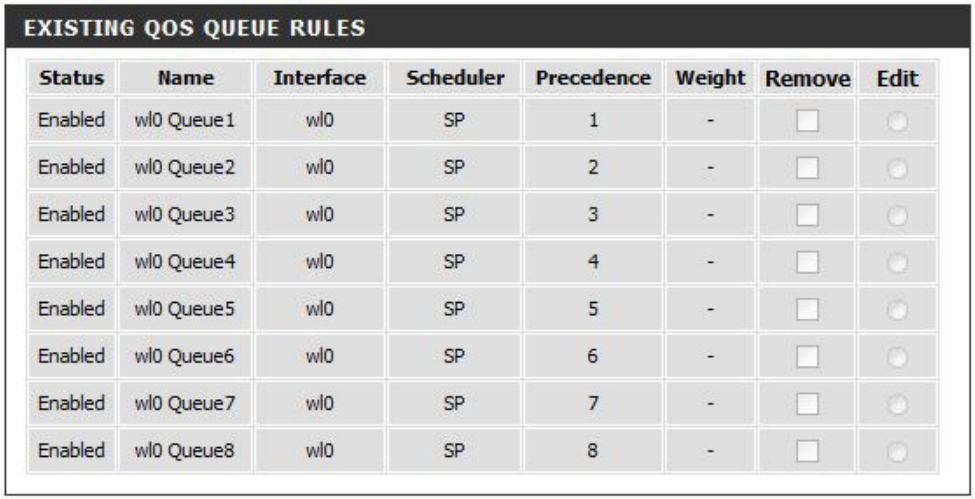
In this section, we can to select this **QoS Queue** and configure it for this router.



Enable: Enable or disable the QoS queue.
Name: Enter a name for this QoS queue.
Interface: Select an interface for this QoS queue.

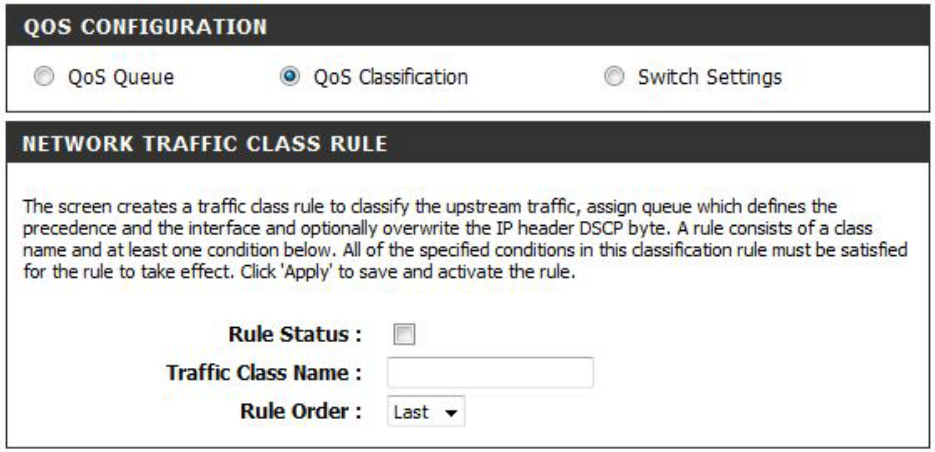
Click the **Apply** button to accept the changes made.
Click the **Cancel** button to cancel the operation.

In this section, we can view the existing QoS queue rules.



Status: It displays the QoS rule status.
Name: It displays the QoS rule name.
Interface: It displays the interface of the incoming packets for this rule.
Scheduler: It displays the queue type of this rule.
Precedence: It displays the precedence of this rule.
Weight: It displays the weight of this rule.
Remove: To remove this rule.
Edit: To edit this rule.

In this section, we can to select the **QoS Classification** option and configure it for this router.

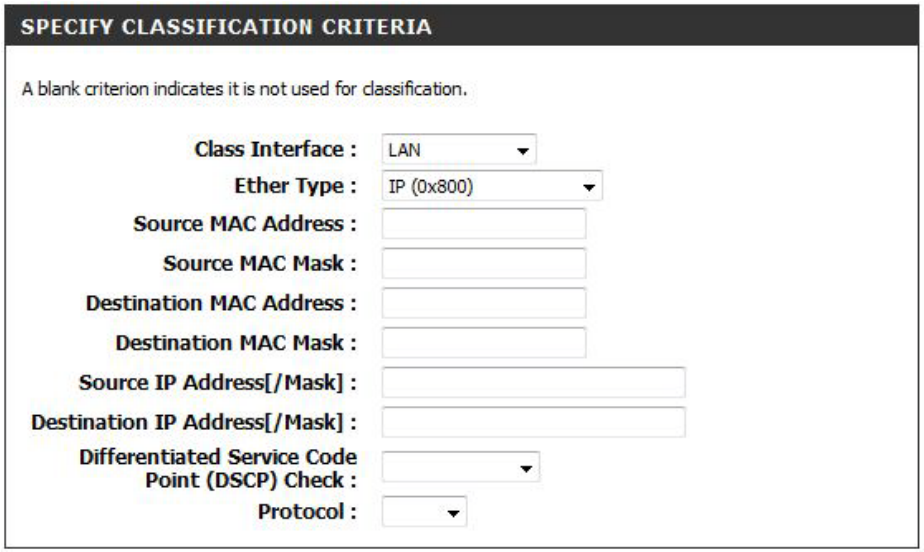


Rule Status: Enable or disable the QoS rule for this router.

Traffic Class Name: Enter a traffic class name for this router.

Rule Order: Select the rule as last rule.

In this section, we can configure classification criteria for this rule.



Class Interface: Specify incoming packets from which interface for this QoS classification.

Ether Type: Specify incoming packets which Ethernet type for this QoS classification, this option includes: **IP (0x800)**, **ARP (0x806)**, **IPv6 (0x86DD)**, **PPPoE_DISC (0x8863)**, **PPPoE_SES (0x8864)**, **8865 (0x8865)** and **8866 (0x8866)**.

Source MAC Address: Specify source MAC address of incoming packets for this QoS classification.

Source MAC Mask: Specify source MAC mask of incoming packets for this QoS classification.

Destination MAC Address: Specify destination MAC address of incoming packets for this QoS classification.

Destination MAC Mask: Specify destination MAC mask of incoming packets for this QoS classification.

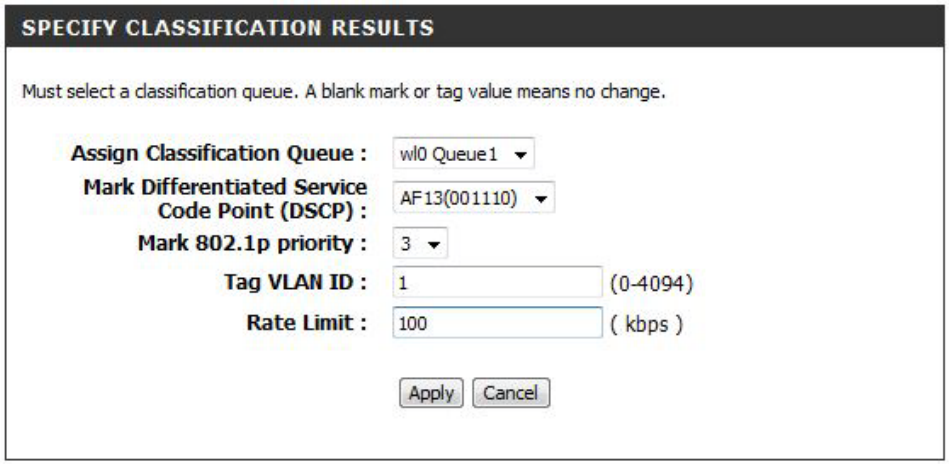
Source IP Address [/Mask]: Specify source IP address and subnet mask of incoming packets for this QoS classification, only select **IP (0x800)** and **IPv6 (0x86DD)**.

Destination IP Address [/Mask]: Specify destination IP address and subnet mask of incoming packets for this QoS classification, only select **IP (0x800)** and **IPv6 (0x86DD),** only select **IP (0x800)** and **IPv6 (0x86DD)**.

Differentiated Service Code Point (DSCP) Check: Select the DSCP value that will be checked by the classifier.

Protocol: Select protocol for this QoS classification, only select **IP (0x800)** and **IPv6 (0x86DD)**, this option can be operated, options includes **TCP**, **UDP**, **ICMP** and **IGMP**.

In this section, we can assign QoS classification to a queue and mark DSCP, 802.1p priority, VLAN ID and specify rate limit for this QoS classification.



Assign Classification Queue: Set the Assign Classification Queue field depending on your type of connection.

Mark Differentiated Service Code Point (DSCP): the DSCP value that will be set by the traffic class rule.

Mark 802.1P Priority: In the scale from 0 -7, 0 is best effort, 6 and 7 are reserved.

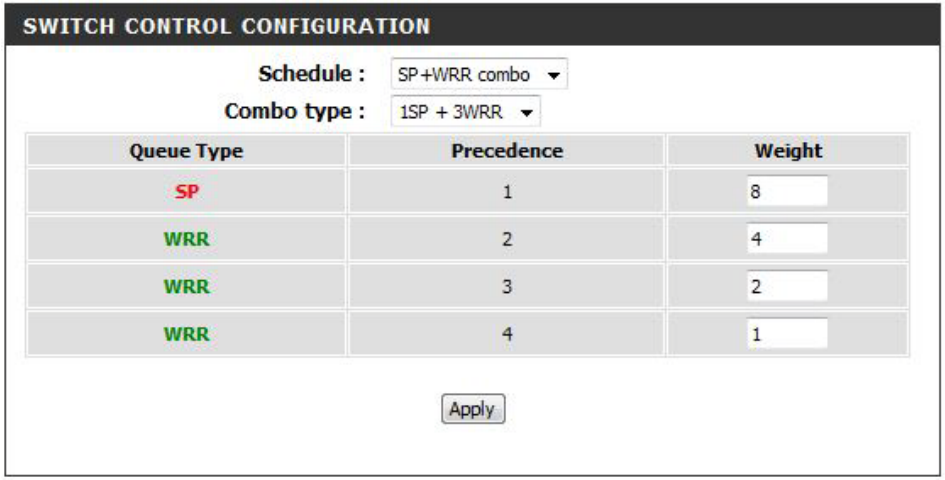
Tag VLAN ID: Set the Tag VLAN ID for the LAN egress traffic.

Rate Limit: Set the Rate Control if you wish to have a limit to the bandwidth, or else leave this field blank.

Click the **Apply** button to accept the changes made.

Click the **Cancel** button to cancel the operation.

In this section, we can enable Switch Settings and configure it.



Schedule: Configure the Queue Type that will be applied on the ether switch.

Combo type: If on you set Queue type to **SP+WRR combo,** this setting will be display.

Click the **Apply** button to accept the changes made.

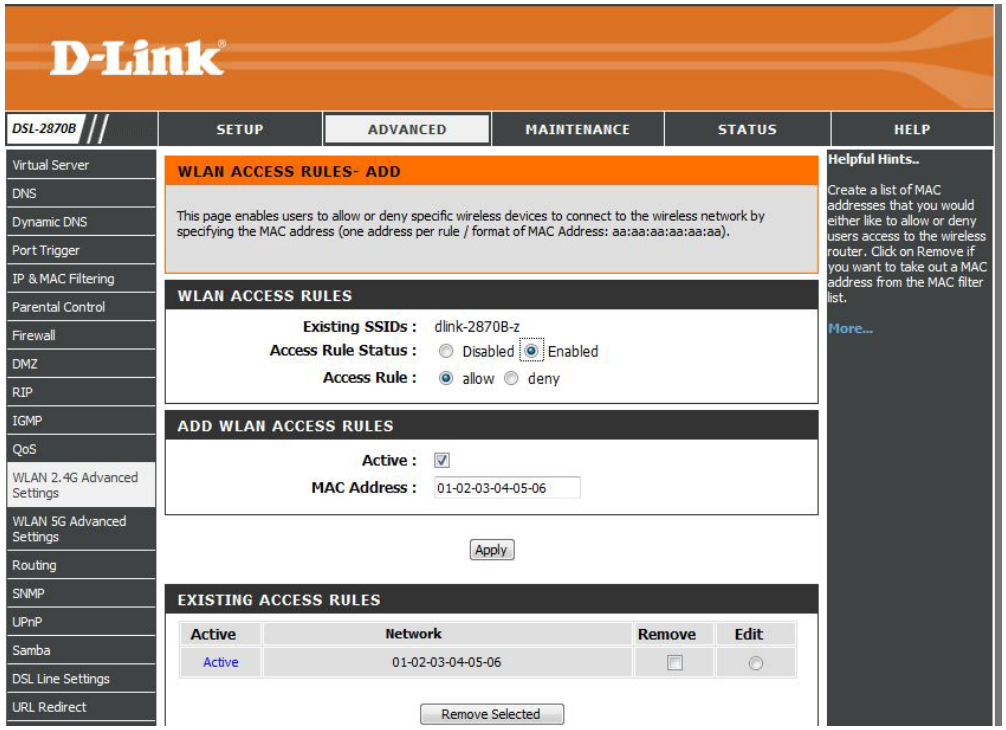
Advanced Wireless 2.4G

To access the **Advanced Wireless 2.4G** page, click on the **Advanced** menu link, at the top, and then click on the **WLAN 2.4G Advanced Settings** menu link, on the left.

On this page, the user can configure advanced services related to the Wireless 2.4Ghz connectivity of this product.

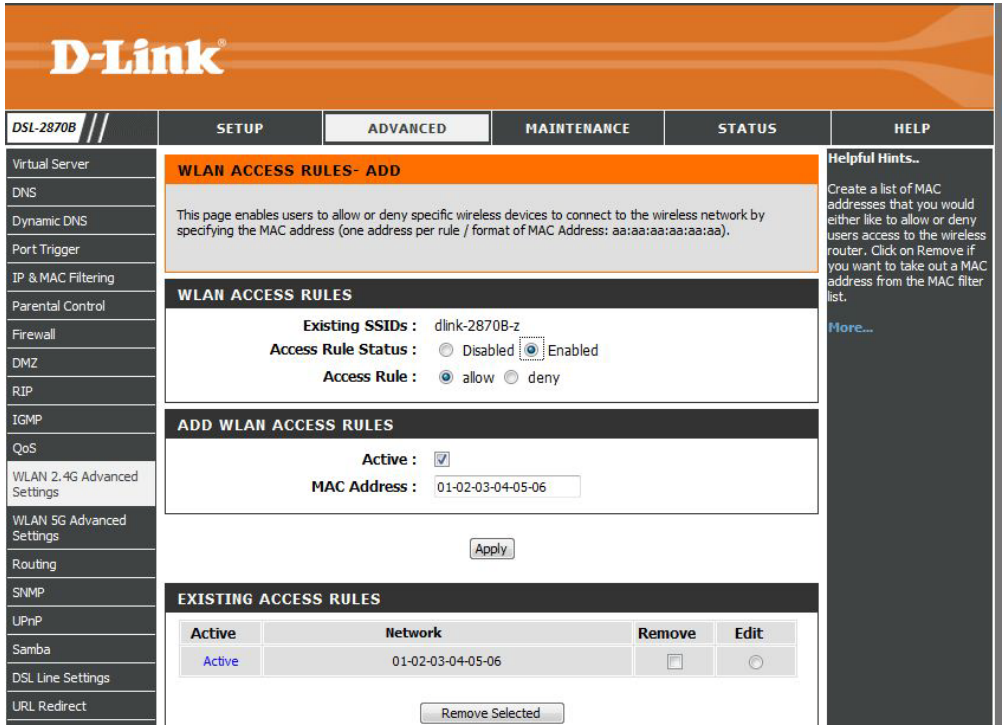
Services available for configuration are the following:

- Access Rules
- Multiple SSIDs
- Performance



Access Rules

Click the **WALN 2.4G Access Rules** on the left to access the **Wireless 2.4G Access Rules Settings** configuration page.



In this section, we can change the global wireless filter policy to what you like to deny or allow special WLAN devices connected to the router.

Existing SSIDs: It displays the existing SSID.

Access Rule Status: Enable or disable the access rule status for the existing SSID.

Access Rule: Specify the access rule as allow or deny.

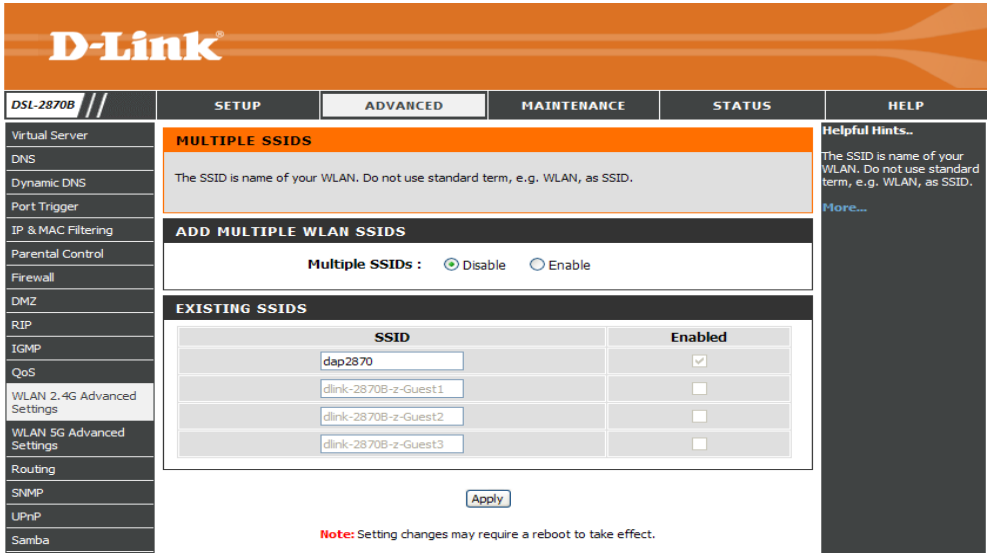
Active: To active the rule or inactive the access rule.

MAC Address: Enter the MAC address to allow access or deny access.

Click the **Apply** button to accept the changes made.

Multiple SSIDs

Click the **Multiple WALN 2.4G SSIDs** on the left to access the **Advanced Wireless Multiple SSIDs** configuration page.



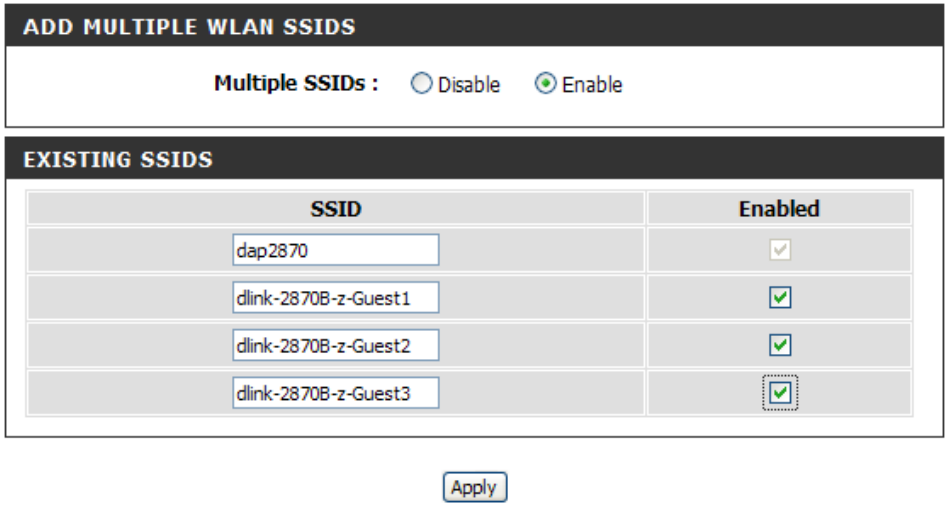
In this section, the Dual band Wireless N750 Modem Router supports Multiple SSIDs so you can operate several WLANs in parallel.

Multiple SSIDs: Enable or disable multiple SSID for this router.

SSID: Enter the SSID name for this router.

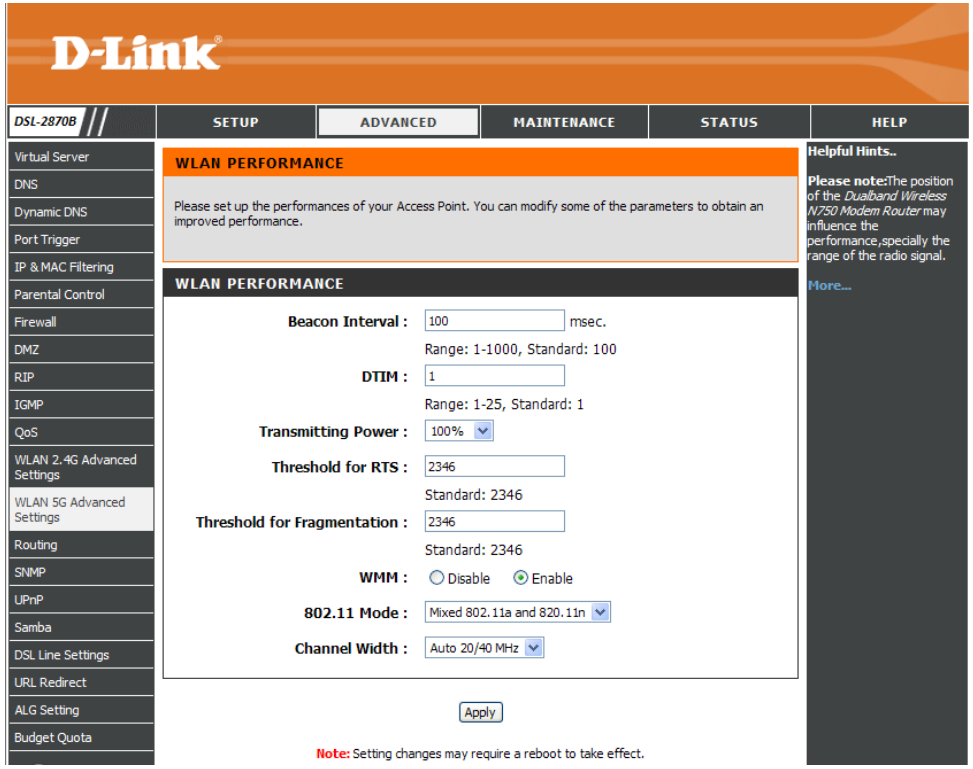
Enable: Enable or disable the SSID for this router.

Click the **Apply** button to accept the changes made.

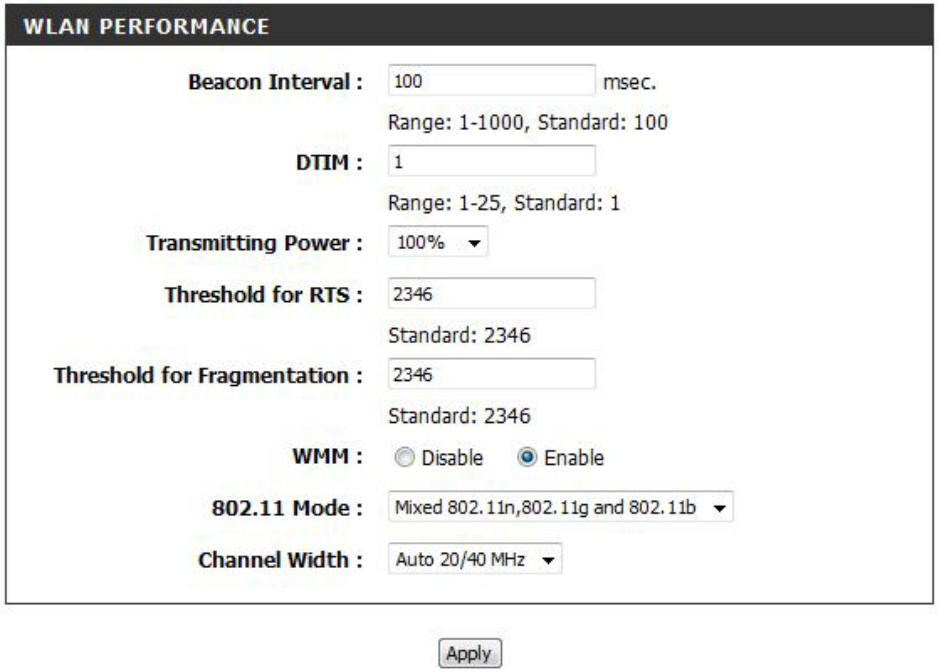


Performance

Click the **WALN 2.4G Performance** on the left to access the **Advanced Wireless Performance** configuration page.



After clicking the **WALN 2.4G Performance** the following page is available.



In this section, we can configure the additional settings for configuring you're wireless network.

Beacon Period: A packet of information that is sent from a connected device to all other devices where it announces its availability and readiness. A beacon interval is a period of time (sent with the beacon) before sending the beacon again. The beacon interval may be adjusted in milliseconds (ms).

DTIM Interval: Sets the Wake-up interval for clients in power-saving mode.

Transmitting Power: This is the percentage of power that should be transmitted from your wireless router. Select from 12.5%, 25%, 50% and 100%.

Threshold for RTS: Determines the packet size of a transmission through the use of the router to help control traffic flow. Generally, there is no need to change this value. If the flow of traffic becomes, change the value within the range between 1 and 2346. Default value is 2346.

Threshold for Fragmentation: Used to fragment packets, which help improve performance in the presence of radio frequency (RF) interference. Generally there is no need to change this value, If the flow of traffic becones block, except for a huge packet error rate. Change the value within the range between 256 and 2346. Default value is 2346.

WMM: Wi-Fi Multimedia (WMM), is a Wi-Fi Alliance interoperability certification, based on the IEEE 802.11e standard. It provides basic Quality of service (QoS) features to IEEE 802.11 networks.

802.11 Mode: Sets the current 802.11 mode. For WLAN 2.4G, you can select 802.11b only, 802.11g only, 802.11n only, or the mixed mode. For WLAN 5G, you can select 802.11a only, 802.11n only or the mixed mode.

Channel Width: Specify the channel width, it includes: 20MHz, 40MHz and Auto 20/40 MHz.

Click the **Apply** button to accept the changes made.

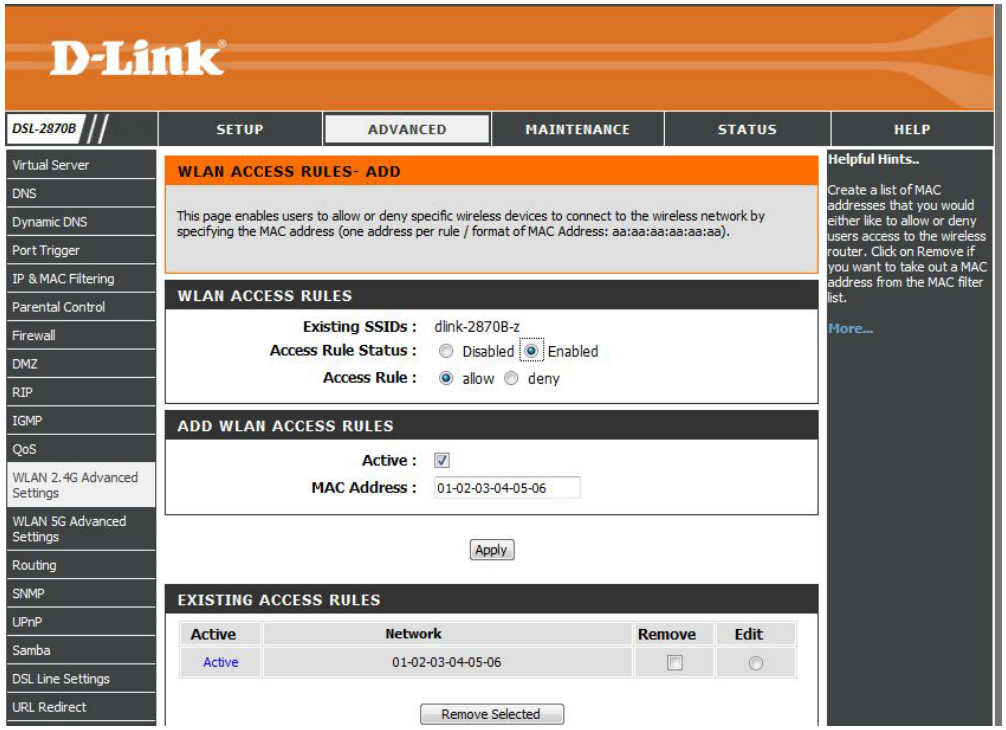
Advanced Wireless 5G

To access the **Advanced Wireless 5G** page, click on the **Advanced** menu link, at the top, and then click on the **WLAN 5G Advanced Settings** menu link, on the left.

On this page, the user can configure advanced services related to the Wireless 2.4Ghz connectivity of this product.

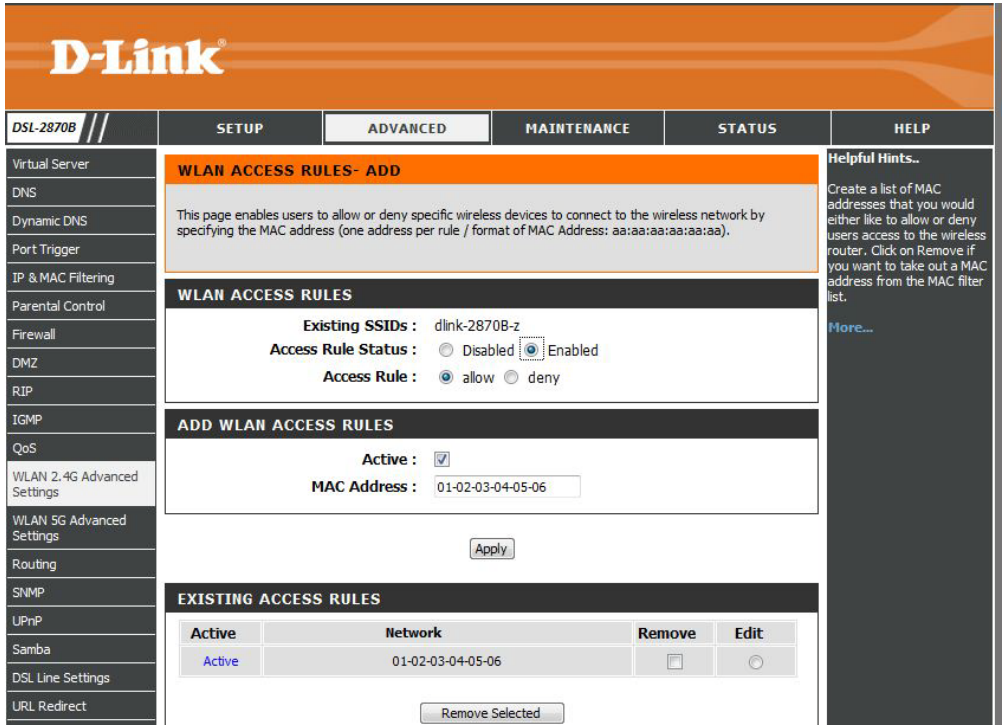
Services available for configuration are the following:

- Access Rules
- Multiple SSIDs
- Performance



Access Rules

Click the **WALN 5G Access Rules** on the left to access the **Wireless 5G Access Rules Settings** configuration page.



In this section, we can change the global wireless filter policy to what you like to deny or allow special WLAN devices connected to the router.

Existing SSIDs: It displays the existing SSID.

Access Rule Status: Enable or disable the access rule status for the existing SSID.

Access Rule: Specify the access rule as allow or deny.

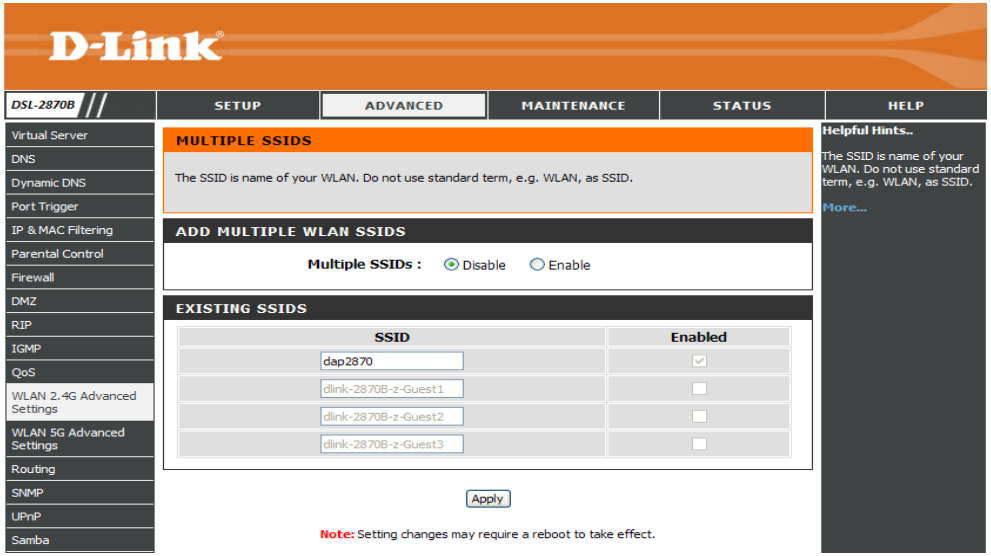
Active: To active the rule or inactive the access rule.

MAC Address: Enter the MAC address to allow access or deny access.

Click the **Apply** button to accept the changes made.

Multiple SSIDs

Click the **Multiple WALN 5G SSIDs** on the left to access the **Advanced Wireless Multiple SSIDs** configuration page.



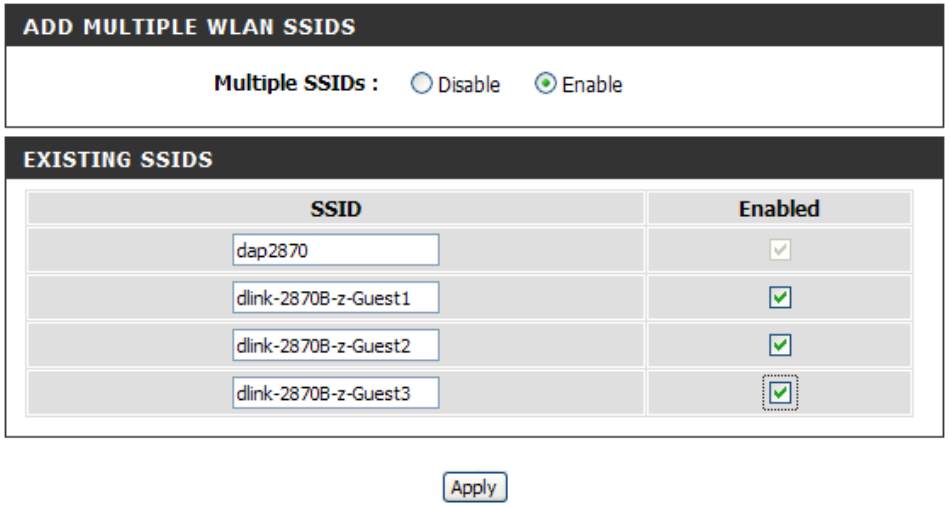
In this section, the Dual band Wireless N750 Modem Router supports Multiple SSIDs so you can operate several WLANs in parallel.

Multiple SSIDs: Enable or disable multiple SSID for this router.

SSID: Enter the SSID name for this router.

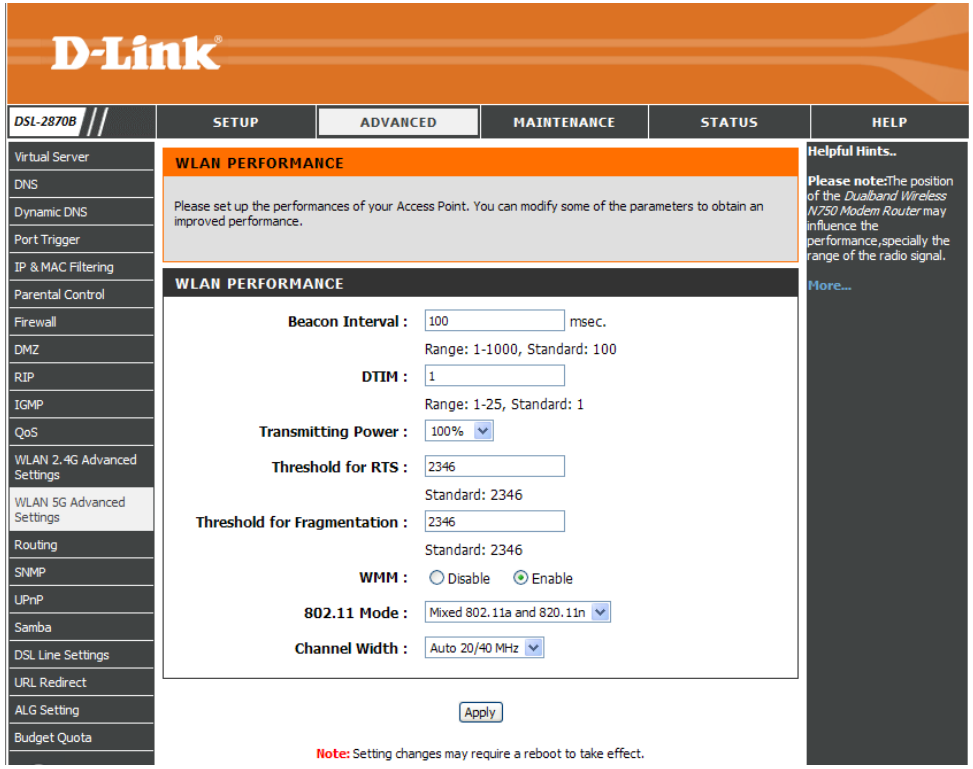
Enable: Enable or disable the SSID for this router.

Click the **Apply** button to accept the changes made.

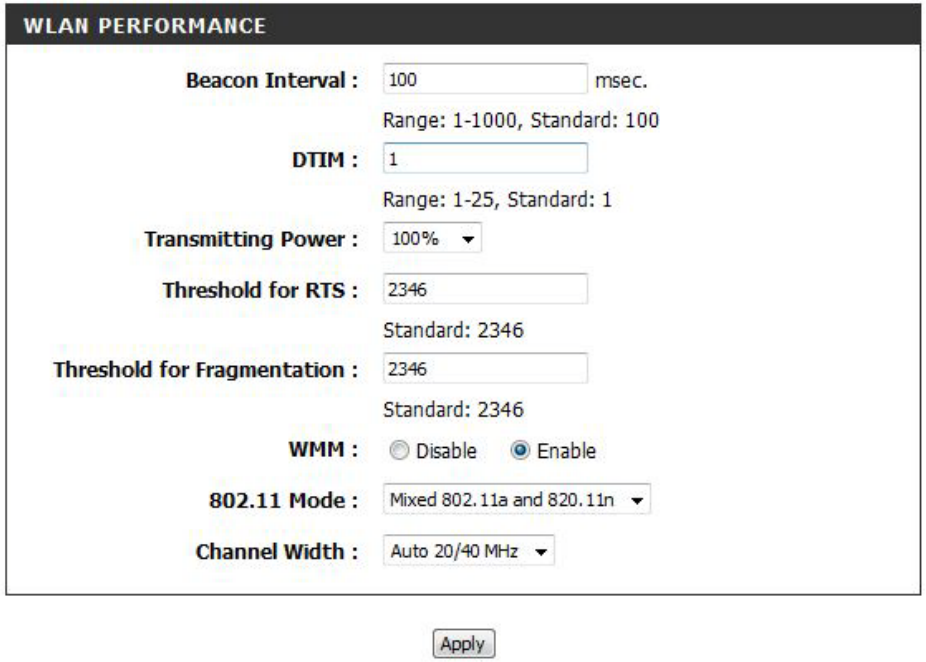


Performance

Click the **WALN 5G Performance** on the left to access the **Advanced Wireless Performance** configuration page.



After clicking the **WALN 5G Performance** the following page is available.



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Channel Width: Specify the channel width, it includes: 20MHz, 40MHz and Auto 20/40 MHz.

Click the **Apply** button to accept the changes made.

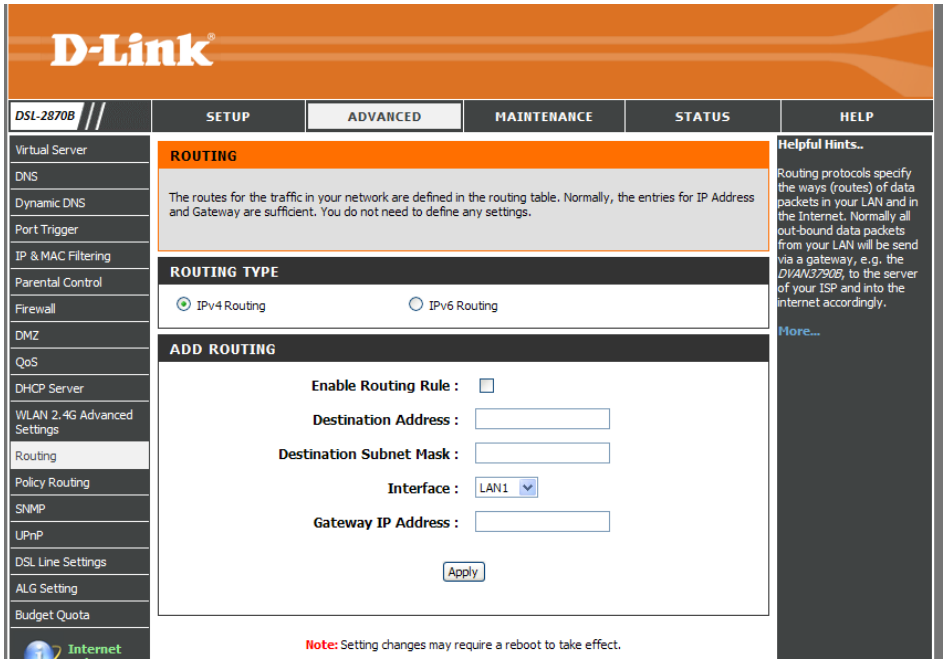
Routing

To access the **Routing** page, click on the **Advanced** menu link, at the top, and then click on the **Routing** menu link, on the left.

On this page, the user can configure services related to the Routing feature of this product.

Services available for configuration are the following:

- Add IPv4 Routing
- Add IPv6 Routing



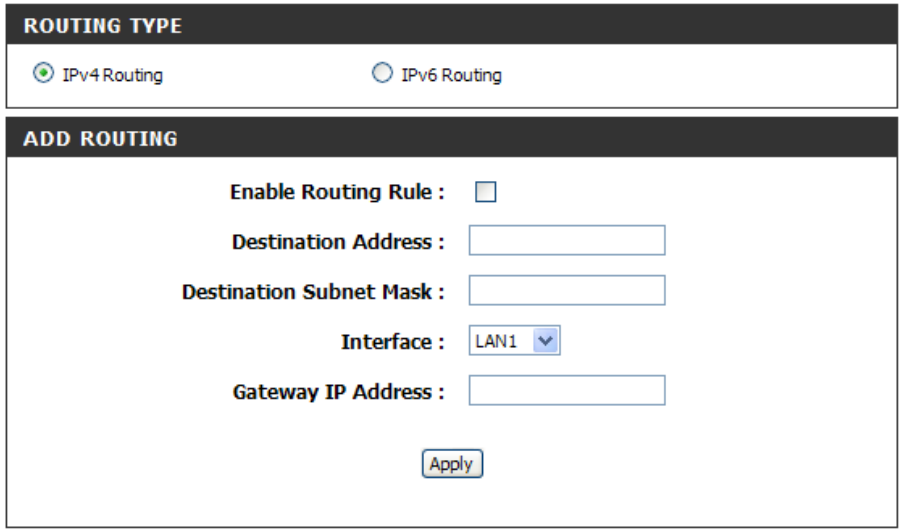
Add IPv4 Routing

Click the IPv4 Routing button to access the IPv4 Routing configuration page.

After clicking the **IPv4 Routing** button the following page is available.

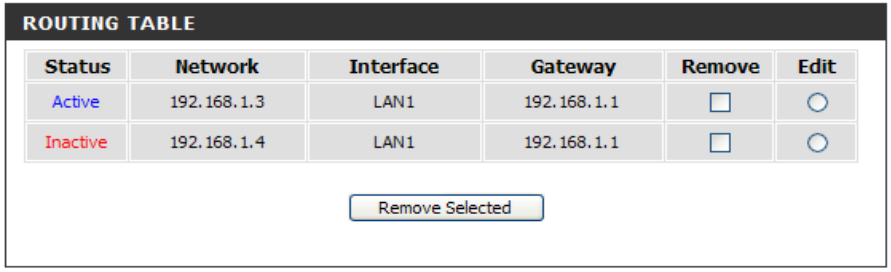
Enable Routing Rule: Enable or disable the routing rule for this router.
Destination Address: Enter a destination address for the routing rule.
Destination Subnet Mask: Enter a subnet mask address for the routing rule.
Interface: Specify the interface for this routing rule.
Gateway IP address: Specify gateway IP address for this routing rule.

Click **Apply** button to commit the configuration.



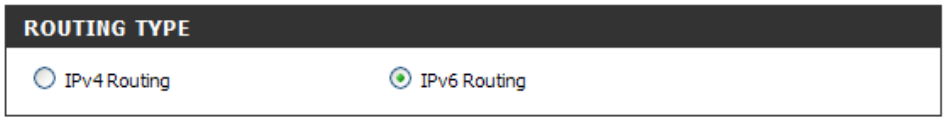
In this section, a list of IPv4 static route entries will be displayed.

Click the **Remove Selected** button to remove the selected entry.



Add IPv6 Routing

Click the IPv6 Routing button to access the IPv6 Routing configuration page.



After clicking the **IPv6 Routing** button the following page is available.

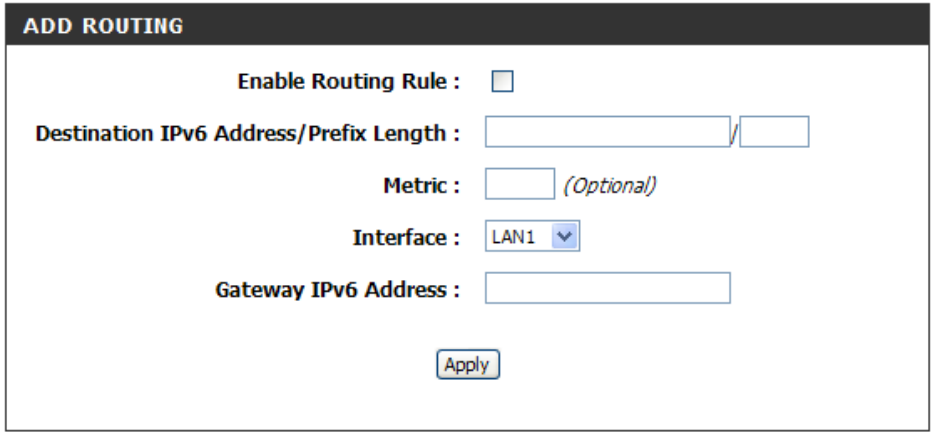
Enable Routing Rule: Enable/disable IPv6 routing

Destination IPv6 Address/Prefix Length: Enter the destination IP address and prefix length for this route entry here.

Metric: Enter the metric value, used by this route entry, here.

Interface: Select the interface this will be associated with this rule here.

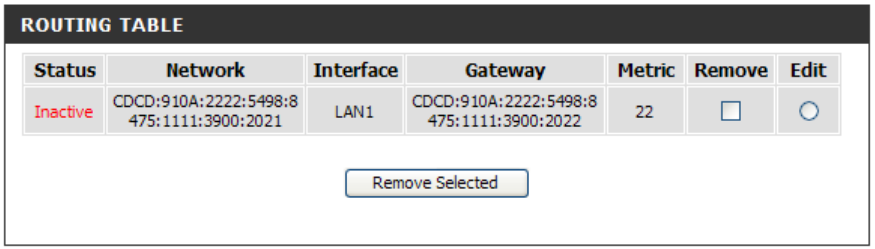
Gateway IPv6 Address: Enter the gateway IP address for this route entry here.



Click the **Apply** button to accept the changes made

In this section, a list of IPv6 static route entries will be displayed.

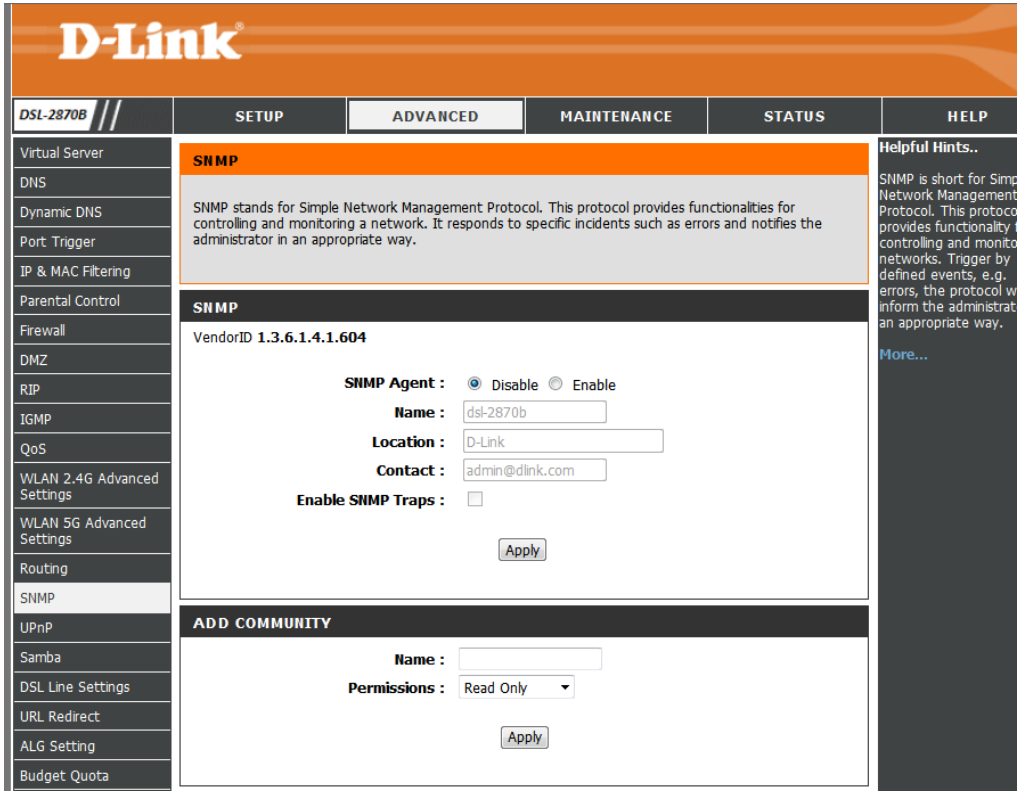
Click the **Remove Selected** button to remove the selected entries.



SNMP

To access the **SNMP** page, click on the **Advanced** menu link, at the top, and then click on the **SNMP** menu link, on the left.

On this page, the user can configure services related to the SNMP feature of this product.



In this section, we can configure the SNMP server parameters for this router.

SNMP Agent: Select this option to enable or disable the SNMP feature.

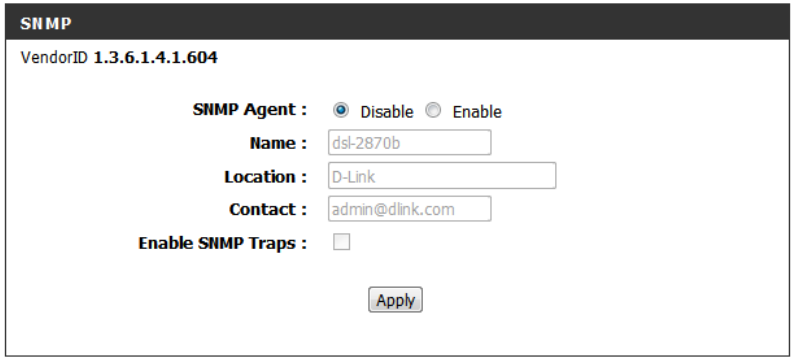
Name: Enter the SNMP name here.

Location: Enter the SNMP location here.

Contact: Enter the SNMP location here.

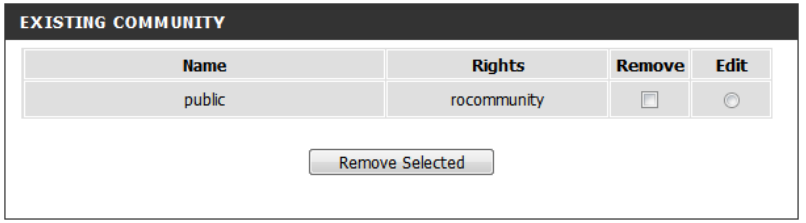
Enable SNMP Traps: Select this option to enable or disable the SNMP traps.

Click the **Apply** button to accept the changes made.



In this section, a list of **SNMP** community will be displayed.

Click the **Remove Selected** button to remove the selected entry.



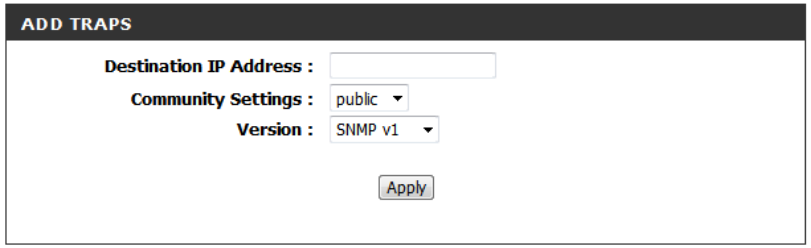
In this section, we can add the SNMP traps parameters for this router.

Destination IP Address: Enter the SNMP traps IP address.

Community Settings: Select this option to choose community.

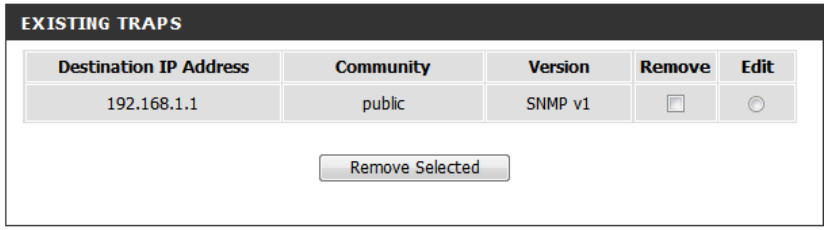
Version: Select this option to choose SNMP version.

Click the **Apply** button to accept the changes made.



In this section, a list of SNMP traps will be displayed.

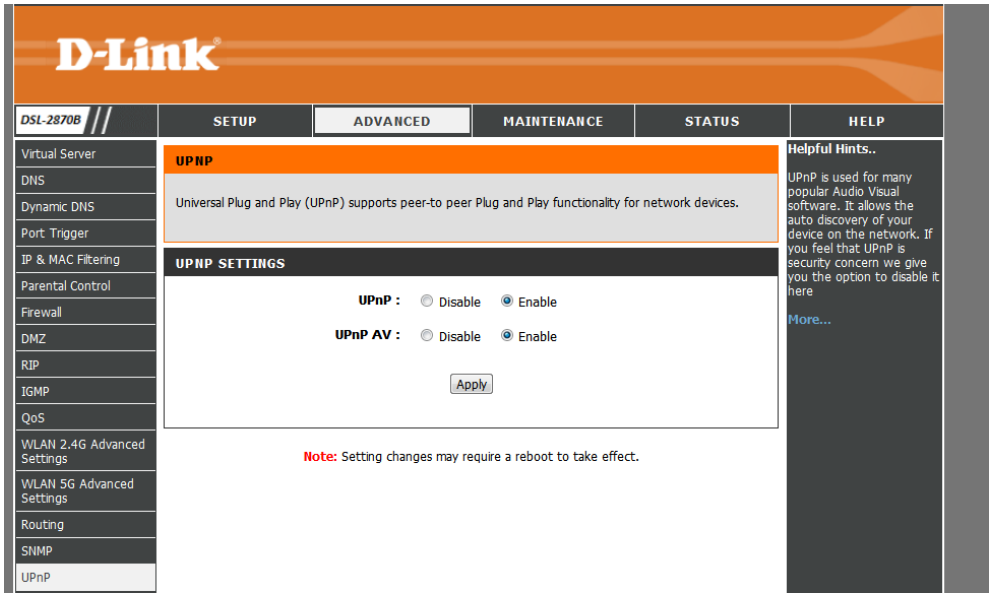
Click the **Remove Selected** button to remove the selected entry.



UPnP

To access the **UPnP** page, click on the **Advanced** menu link, at the top, and then click on the **UPnP** menu link, on the left.

On this page the user can configure services related to the **UPnP** feature of this product.

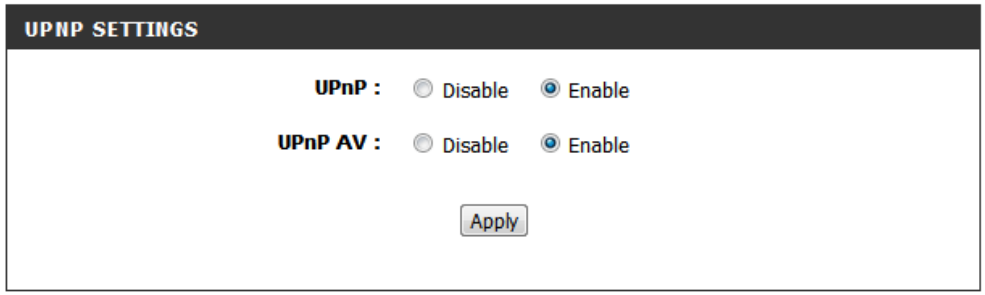


In this section, we can configure the UPnP parameters for this router.

UPnP: Select this option to enable or disable the UPnP feature.

UPnP AV: Select this option to enable or disable the UPnP AV feature.

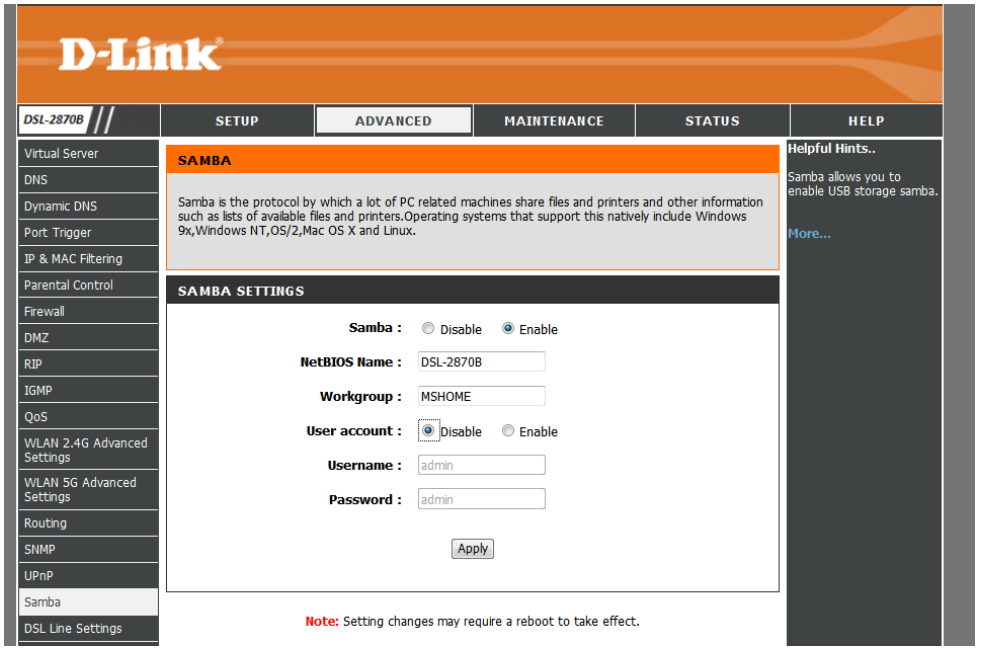
Click the **Apply** button to accept the changes made.



Samba

To access the **Samba** page, click on the **Advanced** menu link, at the top, and then click on the **Samba** menu link, on the left.

On this page, the user can configure services related to the Samba connectivity of this product.



In this section, we can configure the Samba server parameters for this router.

Samba: Select this option to enable the Samba server feature.

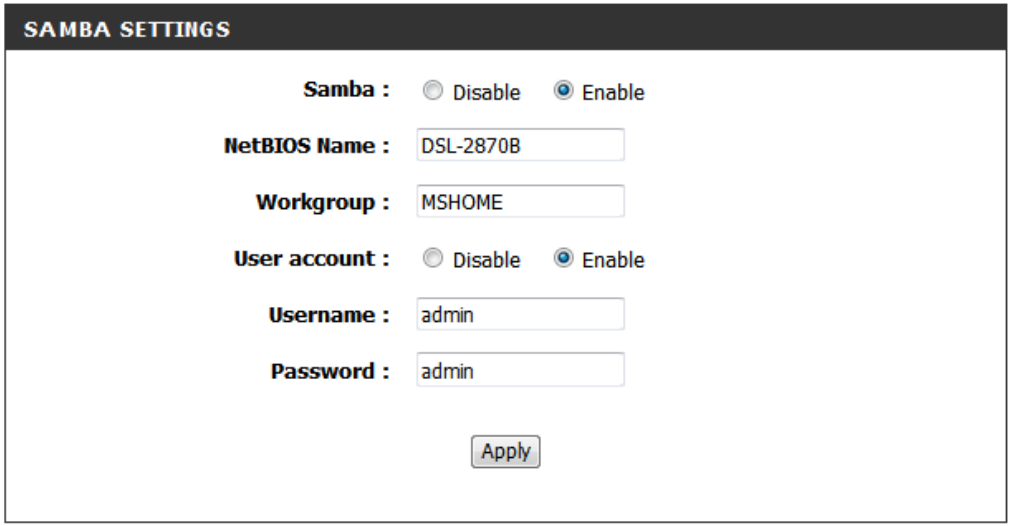
NetBios Name: Enter the NetBIOS name used here.

Workgroup: Enter the workgounp name used here.

User account: Select this option to on/off the Samba account.

Username: Enter the samba account username used here.

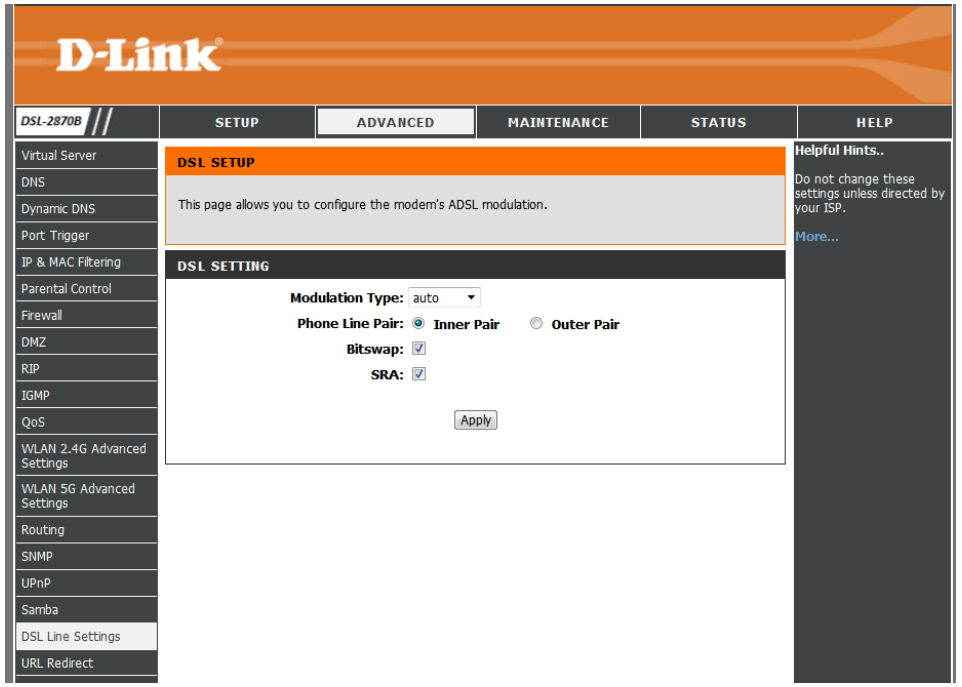
Click the **Apply** button to accept the changes made.



DSL Line Settings

To access the **DSL Line Settings** page, click on the **Advanced** menu link, at the top, and then click on the **DSL Line Settings** menu link, on the left.

On this page, we can configure **DSL Line Settings** Tunnel Mode connections.



In this section, we can configure the Samba server parameters for this router.

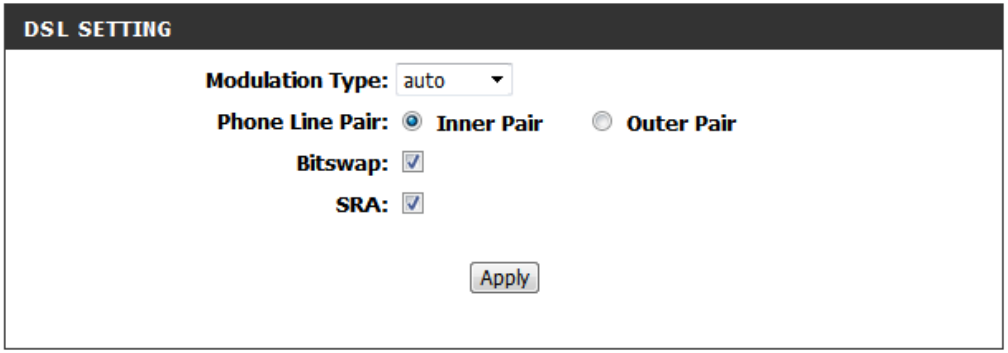
Modulation Type: Select this option to choose modulation type.

Phone Line Pair: Select this option to choose phone line pair.

Bitswap: Select this option to enable the Bitswap feature.

SRA: Select this option to enable the SRA feature.

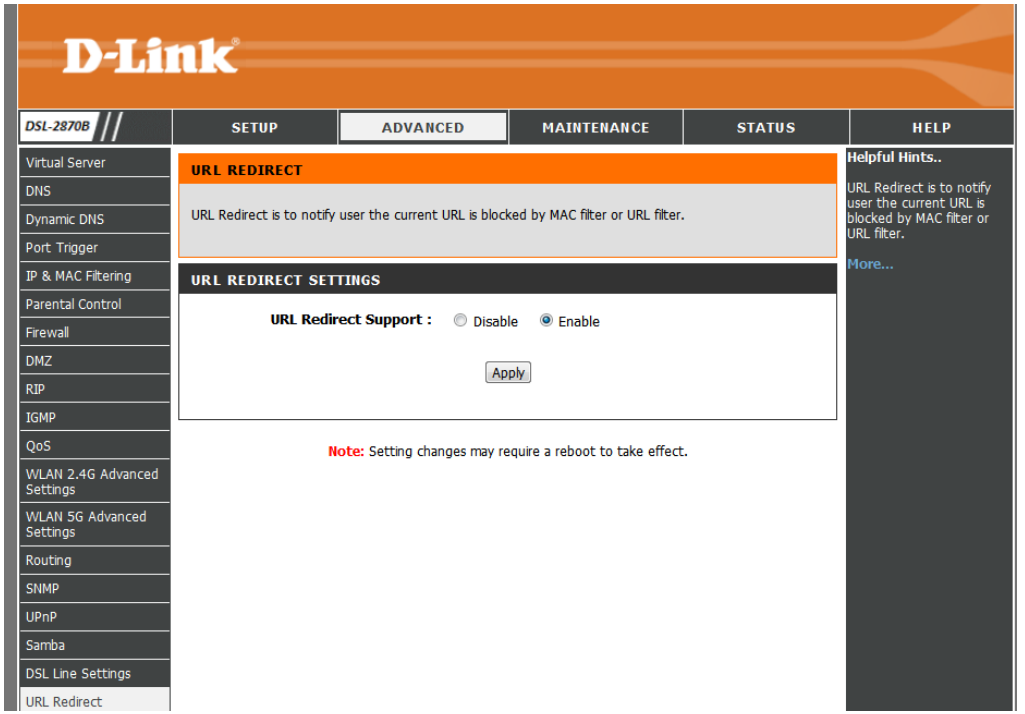
Click the **Apply** button to accept the changes made.



URL Redirect

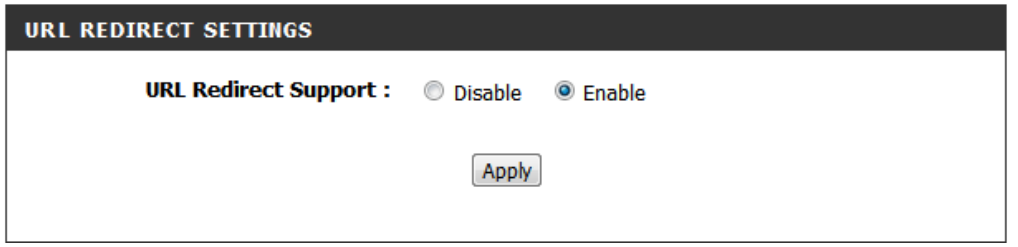
To access the **URL Redirect** page, click on the **Advanced** menu link, at the top, and then click on the **URL Redirect** menu link, on the left.

On this page, we can configure URL Redirect Tunnel Mode connections.



In this section, we can configure the URL Redirect parameters for this router.

URL Redirect Support: Select this option to enable or disable URL Redirect Support feature..

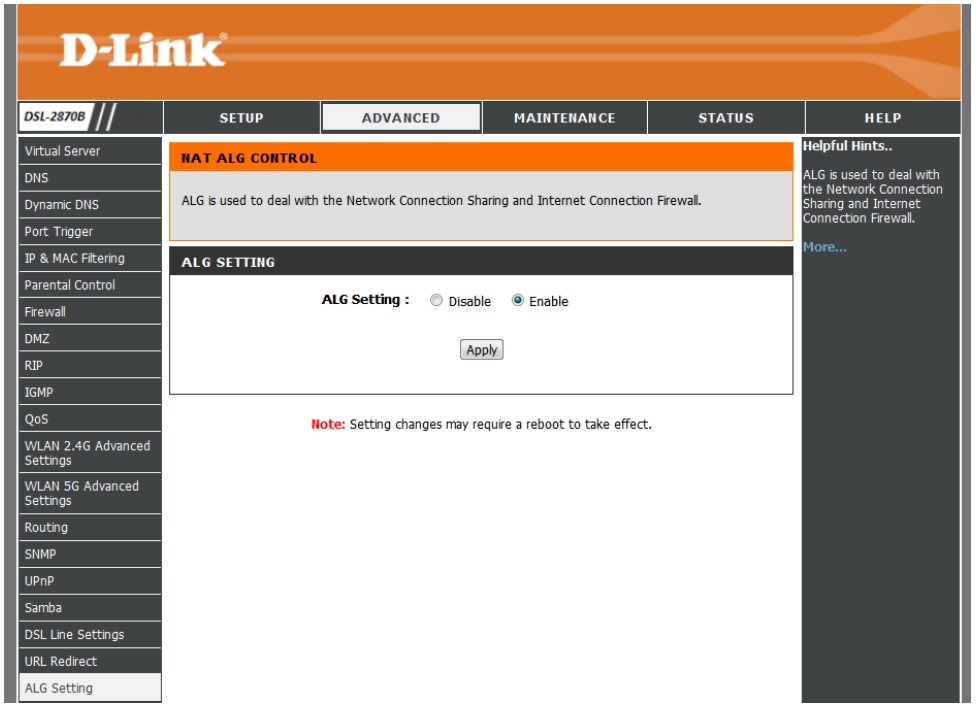


Click the **Apply** button to accept the changes made.

ALG Setting

To access the **ALG Setting** page, click on the **Advanced** menu link, at the top, and then click on the **ALG Setting** menu link, on the left.

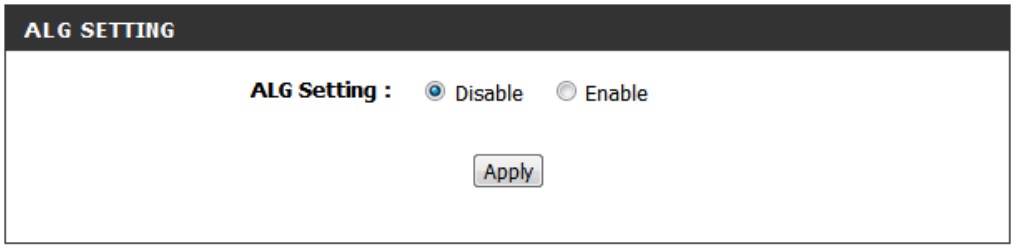
On this page, we can configure ALG Setting connectivity of this product.



In this section, we can configure the ALG parameters for this router.

ALG Setting: Select this option to enable or disable ALG feature..

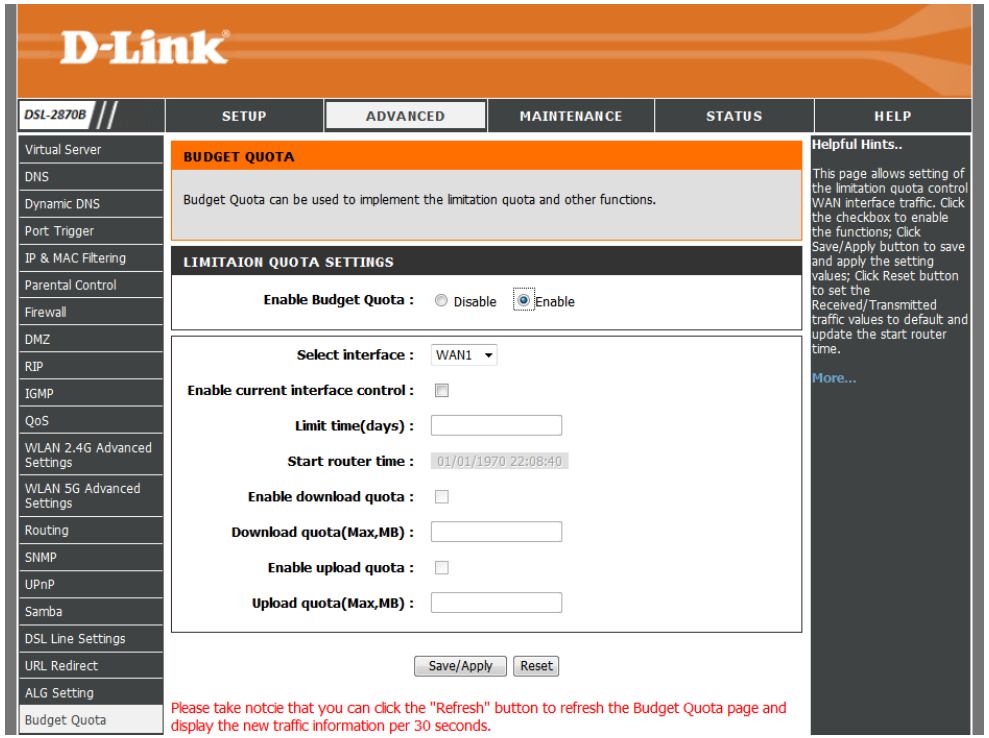
Click the **Apply** button to accept the changes made.



Budget Quota

To access the **Budget Quota** page, click on the **Advanced** menu link, at the top, and then click on the **Budget Quota** menu link, on the left.

On this page, we can configure **Budget Quota** Setting connectivity of this product.



In this section, we can configure the **Budget Quota** parameters for this router.

ALG Setting: Select this option to enable or disable ALG feature..

Select interface: Select this option to choose the interface you want to control.

Enable current interface control: Select this option to enable or disable current interface control.

Limit time (days): Enter the limit days here.

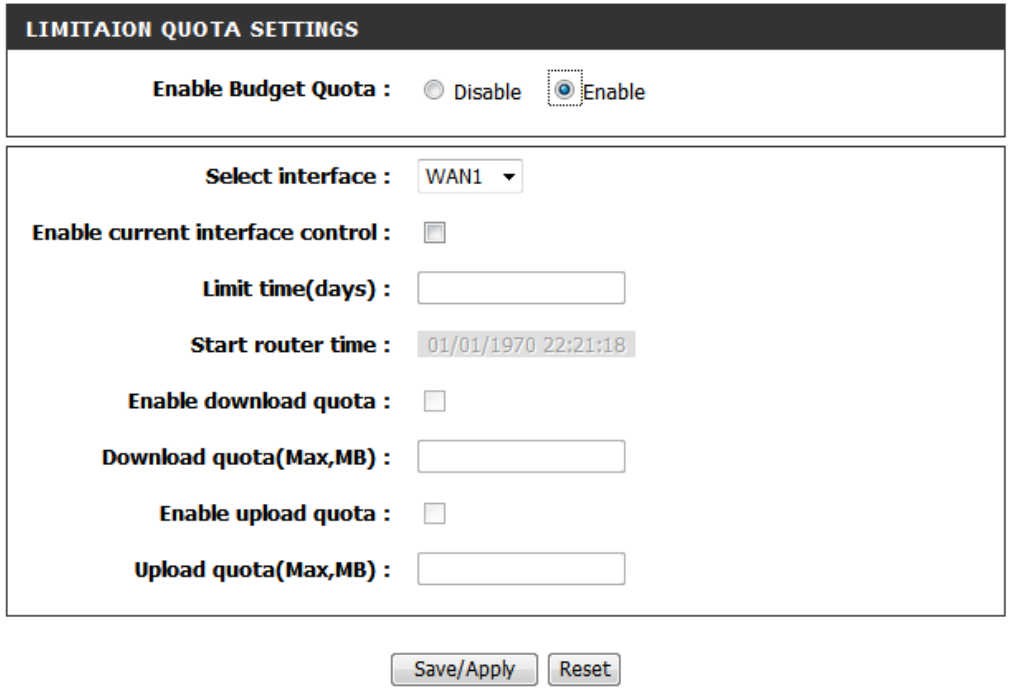
Start router time: It is system time and can't be set here.

Enable download quota: Select this option to enable or disable download quota control.

Download quota (Max, MB): Enter the limit download quota here.

Enable upload quota: Select this option to enable or disable upload quota control.

Upload quota (Max,MB): Enter the limit upload quota here.



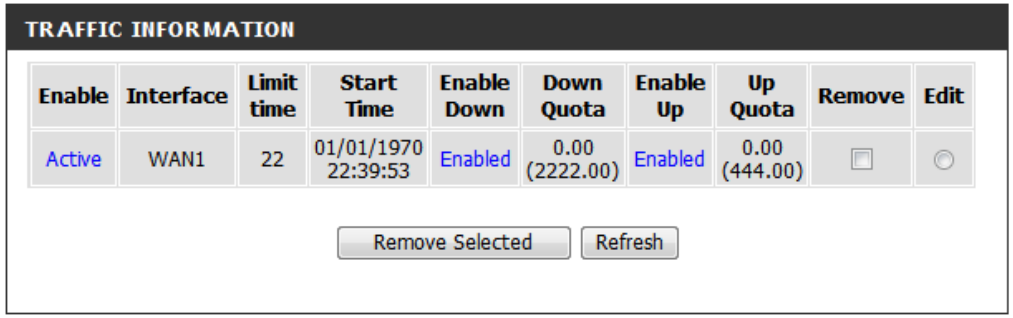
Click the **Save**/**Apply** button to accept the changes made.

Click the **Reset** button to clear and revive the limit time, download quota and upload quota.

In this section, a list of budget quota will be displayed.

Select the **Remove Selected** option and click the **Remove Selected** button to remove the specific entry.

Click the **Refresh** button to refresh the budget quota data.

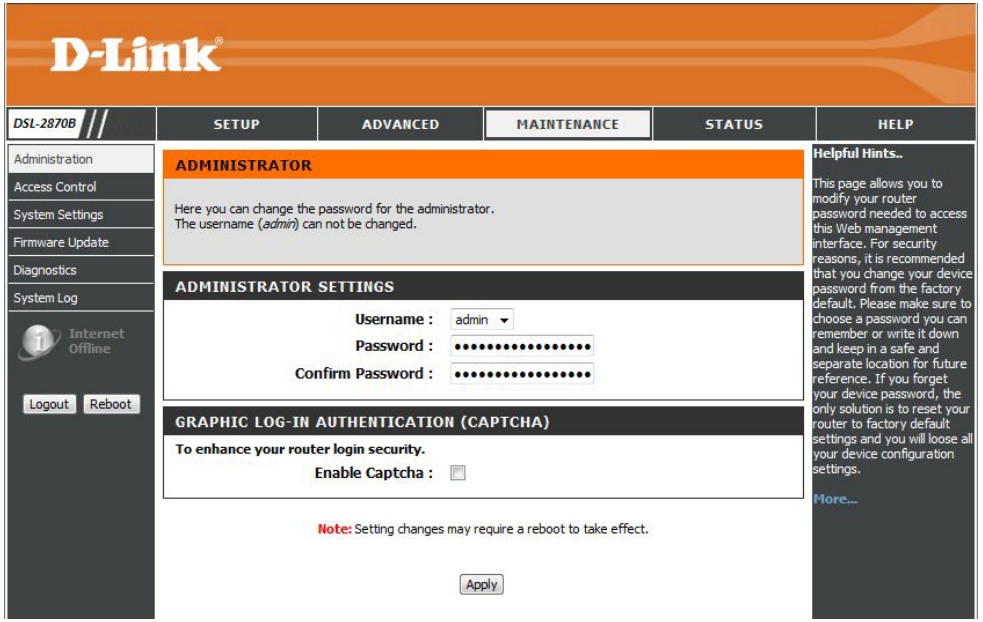


Maintenance Category

The **Maintenance** category is designed to assist the user with maintenance configurations for this product.

The following pages can be found in the **Maintenance** category:

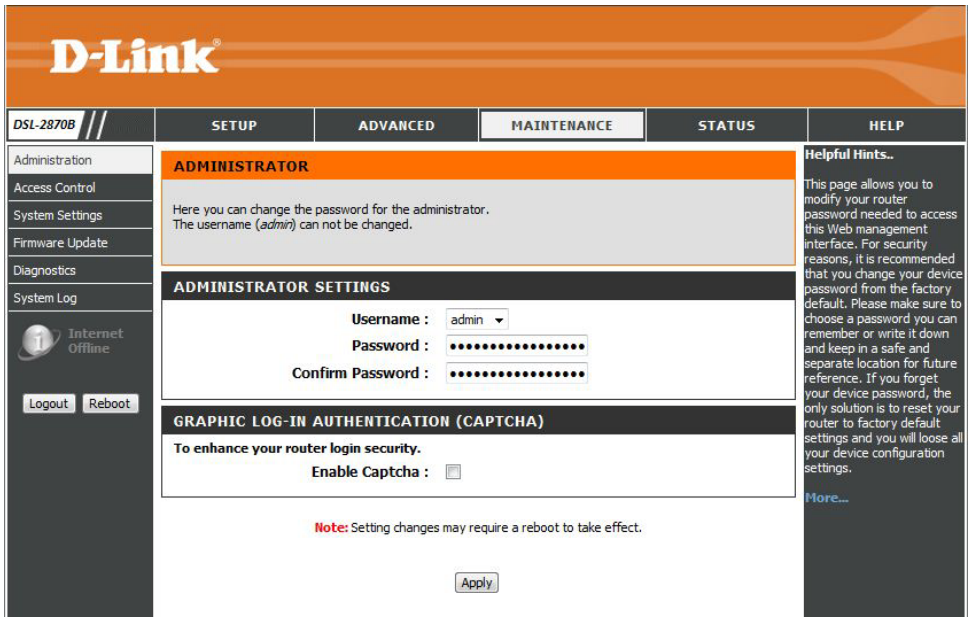
- Administrator– On this page the user can configure the login username, password and captcha for the web user interface of this product
- Access Control – On this page the user can configure access control for WAN and LAN interface of this product.
- System Settings– On this page the user can perform maintenance concerning the System. Services available for configuration are **Backup and Restore Settings**, **Restore to Factory Default Settings**, and a **Save and System Reboot**.
- Firmware Update – On this page, the user can update the running firmware for this product.
- Diagnostics –On this page, the user can run a diagnostics test that includes testing the Ethernet, Wireless, ATM OAM F4/F5 and Internet Connectivity of this product.
- System Log – On this page, the user can **View** and **Configure** the **System Log** used by this product.



Administrator

To access the **Administrator** page, click on the **Maintenance** menu link, at the top, and then click on the **Administrator** menu link, on the left.

On this page the user can configure the login username, password and graphic login authentication for the web user interface of this product



In this section, we can configure the access control account information.

Username: Specify the username for this router here.

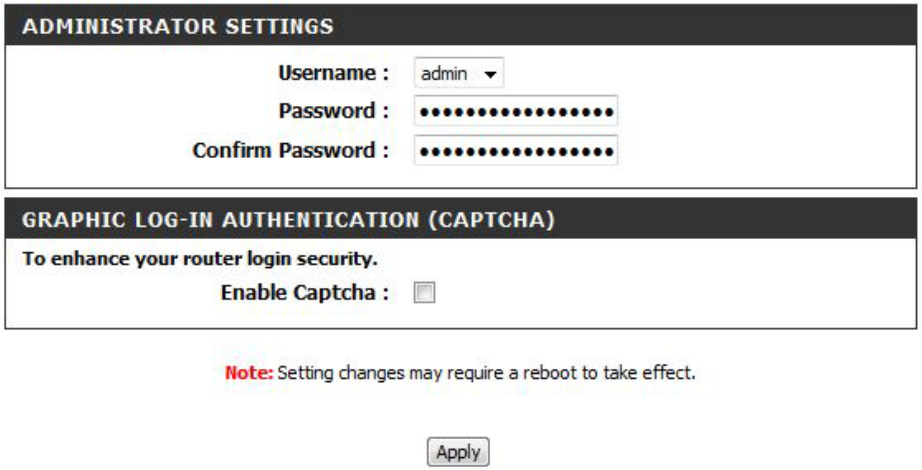
Old Password: Enter the old login password for this router here.

New Password: Enter the new login password for this router here.

Confirm Password: Enter the new login password for this router here again.

Enable Captcha: Enable or disable the graphic login authentication for this router here.

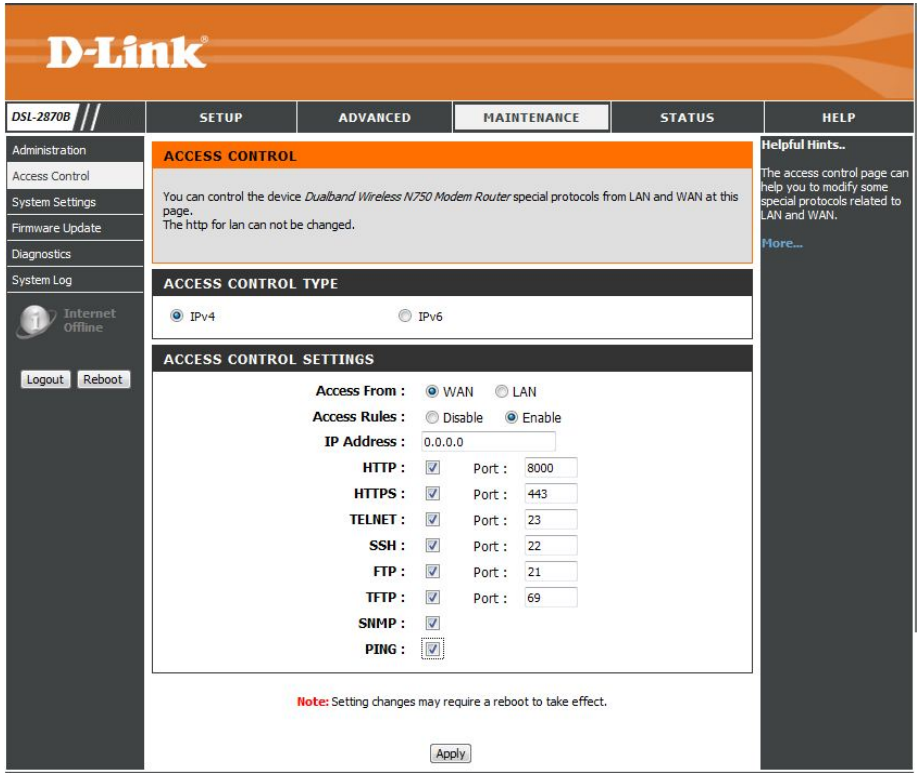
Click the **Apply** button to accept the changes made



Access Control

To access the **Access Control** page, click on the **Maintenance** menu link, at the top, and then click on the **Access Control** menu link, on the left.

On this page the user can configure access control for WAN and LAN interface of this product.



In this section, we can configure the access control account information.

Access Control Type: Specify the access control type is IPv4 or IPv6 for this router here.

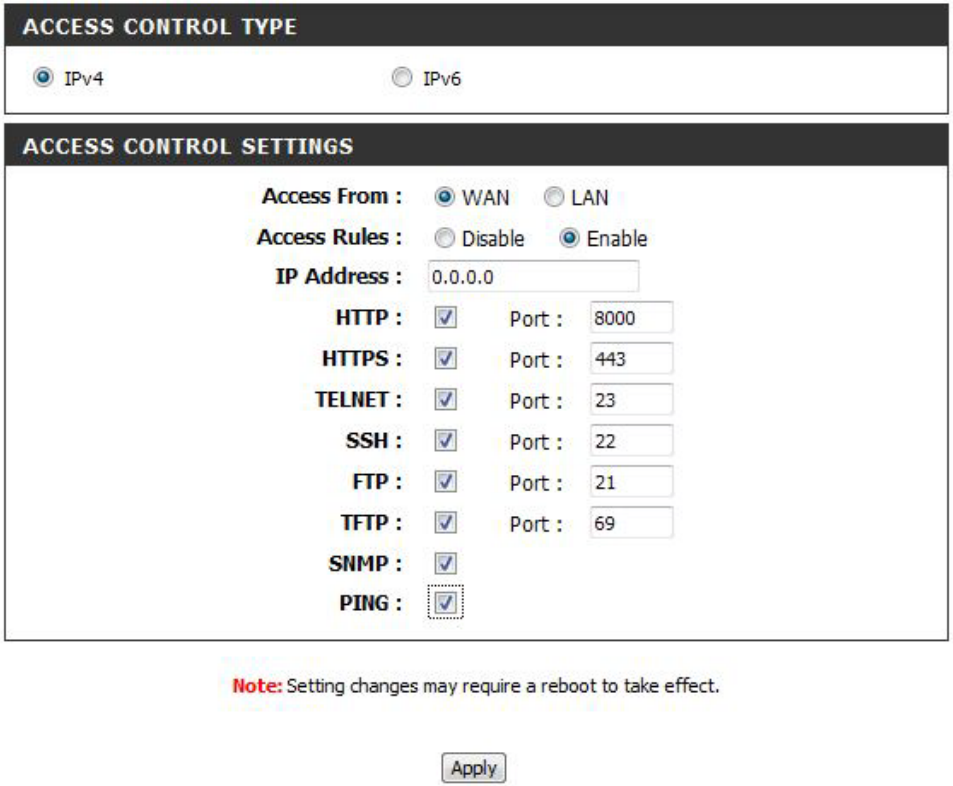
Access From: Specify the access interface for this router here.

Access Rules: Enable or disable the access rules for this router here.

IP Address: Enter the IP address for this router here, it specify which IP address can access the router.

Access Control Services: Specify the access services for this router here, it includes services: **HTTP**, **HTTPS**, **TELNET**, **SSH**, **FTP**, **TFTP**, **SNMP** and **PING**.

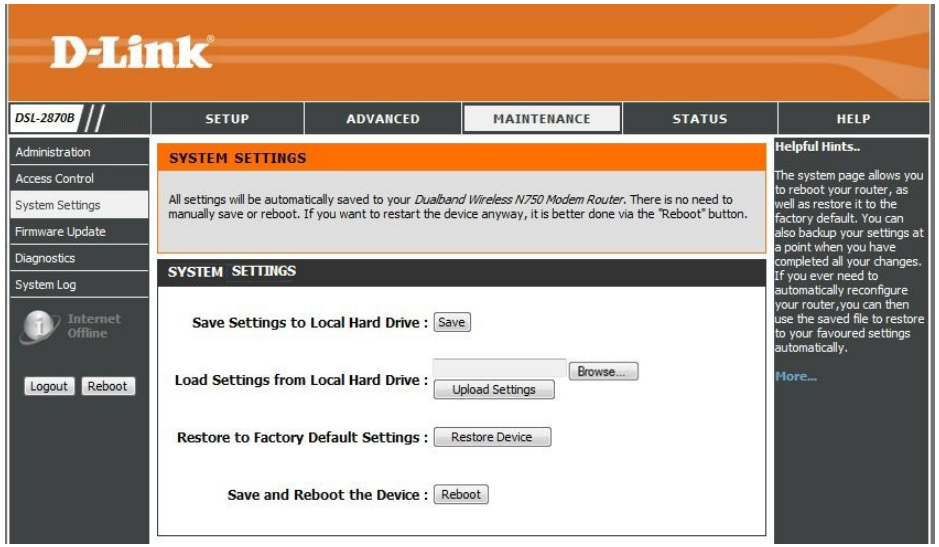
Click the **Apply** button to accept the changes made.



System Settings

To access the **Device Info** page, click on the **Status** menu link, at the top, and then click on the **Device Info** menu link, on the left.

On this page, the user can view information regarding the System, WAN Connectivity, and LAN Connectivity.



In this section we can initiate the configuration backup, restore, restore to factory default setting, save, and reboot the device feature.

Backup Settings: Once you have configured the router to your satisfaction, it is a good idea to back up the configuration file to your computer. To save the current configuration settings to your computer, click the **Save** button of **Save Settings to Local Hard Driver**. You will be prompted to select a location on your computer to put the file. The file type is *bin* and may be named anything you wish.

Restore Settings: To load a previously saved configuration file, click the **Browse** button of **Load Settings from Local Hard Driver** and locate the file on your computer. Click the **Upload Settings** button to load the settings from your local hard drive. Confirm that you want to load the file when prompted. The router will reboot and begin operating with the configuration settings that have just been loaded

Restore to Factory Default Settings: in this section, we can perform a factory reset

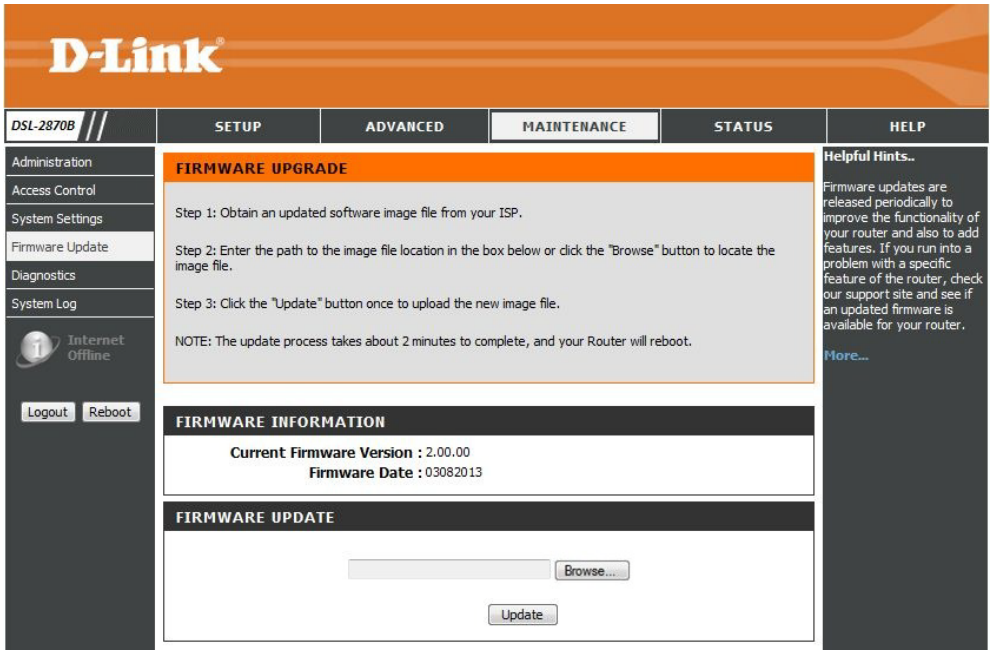
on this router. To reset the router to its factory default settings, click the **Restore Device** button of **Restore to Factory Default Settings**. You will be prompted to confirm your decision to reset the router. The router will reboot with the factory default settings.

Save and Reboot the Device: in this section, we can reboot the router. Click the **Reboot** button to initiate the reboot procedure.

Firmware Update

To access the **Firmware Update** page, click on the **Maintenance** menu link, at the top, and then click on the **Firmware Update** menu link, on the left.

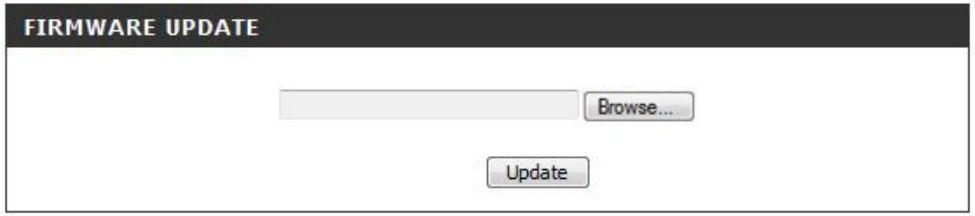
On this page, the user can update the running firmware for this product. From time to time, a software update will be available for this product. Keep an eye on the D-Link website for possible software updates that might be available in the future.



In this section, we can view the current firmware information for the device.

In this section, we can load the latest firmware for the device. Note that the device configuration settings may return to the factory default settings.

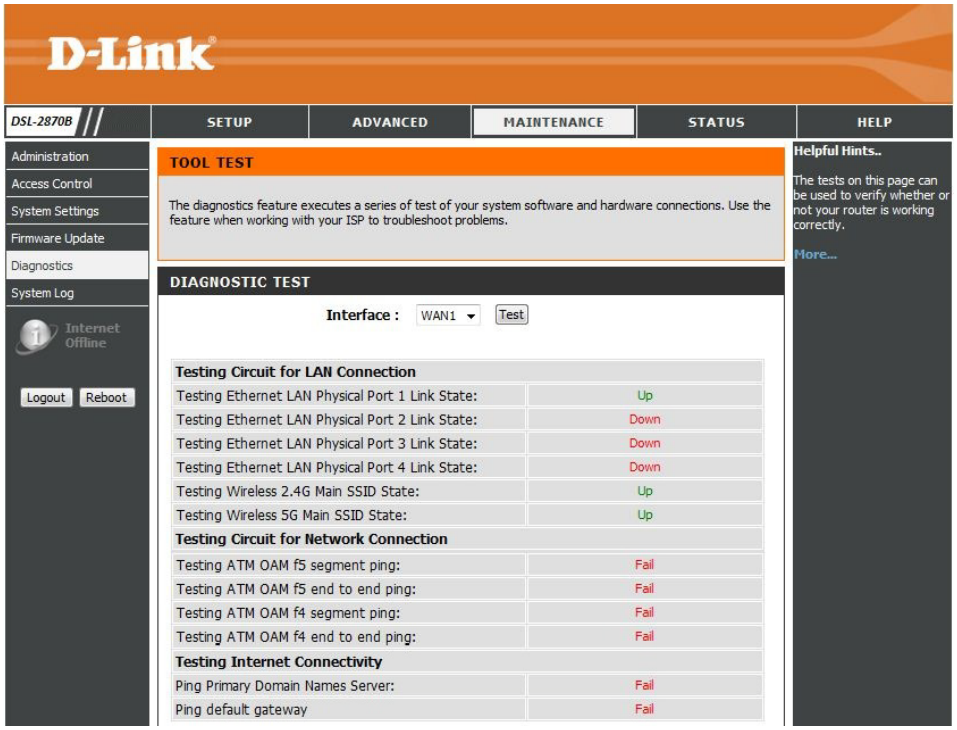
To upgrade the firmware, type in the name and path of the file in the **Software File Name** field or click on the **Browse** button to search for the file. Click the **Update** button to begin copying the file. The file will load and restart the router automatically.



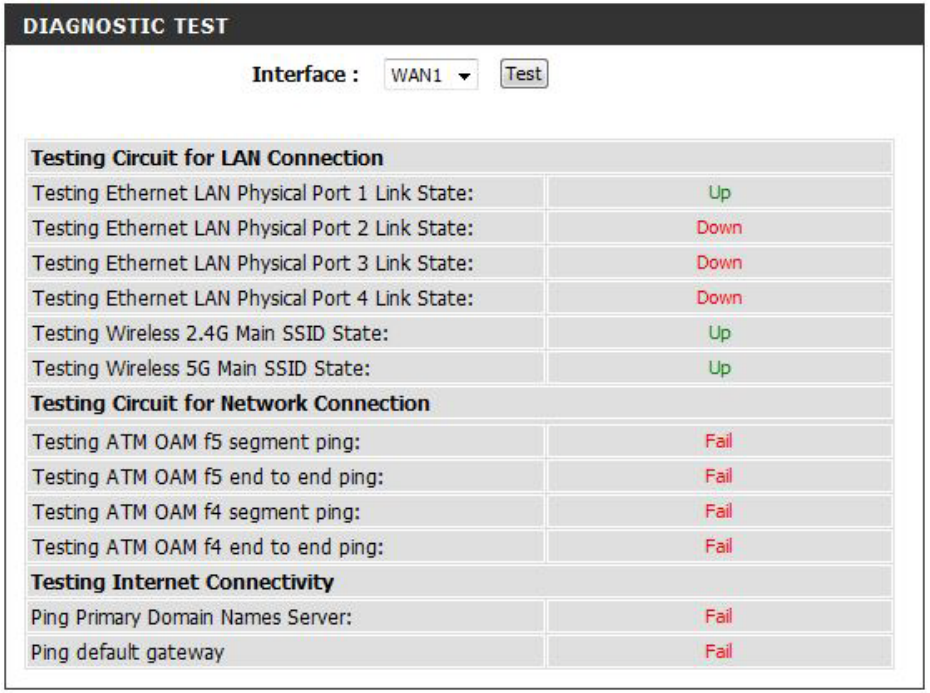
Diagnostics

To access the **Diagnostics** page, click on the **Maintenance** menu link, at the top, and then click on the **Diagnostics** menu link, on the left.

On this page, the user can run a diagnostics test that includes testing the Ethernet, Wireless, ATM OAM F4/F5 and Internet Connectivity of this product.



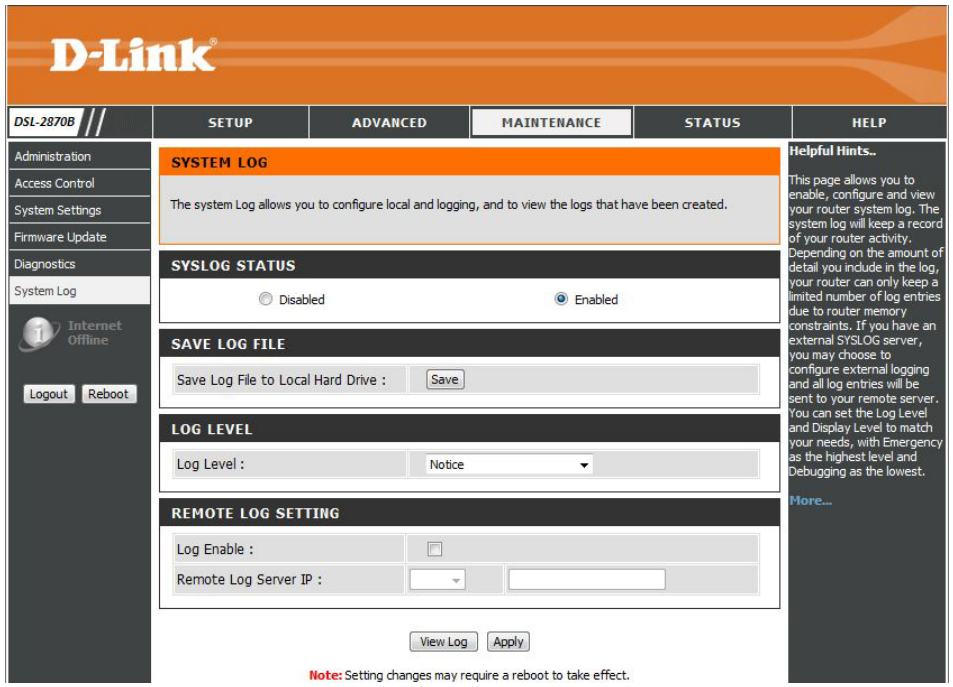
In this section, diagnostic tests are performed to test the connection to the **Local Network** interface and **DSL Service Provider**. This test will include testing the **Ethernet**, **Wireless** connections, **ATM OAM F4/F5**, and **Internet Connectivity** of this router.



System Log

To access the **System Log** page, click on the **Maintenance** menu link, at the top, and then click on the **System Log** menu link, on the left.

On this page, the user can View and Configure the System Log used by this product.



In this section, we can enable or disable the **System Log** Status for this router.

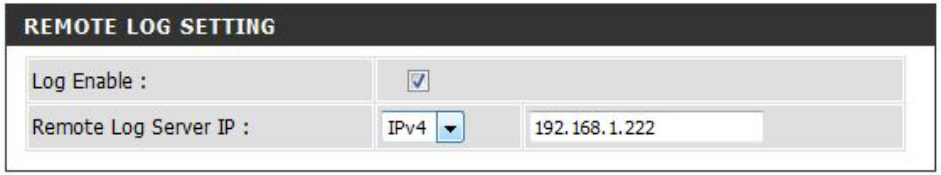
In this section, we can save the **System Log** file to the computer for this router.

In this section we can select the System Log level option here. Options to choose from are Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.

In this section we can configure the Remote System Log Server for this router.

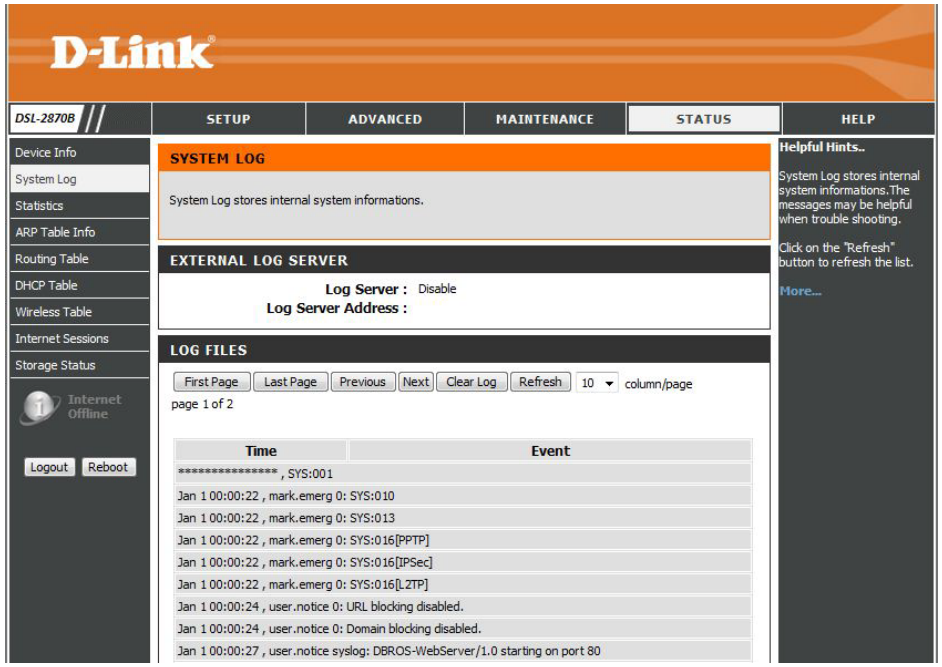
Log Enable: Specify the Remote log state here. Options to choose from are **Disable** and **Enable**.

Remote Log Server IP: Enter IPv4 or IPv6 IP address for the remote System log server.



Click the Apply/Save button to accept the changes made.

After clicking the View Log button, the following page is available. Please refer to System Log of Status section

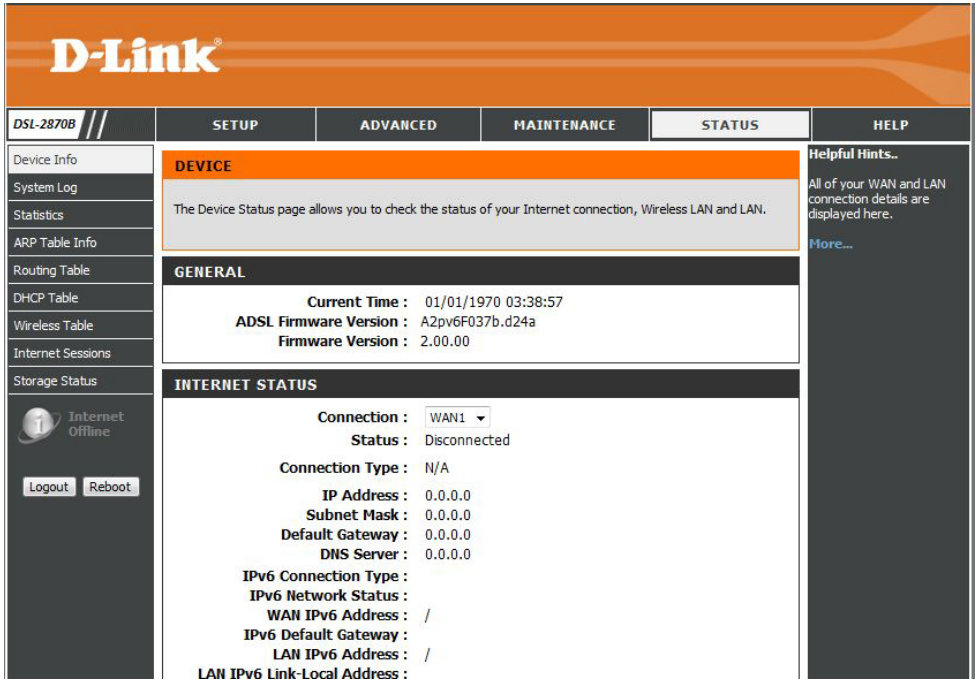


Status Category

The **Status** category is designed to assist the user with information display pages, concerning the configuration and behavior of this product.

The following pages can be found in the **Status** category:

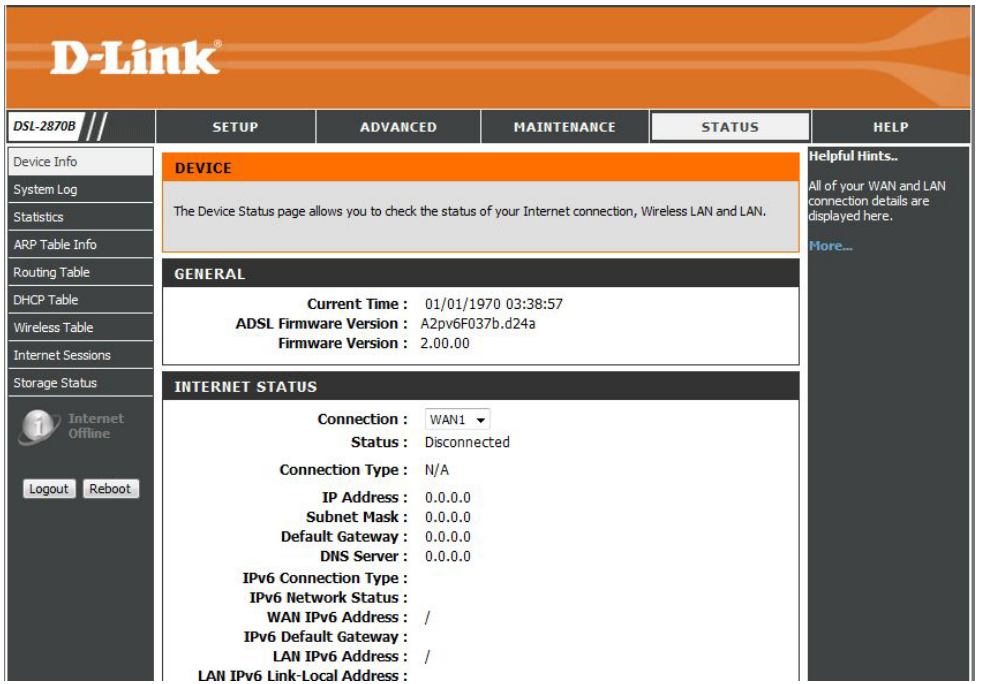
- Device Info – On this page the user can view information regarding the System and Internet Connectivity.
- System Log– On this page the user can view System Log information.
- Statistics – On this page the user can view statistical information about the LAN, WAN, xTM, and xDSL interfaces.
- ARP Table info – On this page the user can view the mapped IP address to its corresponding MAC address and interface name where packets are forwarded.
- Route Info – On this page the user can view information about routes used by this product.
- DHCP Table– On this page the user can view a list of **DHCP clients** that are currently connected to this product.
- Wireless Table–On this page the user can view authenticated wireless stations and their status.
- Internet Sessions–On this page the user can view full details of active internet sessions to your router.
- Storage Service - On this page, the user can view the amount of storage space available.



Device Info

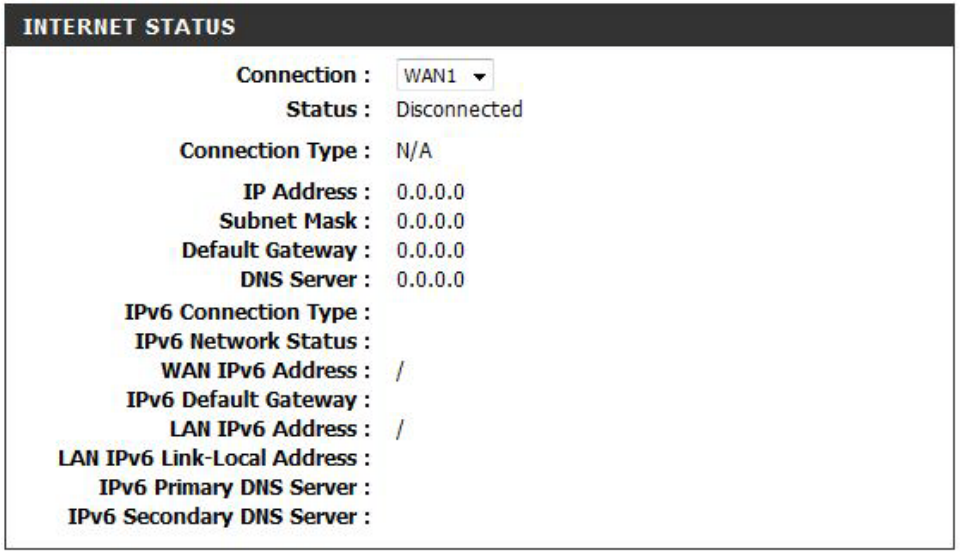
To access the **Device Info** page, click on the **Status** menu link, at the top, and then click on the **Device Info** menu link, on the left.

On this page, the user can view information regarding the System, WAN Connectivity, LAN Connectivity and Wireless Connectivity.



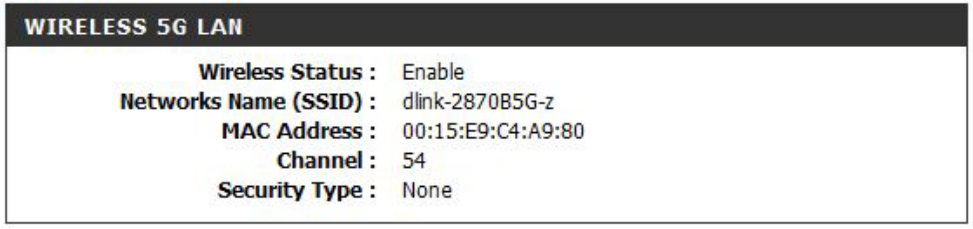
In this section, we can view **System General Information**.

In this section, we can view **Internet Information**.

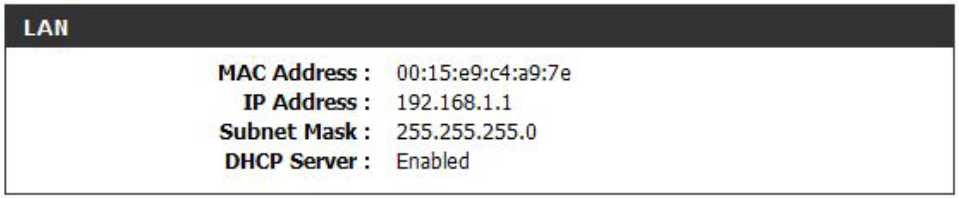


In this section, we can view **Wireless 2.4G Information**.

In this section we can view **Wireless 2.5G Information**.



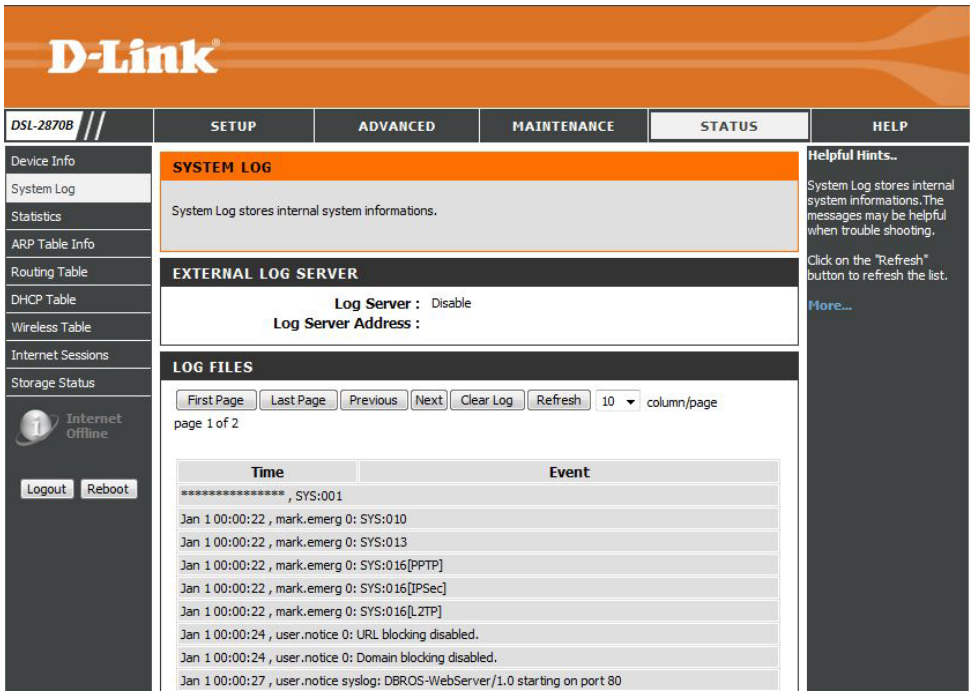
In this section, we can view **LAN Information**.



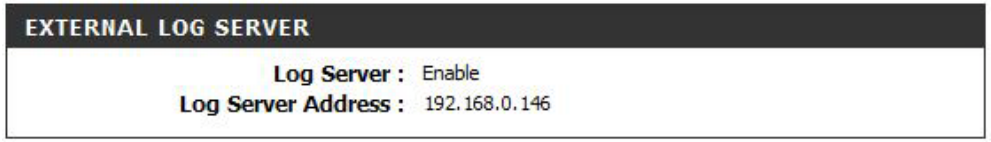
System Log

To access the **System Log** page, click on the **Status** menu link, at the top, and then click on the **System Log** menu link, on the left.

On this page, the user can view System Log information.



In this section, we can view external log server state and IP address.



In this section, we can view log information.

First Page: Click the button, the log page will return to first page of the log information.

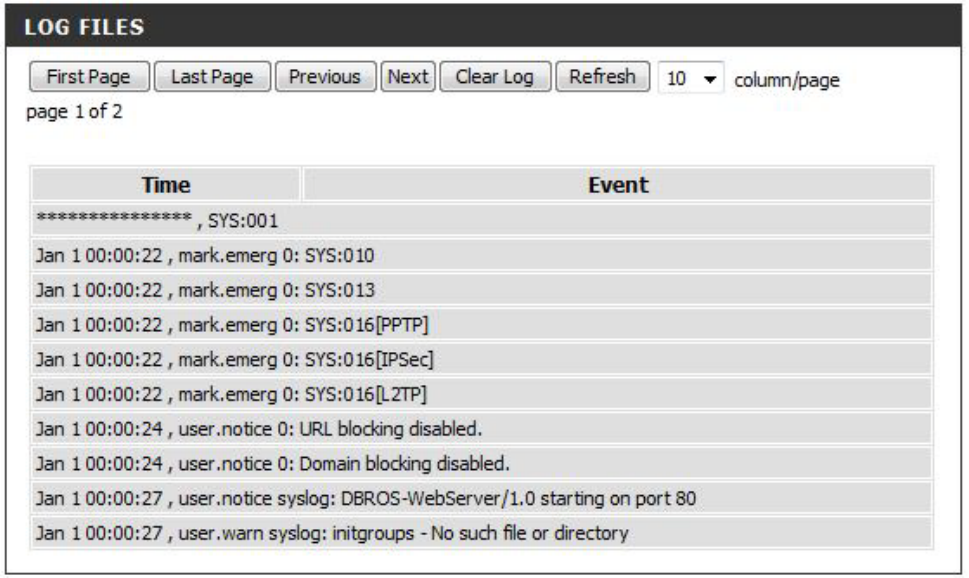
Last Page: Click the button, the log page will return to last page of the log information.

Previous: Click the button, the log page will return to previous page of the log information.

Next: Click the button, the log page will return to next page of the log information.

Clear Log: Click the button, it will clear all log information for this router.

Refresh: Click the button; it will refresh the log information page.

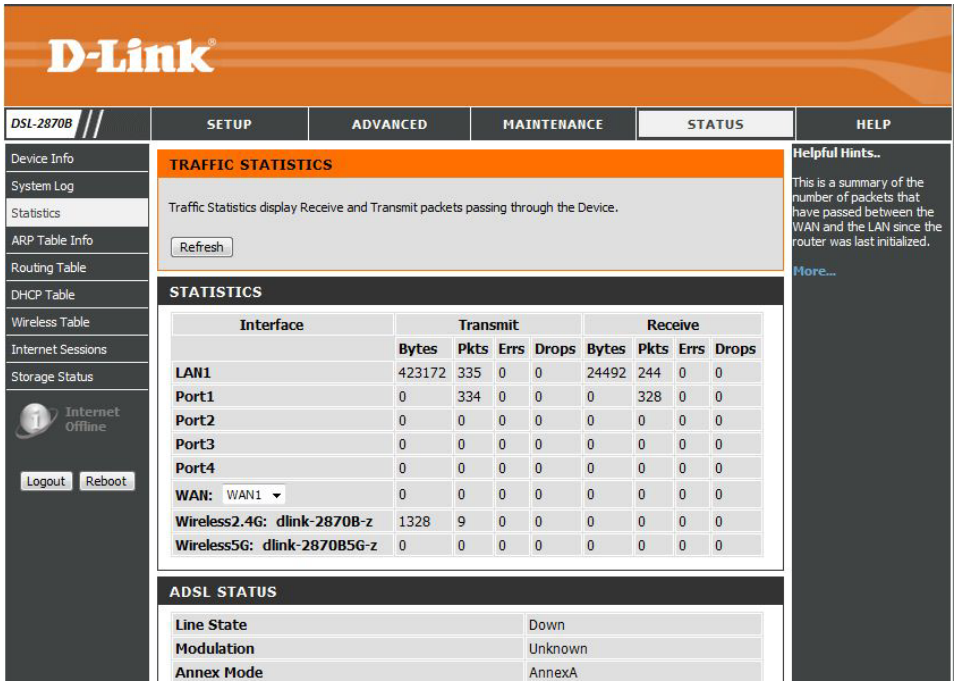


Statistics

To access the **Statistics** page, click on the **Status** menu link, at the top, and then click on the **Statistics** menu link, on the left.

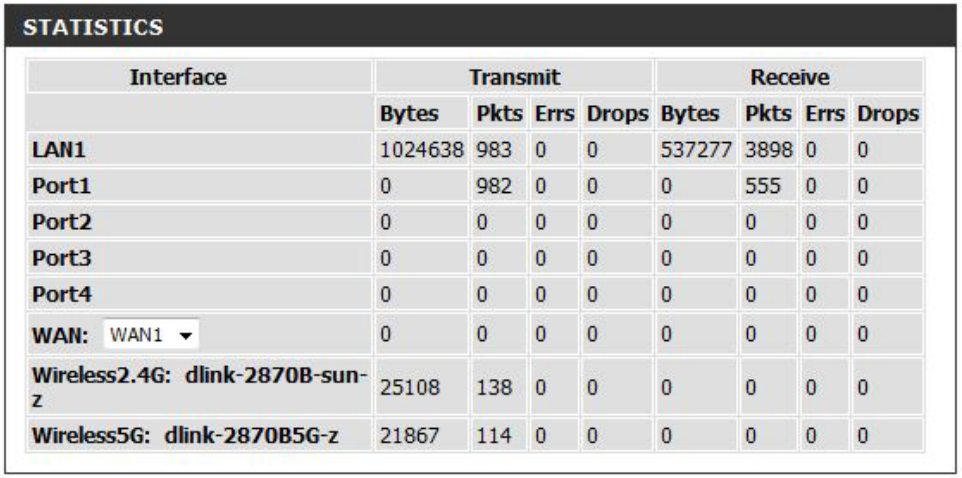
On this page, the user can view statistical information about various interfaces used by this product.

Information available for observations are includes LAN, WAN and xDSL.



In this section, we can view **Local Network**, **Wireless** and **WAN Statistics**.

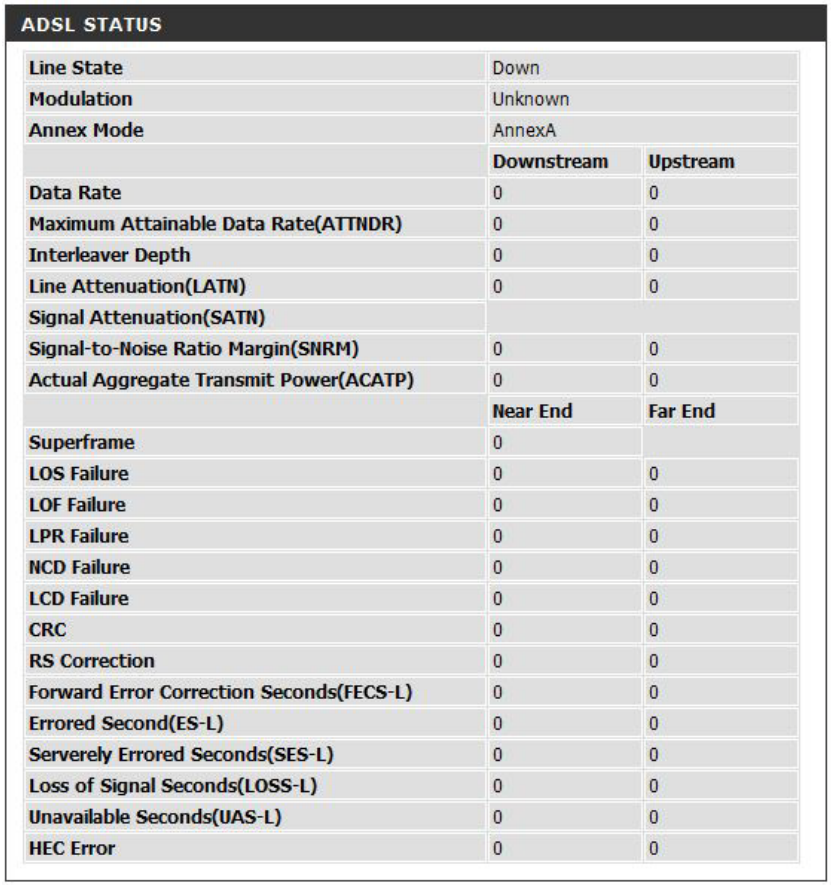
WAN: Select WAN interface to view WAN Statistics.



STATISTICS

Interface	Transmit				Receive			
	Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
LAN1	1024638	983	0	0	537277	3898	0	0
Port1	0	982	0	0	0	555	0	0
Port2	0	0	0	0	0	0	0	0
Port3	0	0	0	0	0	0	0	0
Port4	0	0	0	0	0	0	0	0
WAN: WAN1	0	0	0	0	0	0	0	0
Wireless2.4G: dlink-2870B-sun-z	25108	138	0	0	0	0	0	0
Wireless5G: dlink-2870B5G-z	21867	114	0	0	0	0	0	0

In this section, we can view **xDSL Line Status** and **Statistics**.



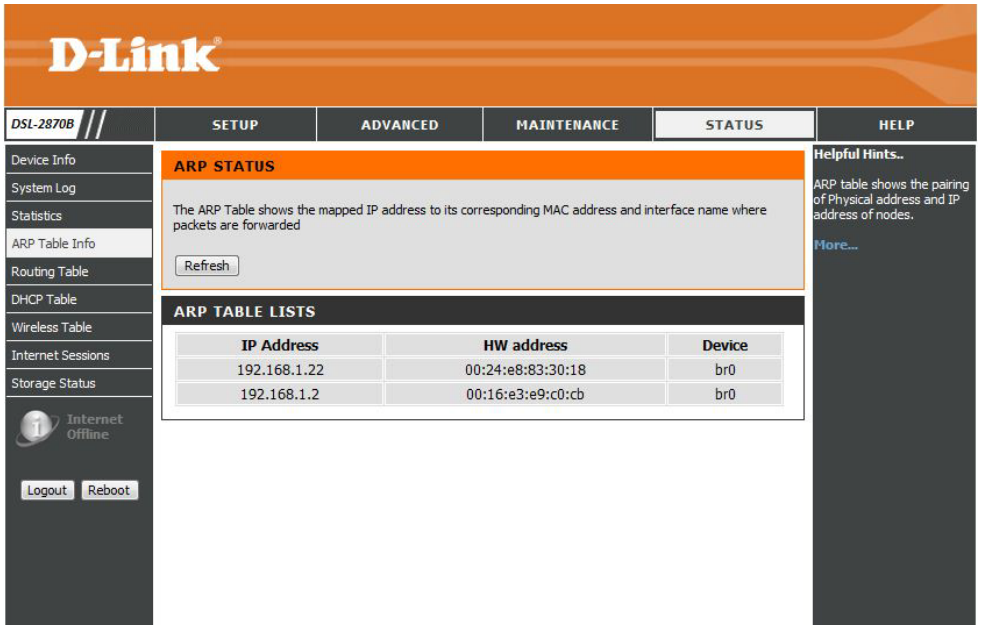
ADSL STATUS

Line State	Down	
Modulation	Unknown	
Annex Mode	AnnexA	
	Downstream	**Upstream**
Data Rate	0	0
Maximum Attainable Data Rate(ATTNDR)	0	0
Interleaver Depth	0	0
Line Attenuation(LATN)	0	0
Signal Attenuation(SATN)		
Signal-to-Noise Ratio Margin(SNRM)	0	0
Actual Aggregate Transmit Power(ACATP)	0	0
	Near End	**Far End**
Superframe	0	
LOS Failure	0	0
LOF Failure	0	0
LPR Failure	0	0
NCD Failure	0	0
LCD Failure	0	0
CRC	0	0
RS Correction	0	0
Forward Error Correction Seconds(FECS-L)	0	0
Errored Second(ES-L)	0	0
Serverely Errored Seconds(SES-L)	0	0
Loss of Signal Seconds(LOSS-L)	0	0
Unavailable Seconds(UAS-L)	0	0
HEC Error	0	0

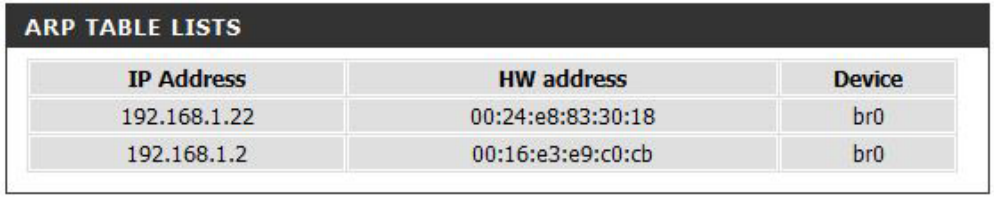
ARP Table Info

To access the **ARP Table Info** page, click on the **Status** menu link, at the top, and then click on the **ARP Table info** menu link, on the left.

On this page the user can view the mapped IP address to its corresponding MAC address and interface name where packets are forwarded.



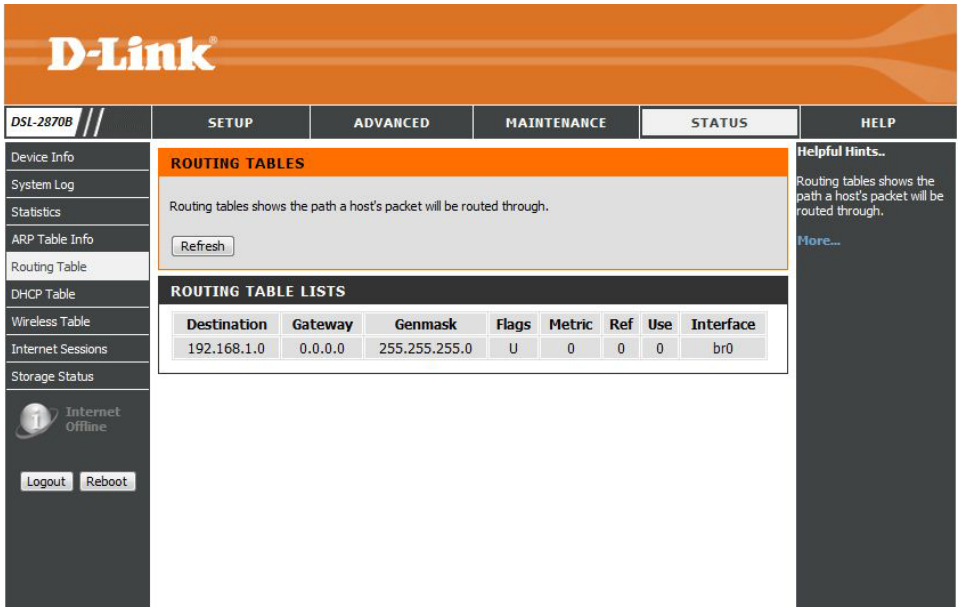
In this section, we can view a ARP Table information.



Route Table

To access the **Route Table** page, click on the **Status** menu link, at the top, and then click on the **Route Table** menu link, on the left.

On this page the user can view information about routes used by this product.



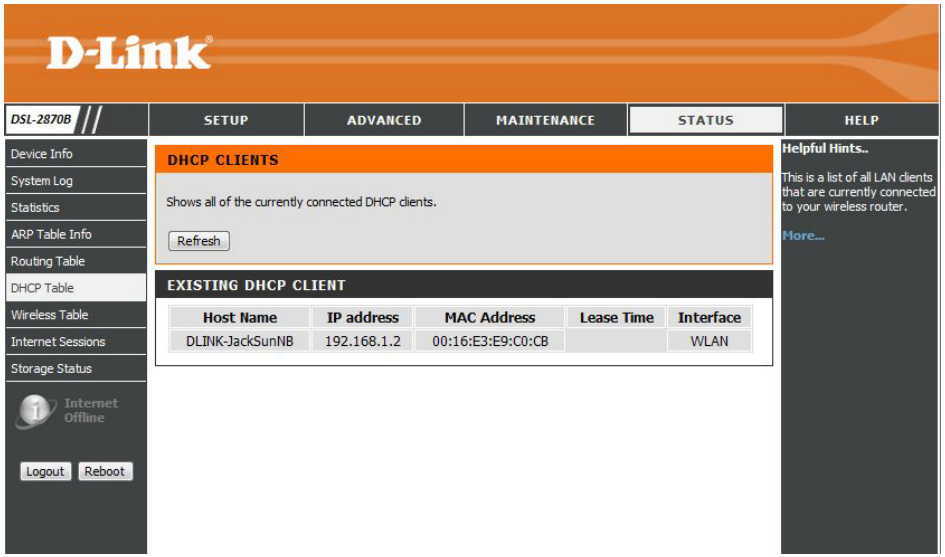
In this section, we can view **Route Information**.

The information available in the **Flag** field can be translated to the following:
U means Up. **!** Means Reject. **G** means Gateway. **H** means Host. **R** means Reinstate.
D means Dynamic or Redirect. **M** means Modified or also Redirect.

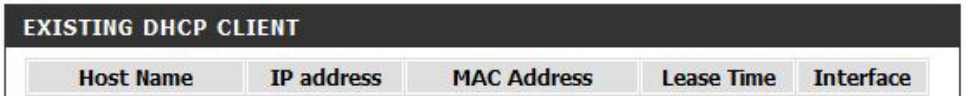
DHCP Table

To access the **DHCP Table** page, click on the **Status** menu link, at the top, and then click on the **DHCP Table** menu link, on the left.

On the page, the user can view a list of DHCP clients that are currently connected to this product.



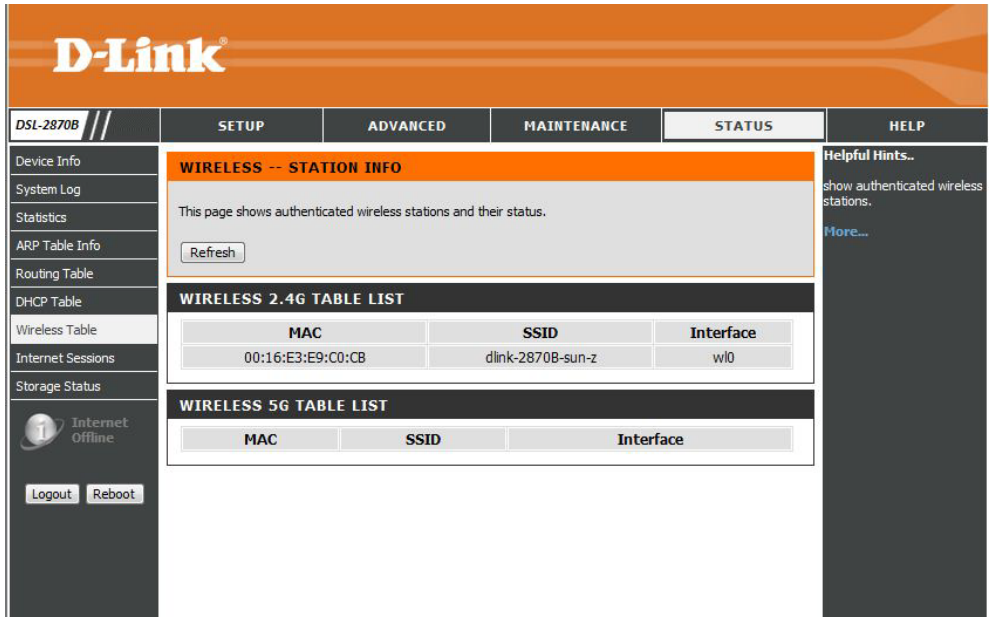
In this section, we can view a list of **DHCP Clients**.



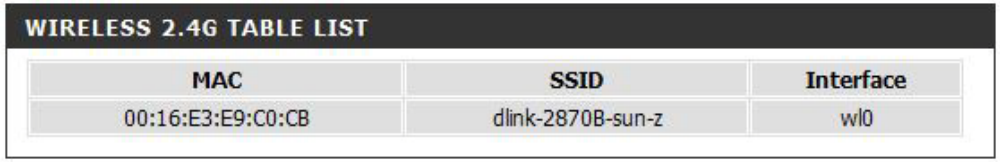
Wireless Table

To access the **Wireless Table** page, click on the **Status** menu link, at the top, and then click on the **Wireless Table** menu link, on the left.

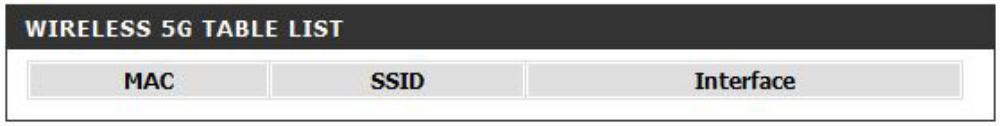
On this page, the user can view authenticated wireless stations and their status.



In this section, we can view Wireless 2.4G stations and their status.



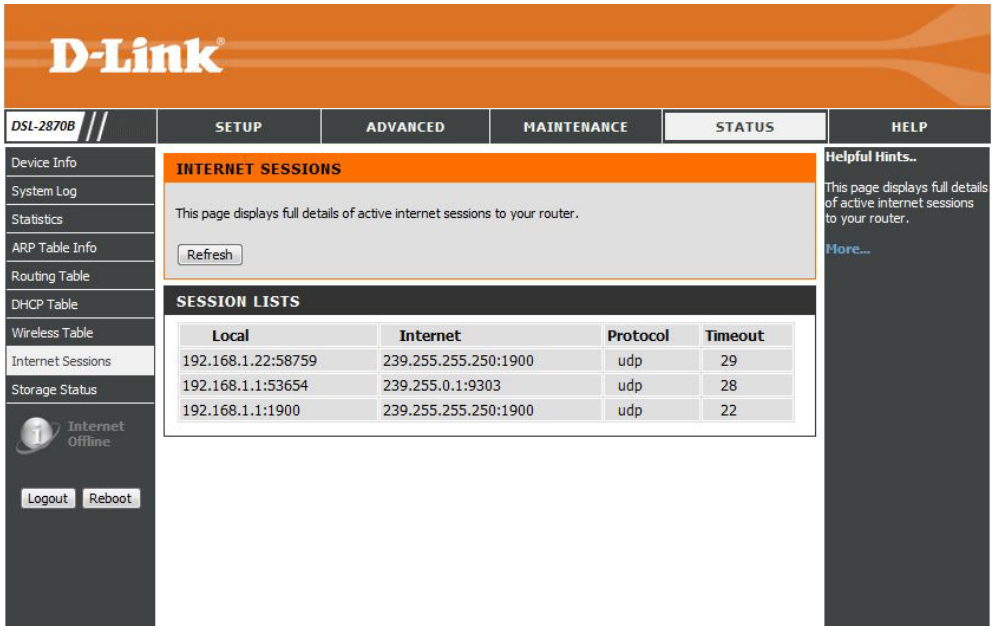
In this section, we can view Wireless 5G stations and their status.



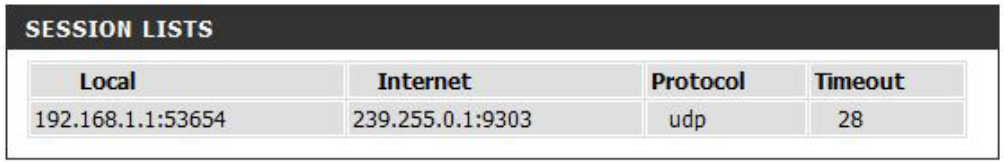
Internet Session

To access the **Internet Session** page, click on the **Status** menu link, at the top, and then click on the **Internet Session** menu link, on the left.

On this page, the user can view full details of active internet sessions to your router.



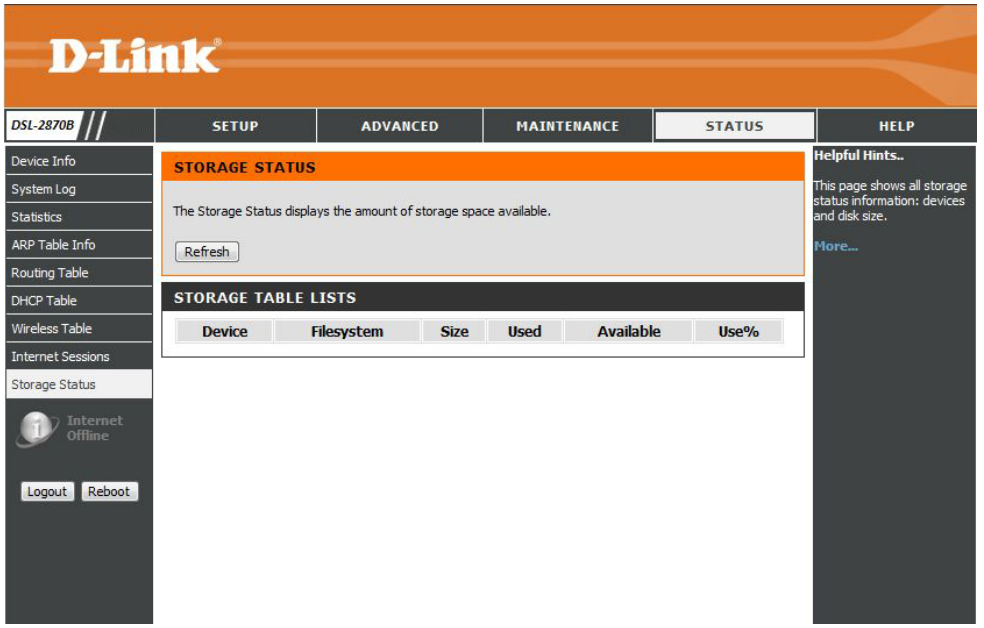
In this section, we can view internet session list.



Storage Service

To access the **Storage Service** page, click on the **Status** menu link, at the top, and then click on the **Storage Service** menu link, on the left.

On this page, the user can configure services related to the Storage Services of this product.



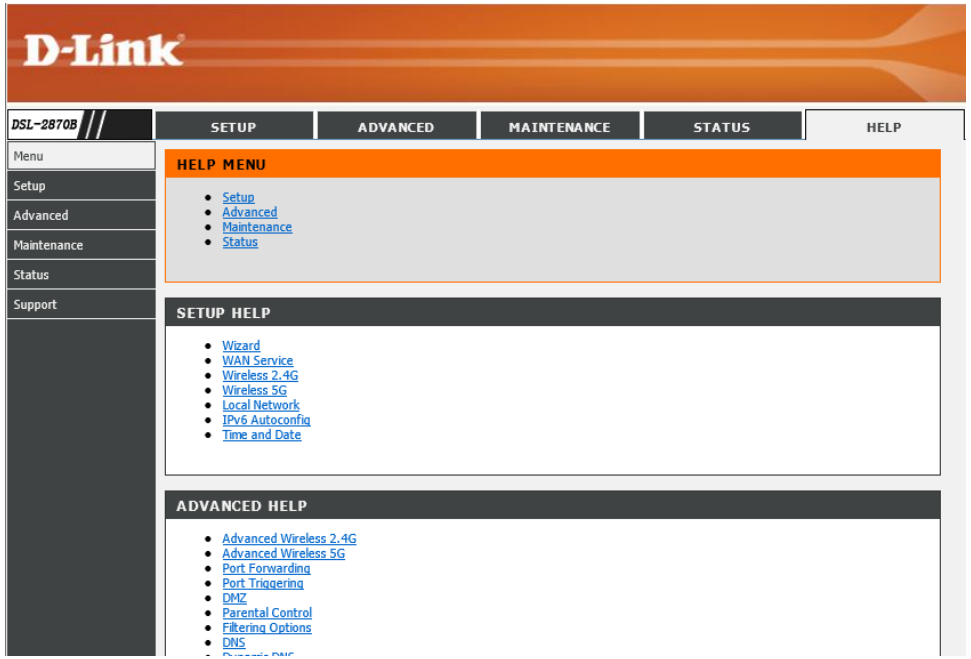
In this page, we can view information about the USB storage device that is inserted into the USB port of this router.

Help Category

The **Help** category is designed to assist the user with helpful information about every topic found on the web user interface of this product.

The following pages can be found in the **Help** category:

- **Menu** – On this page, the user can navigate easily to any page throughout the menu structure to access help information.
- **Setup** – On this page, the user can read more about topics discussed in the Setup category.
- **Advanced** – On this page, the user can read more about topics discussed in the Advanced category.
- **Maintenance** – On this page, the user can read more about topics discussed in the Maintenance category.
- **Status** – On this page, the user can read more about topics discussed in the Status category.



Knowledge Base

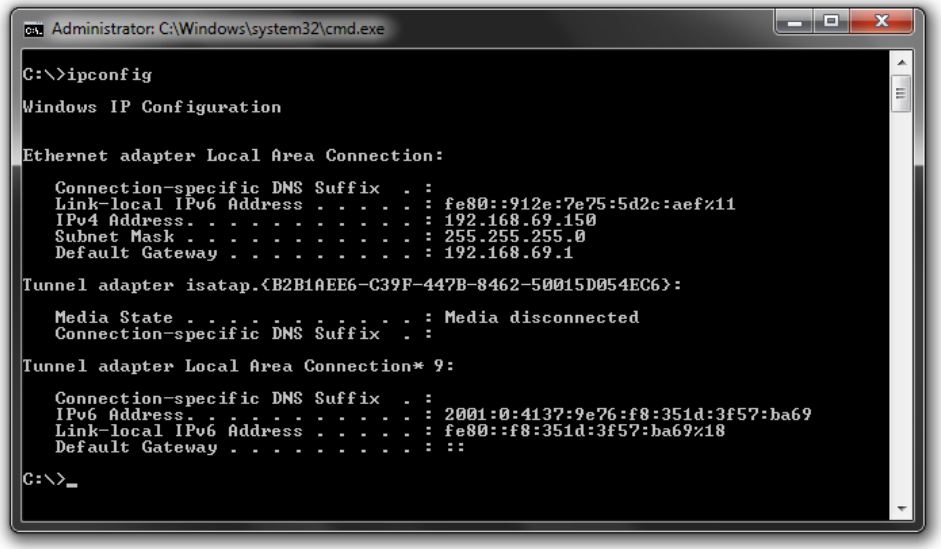
Networking Basics

Check your IP address

After you installed your new network or wireless adapter, by default, the TCP/IP settings should be set to obtain an IP address automatically from a DHCP server. By default the DHCP server option on your router is enabled.

To verify your IP address, please follow the steps below:

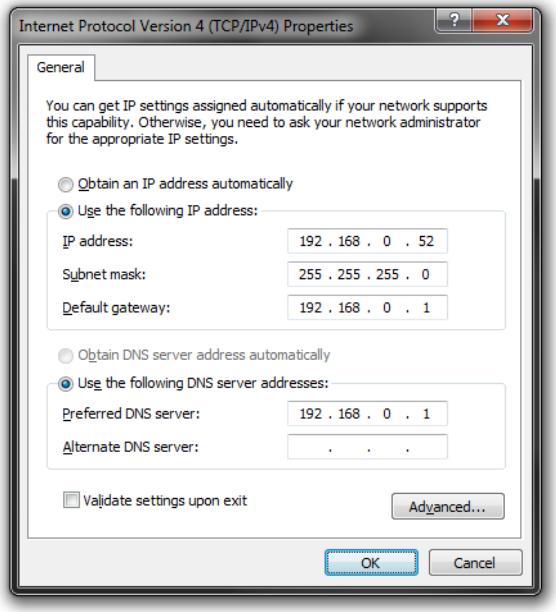
- Click on the Windows **Start** button and open the **Run** application.
- In the **Open** box type *cmd* and click **OK**.
- At the command prompt, type in the command *ipconfig* and press **Enter**. This will display the **IP address**, **Subnet Mask**, and the **Default Gateway** of your adapter. If the address is *0.0.0.0*, it means that your network adapter did not receive an IP address from the DHCP server. Check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.



Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

- Click on the Windows **Start** button and navigate to the **Control Panel** > **Network and Sharing Center** and click on the **Change Adapter Settings** option on the left panel.
- Right-click on the **Local Area Connection**, which represents your network adapter, and select **Properties**.
- Select the **Internet Protocol Version 4 (TCP/IPv4)** option and click on the **Properties** button.
- Select **Use the following IP address** and enter an IP address that is on the same subnet as your router. For example: If your router is running on the IP address of **192.168.1.1**, use any IP address from **192.168.1.2** to **192.168.69.254**. Use the Subnet Mask of **255.255.255.0**. Set Default Gateway the same as the LAN IP address of your router. Set Preferred DNS server IP address the same as the LAN IP address of your router. The Secondary DNS is not needed at this stage.
- Click the **OK** button twice to return to the **Network Connections** window.



Wireless Basics

Wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

How does Wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away. Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn’t use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, business, we have a wireless solution for it.

Home

- Gives everyone at home broadband access.
- Surf the web, check email, instant message, etc…
- Gets rid of the cables around the house.
- Simple and easy to use.

Small Office and Home Office

- Stay on top of everything at home as you would at office.
- Remotely access your office network from home.
- Share Internet connection and printer with multiple computers.
- No need to dedicate office space.

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a Wireless Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let your next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more wireless network Cardbus adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless Cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The router offers wireless security options like WPA/WPA2 PSK/EAP.

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.

Frequently Asked Questions

What can I do if my Router is not working correctly?

There are a few quick steps you can take to try and resolve any issues:

- Check that all the cables are firmly connected at both ends.
- Check that all the corresponding LED indicators are on, especially the Power, DSL, and LAN LED indicators. For more information about LED indicators refer to the Front Panel on page 6.
- Ensure that the settings on the WAN Service page in the Web User Interface are the same as the settings that have been provided to you by your ISP. For more information refer to WAN Service on page 23.

Why can't I get an Internet connection?

For ADSL ISP users, please contact your ISP to make sure the service has been enabled/connected by your ISP and that your ISP username and password are correct.

What can I do if I forgot my web UI login password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10-15 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is **192.168.1.1**. When logging in, the username is '**admin**' and the password is '**admin'**.

Technical Specifications

Hardware Specifications

- LAN Interface: Four 10/100/1000Mbps LAN ports
- DSL Interface: One RJ11 Internet port
- Wireless Interface (2.4Ghz): IEEE 802.11b/g/n
- Wireless Interface (5Ghz): IEEE 802.11a/n
- USB Interface: Complaint USB 2.0

Operating Voltage

- Input: 100~240V (±10%), 50~60Hz
- Output: DC12V, 1.5A

Temperature

- Operating: 32°F~104°F (0°C~40°C)
- Non-Operating: -4°F~149°F (-20°C~65°C)

Humidity

- Operating: 10%~90% non-condensing
- Non-Operating: 5%~95% non-condensing

ADSL Standards

- ANSI T1.413 Issue 2
- ITU G.992.1 (G.dmt) Annex A
- ITU G.992.2 (G.lite) Annex A
- ITU G.994.1 (G.hs)

ADSL2 Standards

- ITU G.992.3 (G.dmt.bis) Annex A
- ITU G.992.4 (G.lite.bis) Annex A

ADSL2+ Standards

- ITU G.992.5 Annex A

ADSL Data Transfer Rate

- G.dmt full rate downstream: up to 8 Mbps / upstream: up to 1 Mbps
- G.lite: ADSL downstream up to 1.5 Mbps / upstream up to 512 Kbps
- G.dmt.bis full rate downstream: up to 12 Mbps / upstream: up to 12 Mbps
- ADSL full rate downstream: up to 24 Mbps / upstream: up to 1 Mbps

Wireless Frequency Range

- IEEE 802.11a: 5150 MHz~5350 MHz
- IEEE 802.11b: 2400 MHz~2497 MHz
- IEEE 802.11g: 2400 MHz~2497 MHz
- IEEE 802.11n: 2400 MHz~2497 MHz, 5150 MHz~5350 MHz

Wireless Bandwidth Rate

- IEEE 802.11a: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11b: 11, 5.5, 2, and 1 Mbps
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11an: 6.5 to 450 Mbps
- IEEE 802.11gn: 6.5 to 300 Mbps

Wireless Channel Numbers

- IEEE 802.11a: Channels 36~64
- IEEE 802.11b: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan)
- IEEE 802.11g: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan)
- IEEE 802.11n: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan), Channels 36~64

Antenna Type

- Five Internal Antennas (Two 2.4 GHz Antennas, Three 5 GHz Antennas)

Wireless Security

- 64/128bit WEP, WPA/WPA2-Personal, WPA/WPA2-Enterprise, WPS (PIN & PBC)

Certifications

- FCC P68/P15B, CE, A-tick.

Dimensions & Weight

- 213 x 173 x 52 mm (8.39 x 6.81 x 2.05 in)
- 405.52 grams (0.89 lbs)