USER MANUAL

DSL-2740B

VERSION 2.01

D-Link®

BROADBAND

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Package Contents

- DSL-2740B Wireless ADSL Router
- 2 non-detachable Antennas(MIMO 2x2)
- Power Adapter
- CD-ROM with Installation Wizard, User Manual, and Special Offers
- One twisted-pair telephone cable used for ADSL connection
- One straight-through Ethernet cable
- One Quick Installation Guide

Note: Using a power supply with a different voltage rating than the one included With the DSL-2740B will cause damage and void the warranty for this product.

System Requirements

1. ADSL Internet service
   Computer with:
   - 200MHz Processor
   - 64MB Memory
   - CD-ROM Drive
   - Ethernet Adapter with TCP/IP Protocol Installed
   - Windows win7/vista/XP/2000z
   - MAC OS
   - Internet Explorer v6 or later, FireFox v1.5

2. D-Link Click's Connect Utility
   Computer with:
   - Windows win7/vista/XP/2000

Introduction

HIGH-SPEED ADSL2/2+ INTERNET CONNECTION
Latest ADSL2/2+ standards provide Internet transmission of up to 24Mbps downstream, 1Mbps upstream.

HIGH-PERFORMANCE WIRELESS
Embedded 802.11n technology for high-speed wireless connection, complete compatibility with 802.11b/g wireless devices

TOTAL SECURITY
Firewall protection from Internet attacks, user access control, WPA/WPA2 wireless security.

ULTIMATE INTERNET CONNECTION
The DSL-2740B ADSL2+ router is a versatile, high-performance remote router for home and the small office. With integrated ADSL2/2+ supporting up to 24Mbps download speed, firewall protection, Quality of Service (QoS), 802.11n wireless LAN and 4 Ethernet switch ports, this router provides all the functions that a home or small office needs to establish a secure and high-speed remote link to the outside world.

ULTIMATE WIRELESS CONNECTION WITH MAXIMUM SECURITY
This router provides maximize wireless performance by connecting this router to computer interfaces and stay connected from virtually anywhere at home and in the office. The router can be used with 802.11b/g/n wireless networks to enable significantly improved reception. It supports WPA/WPA2 and WEP for flexible user access security and data encryption methods.

FIREWALL PROTECTION & QoS
Security features prevents unauthorized access to the home and office network, be it from the wireless devices or from the Internet. The router provides firewall security using Stateful Packet Inspection (SPI) and hacker attack logging for Denial of Service (DoS) attack protection. SPI inspects the contents of all incoming packet headers before deciding what packets are allowed to pass through. Router access control is provided with packet filtering based on port and source/destination MAC/IP addresses. For Quality of Service (QoS), the router supports multiple priority queues to enable a group of home or office users to experience the benefit of smooth network connection of inbound and outbound data without concern of traffic congestion. This QoS support allows users to enjoy high ADSL transmission for applications such as VoIP and streaming multimedia over the Internet.

*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.

Features

- **Faster Wireless Networking** - The DSL-2740B provides up to 300Mbps* 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-2740B is still fully compatible with the IEEE 802.11b and g standards, so it can connect with existing 802.11b and g 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-2740B 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+)

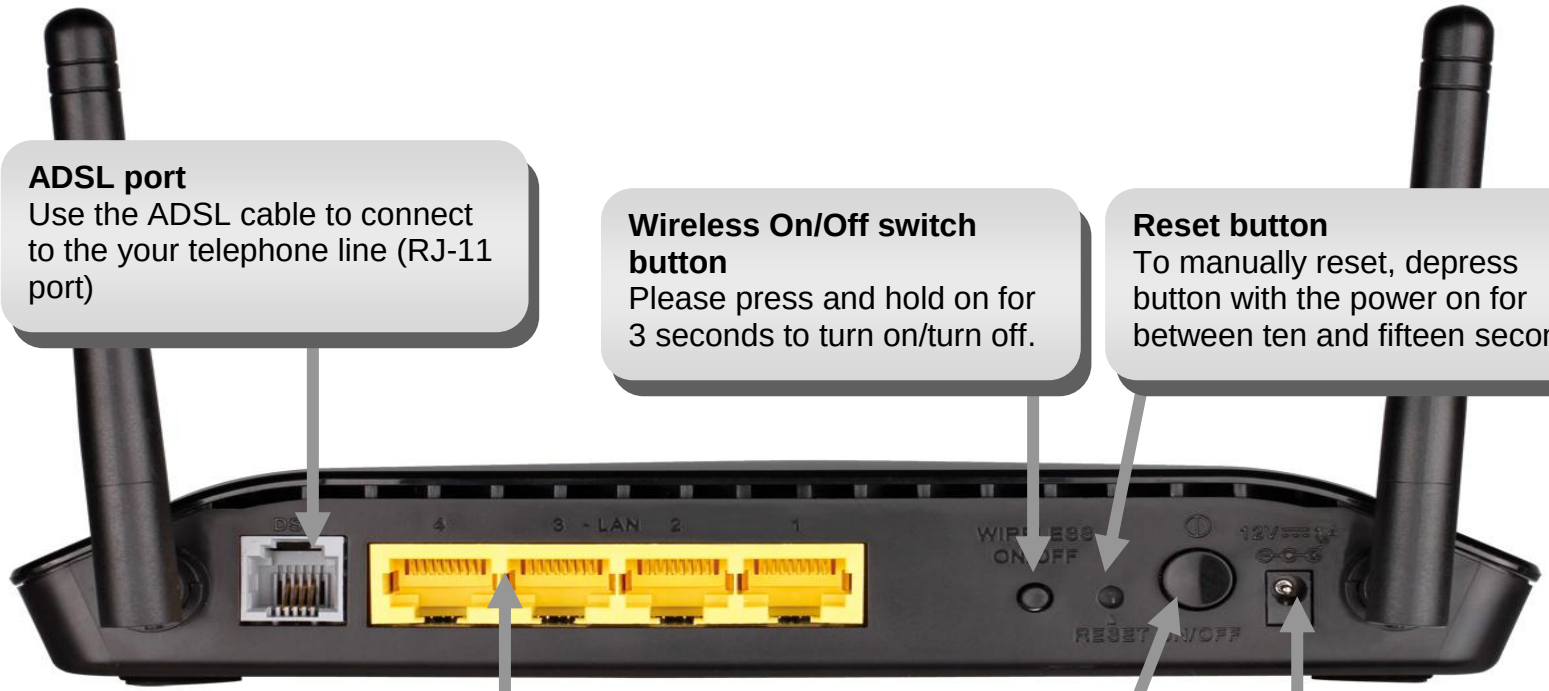
- **Full Network Management** - The DSL-2740B incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management via Telnet connection.

- **Easy Installation** - The DSL-2740B uses a web-based graphical user interface program for convenient management access and easy set up. Any common web browser software can be used to manage the Router.

- **IPv6 Connection Support** – For IPv6 connection, the DSL-2740B provide several connection type: Link-local, Static IPv6, DHCPv6, Stateless Autoconfiguration, PPPoE, IPv6 in IPv4 Tunnel and 6to4.

*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
Connections



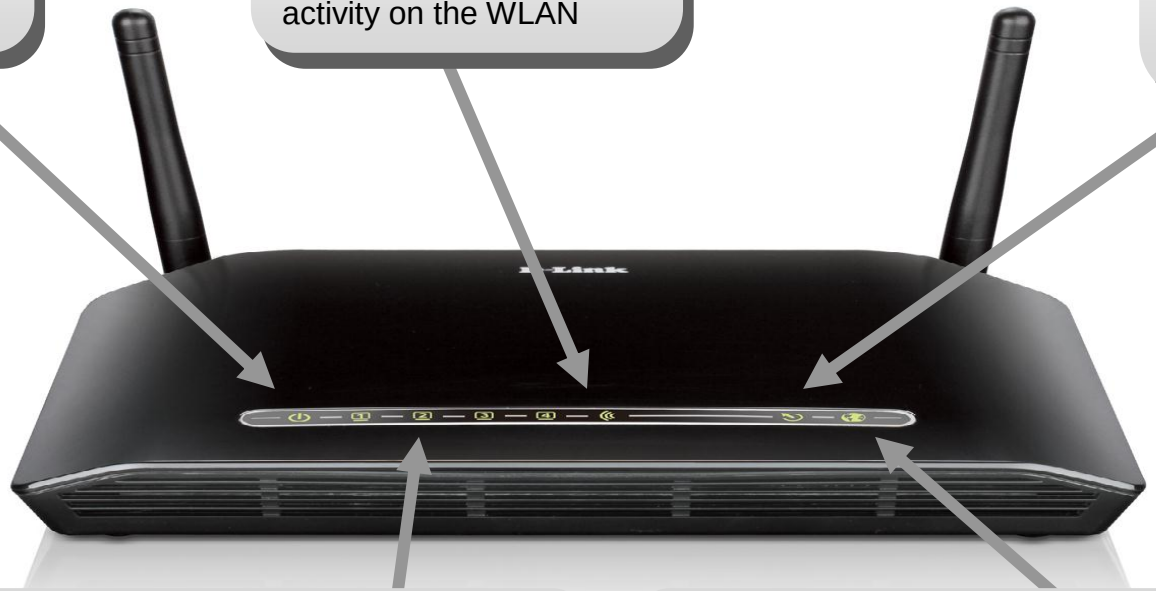
Hardware Overview

LEDs

Power
Steady green light indicates the unit is powered on. When the device is powered off this remains dark.

WLAN
Steady green light indicates a wireless connection. A blinking green light indicates activity on the WLAN

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.



LAN
A solid green light indicates a valid link on startup. These lights blink when there is activity currently passing through the Ethernet port.

Internet
Steady green light indicates a successful Internet connection. Steady red light indicates failed Internet connection. Dark if no WAN protocol is configured.

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. You can print out the two pages below and use the tables to list this information. This way you have a hard copy of all the information needed to setup the Router. If it is necessary to reconfigure the device, all the necessary information can be easily accessed. Be sure to keep this information safe and private.

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-2740B 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 98 SE, Windows ME, Windows 2000, and Windows XP.

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 Opera, Microsoft Internet Explorer® version 6.0, Netscape Navigator® version 6.2.3, or later versions. 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 the Ethernet port 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 NIC 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.

802.11 Wireless LAN Configuration

All the 802.11 wireless LAN settings may be configured on a single page using the web-based manager. For basic wireless communication you need to decide what channel to use and what SSID to assign. These two settings must be the same for any wireless workstations or other wireless access point that communicate with the DSL-2740B through the wireless interface.

Security for wireless communication can be accomplished in a number of ways. The DSL-2740B supports WPA (Wi-Fi Protected Access), WPA2, and mixed WPA/WPA2. Wireless access can also be controlled by selecting MAC addresses that are allowed to associate with the device. Please read the section on Wireless Configuration.

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. It is commonly in the form user@isp.co.uk. 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/PPoA (PPPoE LLC, PPPoA LLC or PPPoA VC-Mux)
- Bridge Mode (1483 Bridged IP LLC or 1483 Bridged IP VC Mux)
- IPoA/MER (Static IP Address) (Bridged IP LLC, 1483 Bridged IP VC Mux, 1483 Routed IP LLC, 1483 Routed IP VC-Mux or IPoA)
- MER (Dynamic IP Address) (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 (ADSL2+ Multi-Mode) used for the Router automatically detects all types of ADSL, ADSL2, and ADSL2+ modulation. However, if you are instructed to specify the modulation type used for the Router, you may choose among the numerous options available on the Modulation Type drop-down menu on the ADSL Configuration window (Advanced > ADSL)

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 DSL-2740B

Username
This is the Username needed access the Router's 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." The user cannot change this.

Password
This is the Password you will be prompted to enter when you access the Router's management interface. The default Password is "admin." The user may change this.

LAN IP addresses for the DSL-2740B
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-2740B
This is the subnet mask used by the DSL-2740B, 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-2740B to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the DSL-2740B to connect to other computer or Ethernet devices.

DHCP Client status
Your DSL-2740B 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-2740B 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.)

It is recommended that your collect and record this information here, or in some other secure place, in case you have to re-configure your ADSL connection in the future.
Once you have the above information, you are ready to setup and configure your DSL-2740B Wireless ADSL Router.

Wireless Installation Considerations

DSL-2740B lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

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

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

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

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

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

Device Installation

The DSL-2740B Wireless ADSL Router maintains three separate interfaces, an Ethernet LAN, a wireless LAN and an ADSL Internet (WAN) connection. Carefully consider the Router's location suitable for connectivity for your Ethernet and wireless devices. You must have a functioning broadband connection via a bridge device such as a Cable or ADSL modem in order to use the Router's WAN function.

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, direct sunlight 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, desktop, or other stable platform. If possible, 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. Push down the Power button, and 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 Link/Act 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 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 off.
2. Turn on the power.
3. Wait for 10~15 seconds and then 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

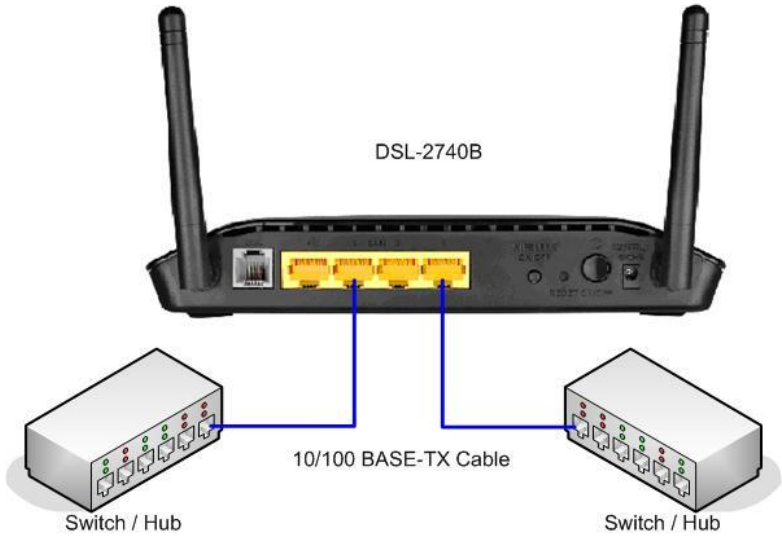
Use the ADSL cable included with the Router to connect it to a telephone wall socket or receptacle. Plug one end of the cable into the ADSL port (RJ-11 receptacle) on the rear panel of the Router and insert the other end into the RJ-11 wall socket. If you are using a low pass filter device, follow the 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 10BASE-TX Ethernet port 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 Mbps only. 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 port on the Router is 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 as shown in this diagram. 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 a 10/100BASE-TX Ethernet adapter card (NIC) installed on a PC using the Ethernet cable provided as shown in this diagram.

Configuration

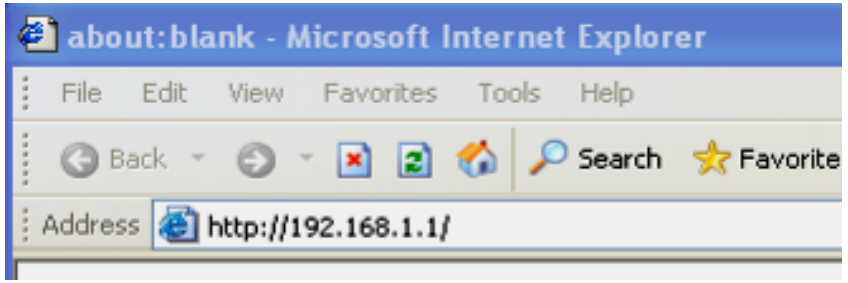
This section will show you how to configure your new D-Link wireless router using the web-based configuration utility.

Web-based Configuration Utility

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. The next section describes how to change the IP configuration for a computer running a Windows operating system to be a DHCP client.

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.1.1).



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

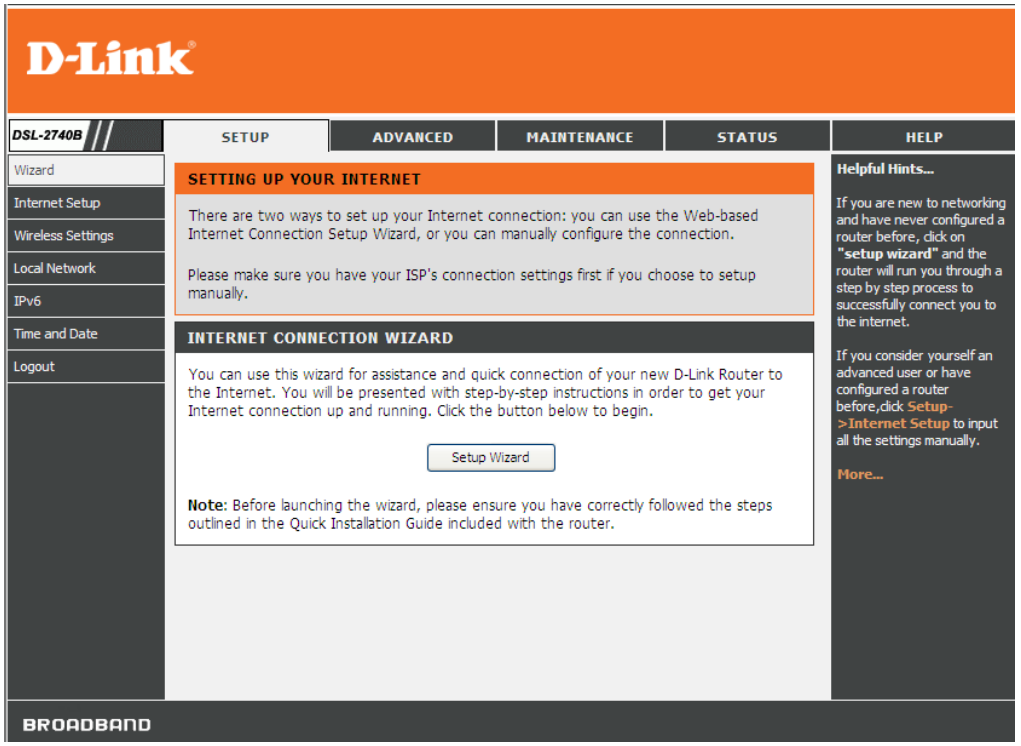
SETUP

This chapter is concerned with using your computer to configure the WAN connection. The following chapter describes the various windows used to configure and monitor the Router including how to change IP settings and DHCP server setup.

WIZARD

ADSL SETUP

Click on the **Setup Wizard** button to launch the **Setup Wizard.**



WELCOME TO D-LINK SETUP WIZARD

There are four steps to configuring your router. Click on the **Next** button to continue.

STEP 1: CHANGE YOUR DSL-2740B PASSWORD

The default password is "**admin**", in order to secure your network, please modify the password. Note: Confirm Password must be same as "**New Password**". Of course, you can click on the **Skip** to ignore the step.

STEP 2: SET TIME AND DATE

TIME SETTING:

Please enable the **Automatically synchronize with Internet time servers** if you want to use time server.

You can use the default time server web site or type any web server name you want on the **First NTP time server** and the **Second NTP time server**.

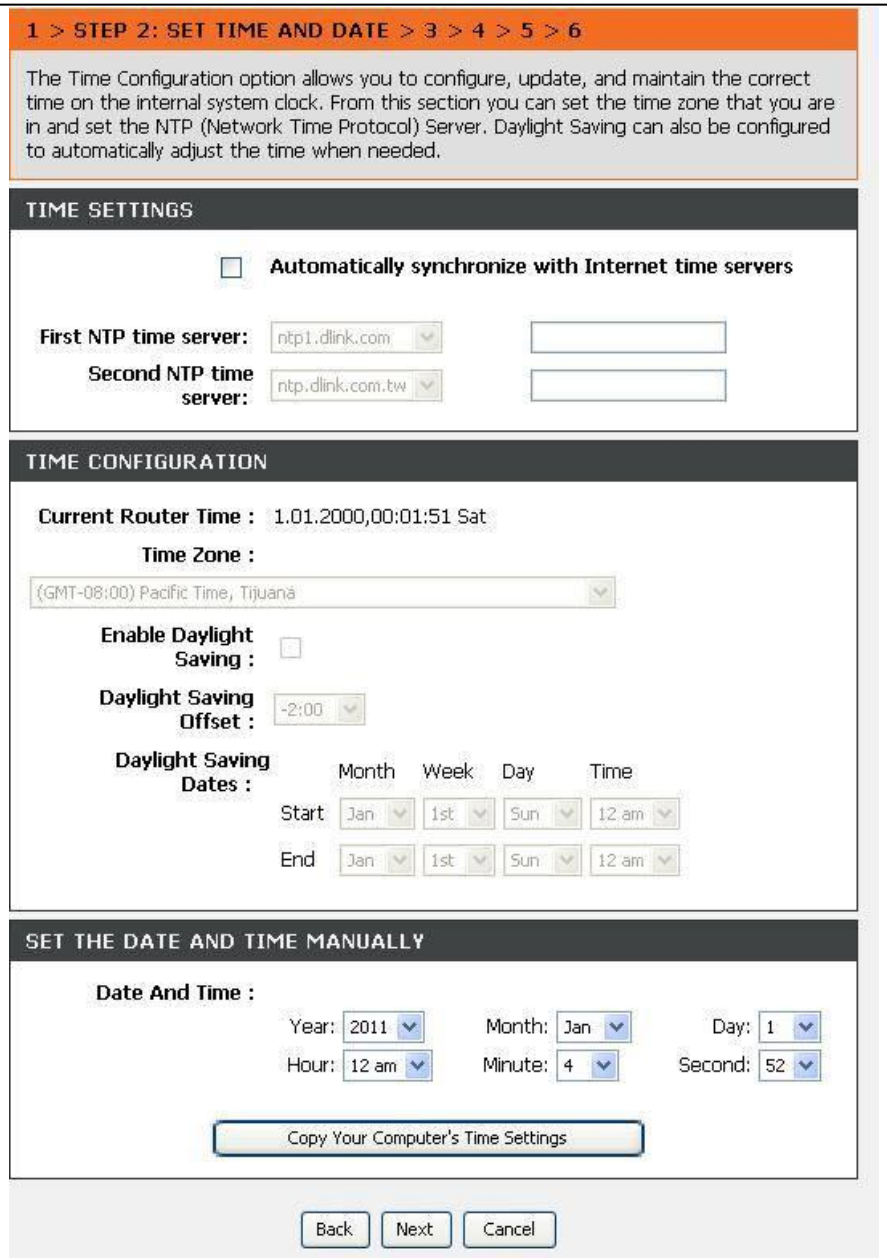
Please select the time zone of your country on the **Time Zone** option.

If you need to use the daylight saving, just choose the **Enable Daylight Saving**. Daylight saving is a period from late Spring to early Fall.

Set how many hours to change the time for Daylight saving Offset.

Configure Daylight Saving Dates,
Daylight Saving time starts in the most parts of the **United States** on the second Sunday of March. Each time zone in the United States starts Daylight Saving time at 2 A.M. Thus, in the United States you must use **March**, **Second**, **Sunday**, at **2:00 A.M.**

Daylight Saving time starts in the **European Union** on the last Sunday of March. Thus, in European Union, you must select **March**, **Last**, **Sunday**. The time must depend on your country's time zone. For example, In Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT or UTC (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.**



Daylight Saving time ends in the most parts of the United States on the First Sunday of November. Each time zone in the United States must use Daylight Saving time at 2:00 A.M. Thus, in the United States you must set **November**, **First**, **Sunday**, at **2:00 A.M**.

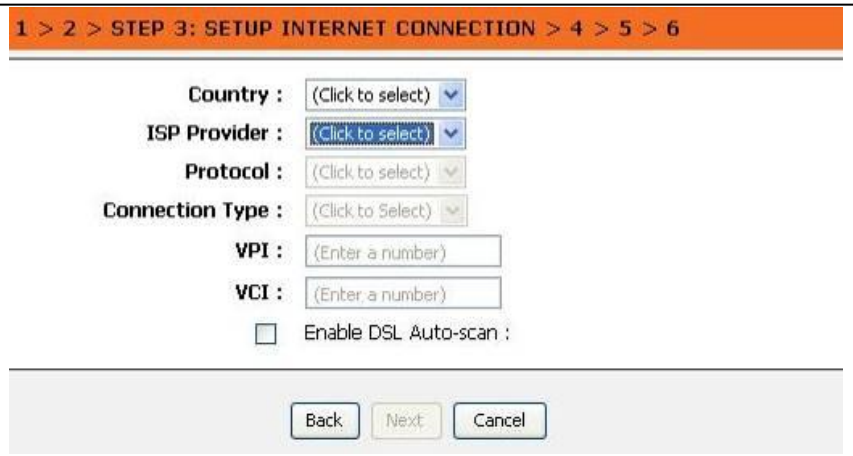
Daylight Saving time ends in the European Union on the Last Sunday of October. For instance, in Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.**

SET THE DATE AND TIME MANAULLY

You can also use the **Copy Your Computer's Time Settings** to synchronize the Date and Time to your local PC. Or, you also can adjust **Year**/**Month**/**Day**/**Hour**/**Minute**/**Second** manually.

Click on the **Next** button to go to the next **Setup Wizard** window.

STEP 3: SETUP INTERNET CONNECTION



Ypu can check **Enable DSL Auto-scan** box to use DSL auto scan or disable to manual.

Please select your **Country**, **ISP Provider** and **Protocol**, and then **VPI/VCI**, and **Connection Type** will auto input.

If you can not find the country and ISP in the list below; you can select **Others**, and then input the **Protocol**, **VPI/VCI** and **Connection Type**.

Please enter the **VPI/VCI** numbers if provided by the ISP.

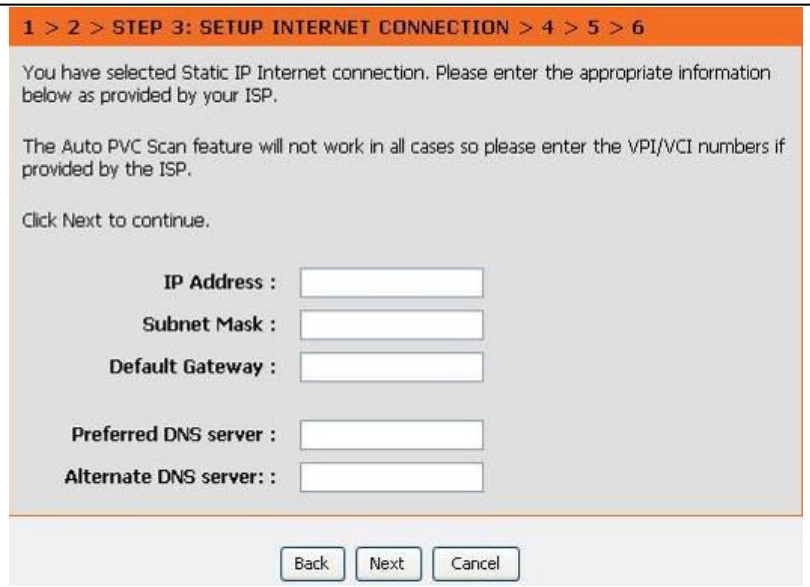
Click on the **Next** button to go to the next **Setup Wizard** window.

If your Protocol selects **PPPoE** or **PPPoa**, you need enter the **Username**, **Password** as provided by your ISP

Click on the **Next** button to go to the next **Setup Wizard** window.

If your Protocol selects **Static IPoE**, you need enter the **IP Address**, **Subnet Mask**, **Default Gateway**, **Preferred DNS server** and **Alternate DNS server** as provided by your ISP.

Click on the **Next** button to go to the next **Setup Wizard** window.



STEP 4: CONFIGURE WIRELESS NETWORK

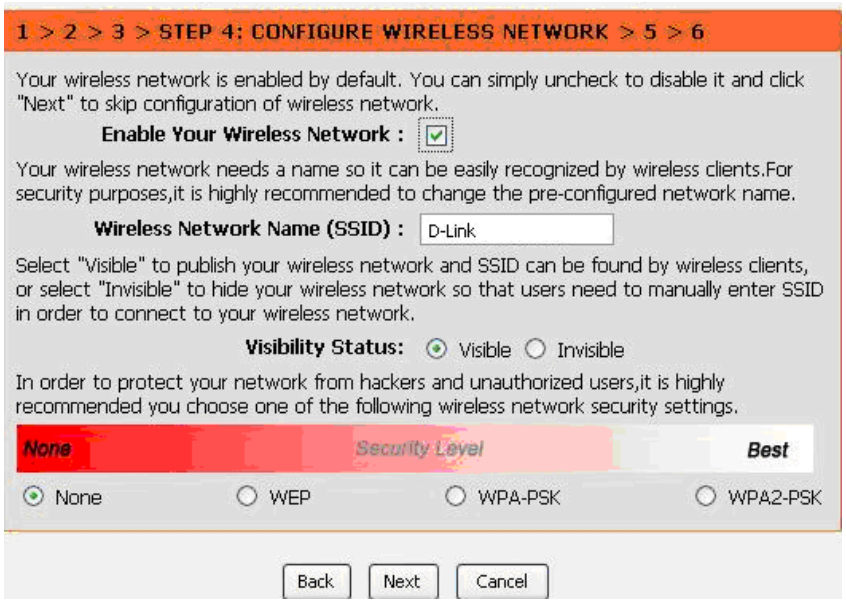
Please check **Enable Your Wireless Network** box to enable your wireless network.

Enter **Wireless Network Name (SSID)** to identify your wireless network.

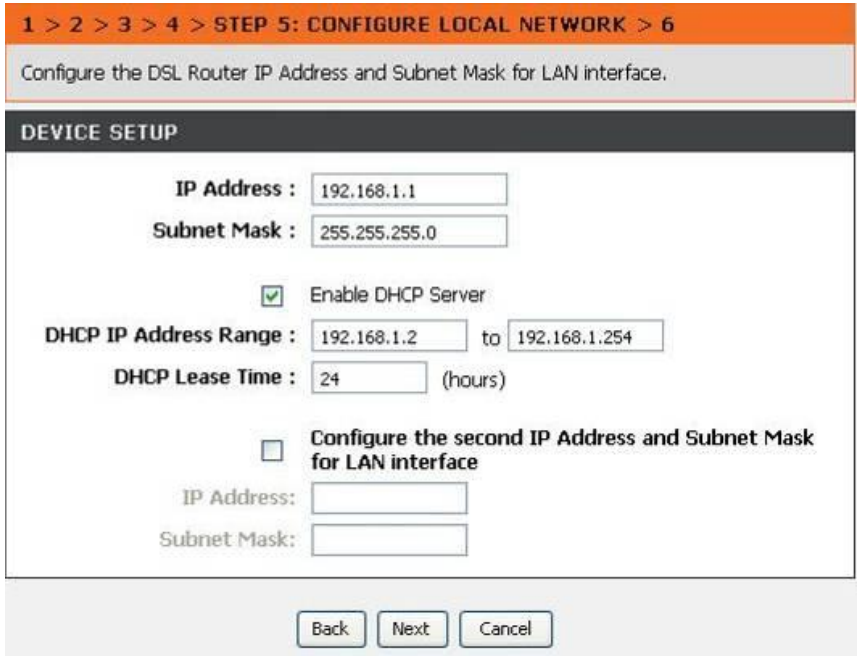
Visibility Status selects **Visible** can be found by wireless clients, **Invisible** to hide your wireless network

Choose one wireless encryption mode for your wireless network. The **Security Level** form low to high as below:
None < **WEP** < **WPA-PSK** < **WPA2-PSK**

Click on the **Next** button to go to the next **Setup Wizard** window.



STEP 5: CONFIGURE LOCAL NETWORK



Configure the DSL **IP Address** and **Subnet Mask** for Lan interfance.

Default setting as below:

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Check **Enable DHCP Server** box to config **DHCP IP Address Range** and **DHCP Lease Time**. Default setting as below:

DHCP IP Address Range: 192.168.1.2 to 192.168.1.254

DHCP Lease Time: 24 hours

Checked the **Configure the second IP Address and Subnet Mask for Lan interfance** box to enter the second IP address and Subnet Mask.

Click on the **Next** button to go to the next **Setup Wizard** window.

STEP 6: COMPLETED AND APPLY

Click **Finish** button to complete Setup.

Click on the **Next** button to go to the next **Setup Wizard** window.

INTERNET SETUP

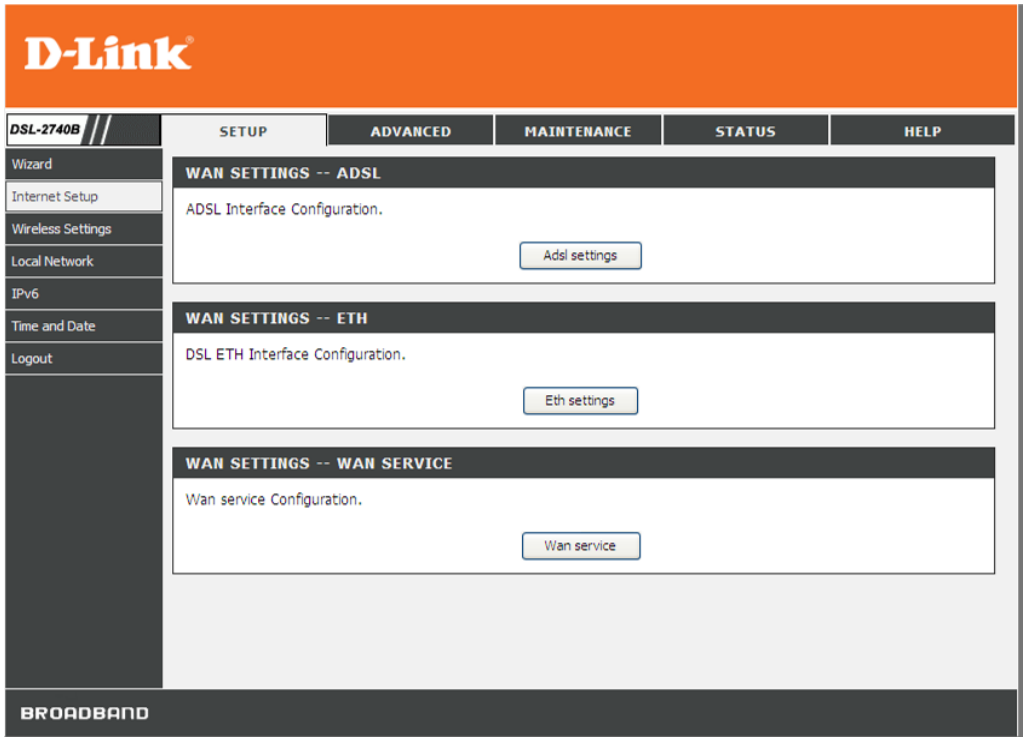
To access the **INTERNET SETUP** (WAN) settings window, click on the **INTERNET Setup** button in the **SETUP** directory in this page:

There are 3 items in **Internet setup**:

WAN SETTING – ADSL
Click on the **Adsl settings** button if you want to configure ADSL Interface Configuration.

WAN SETTING – ETH
Click on the **Eth settings** button if you want to configure DSL ETH Interface Configuration.

WAN SETTING – WAN SERVICE
Click on the **Wan service** button if you want to configure Wan service Configuration.



ADSL INTERFACE CONFIGURATION:

Please click **Add** or **Remove** button to configure ADSL interface.

In **Add** setting page, set **VPI/VCI**, **DSL Latency** and **DSL Link Type.** This information was provided by your ISP

Select **Encapsulation Mode** and **Service Category.**

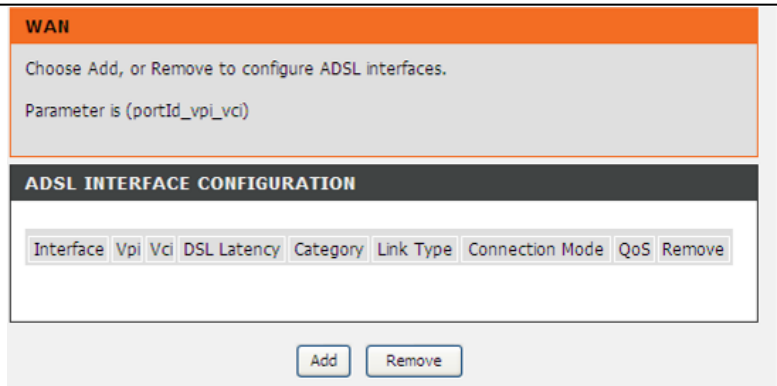
Choose **Select Connection Mode**

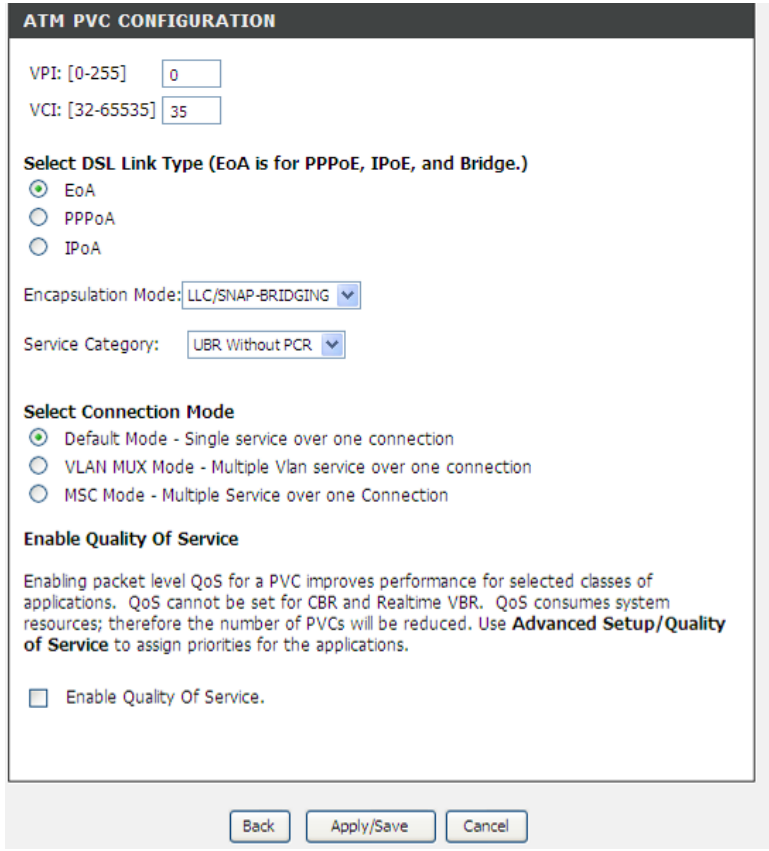
The ATM settings allow the user to adjust ATM Quality of Service (QoS) or traffic parameters to suit specific traffic requirements. For applications or circumstances where packet loss or packet delay is a concern, ATM QoS can be adjusted to minimize problems. For most accounts, it will not be necessary to change these settings. Altering QoS settings can adversely affect performance of some commonly used Internet applications.

If you plan to change QoS or traffic parameters, contact your ISP or network services provider for information on what types of adjustment are available or possible for your account. Your ISP may not support the class of service you want to use.

To adjust ATM QoS parameters, select one of the Service Categories listed here and type in the PCR value in the entry field below. For the VBR service category, an additional parameter (SCR) must also be defined.

Click **Apply/Save** button to apply configuration.



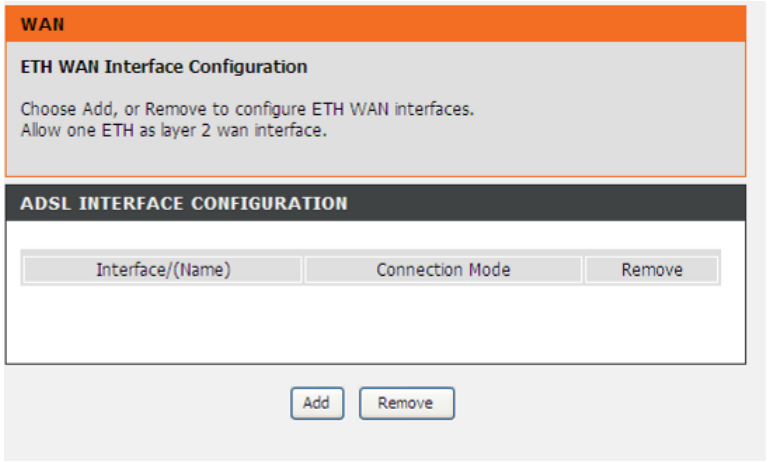


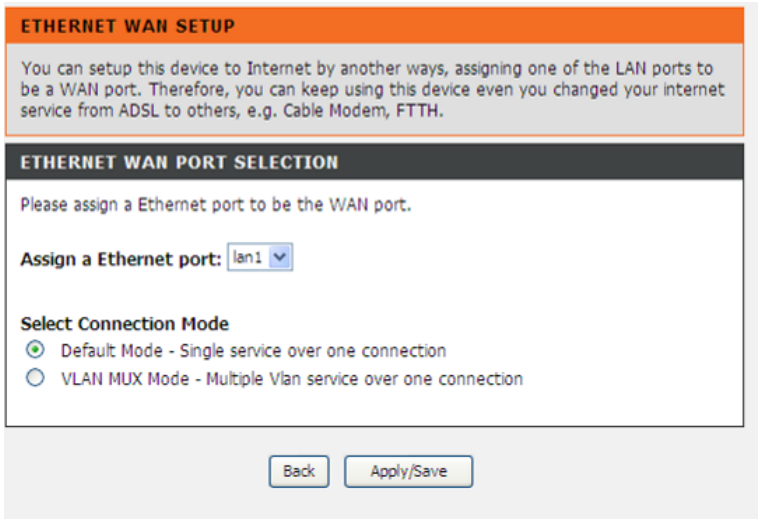
ETH WAN INTERFACE CONFIGURATION:

Please click **Add** or **Remove** button to configure ETH WAN interfaces

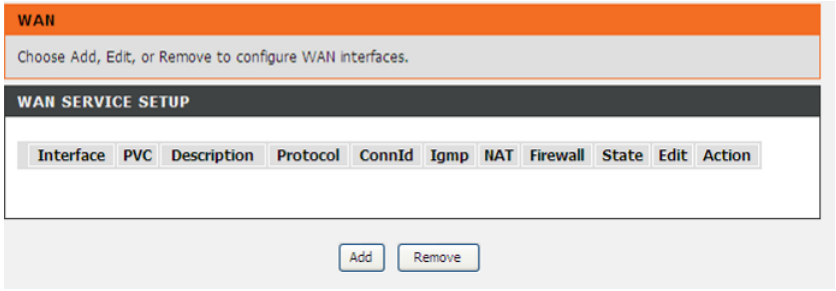
In **Add** setting page, select **a ETH port** to configure ETH WAN and select **Connection Mode**

Click **Apply/Save** button to apply configuration.





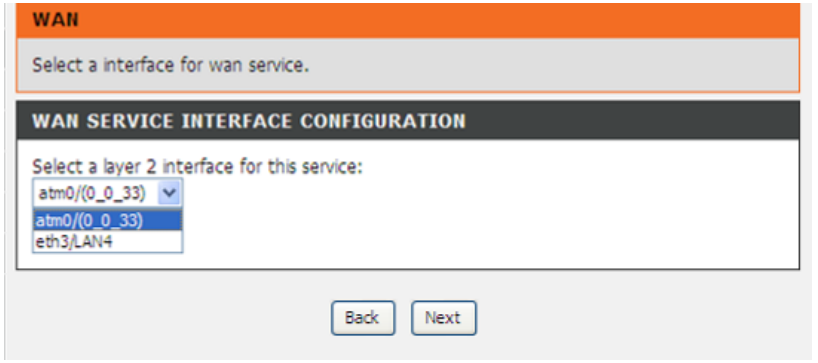
WAN SERVICE SETUP:



Please choose **Add** or **Remove** to configure WAN interfaces

In **Add** setting page, Choose **a layer 2 interface for this service**.

Click **Next** to go to the next page.

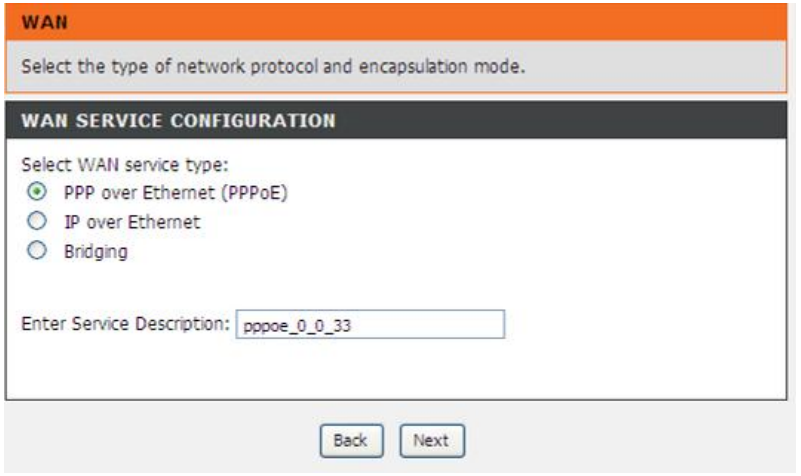


Select the **WAN Service Type** used for the Internet connection.

Your ISP has given this information to you. The connection types available are **PPPoE, IP over Ethernet** or **Bridge Mode**.

When WAN service type was selected, it will appear the connection description in **Enter Service Description**

Click **Next** to go to the next page.



For PPPoE/PPPoA connection

Type in the **Username** and **Password** (and PPPoE Service Name, if required by your ISP).

Type service name which is from your ISP on the **Servername** option.

Choose **PPPoE LLC/Snap-Bridging**, **PPPoE VC-mux**, **PPPoA LLC/encapsulation** and **PPPoA VC-mux**.

Set MTU value which you want but should be less than 1492 on the **MTU**

Enable the **Enable NAT** or **Fullcone NAT**when you want to have WAN and LAN.

Enable the **Enable Firewall** when you want to have the basic filter function, for example, ICMP ping to DSL-2740B.

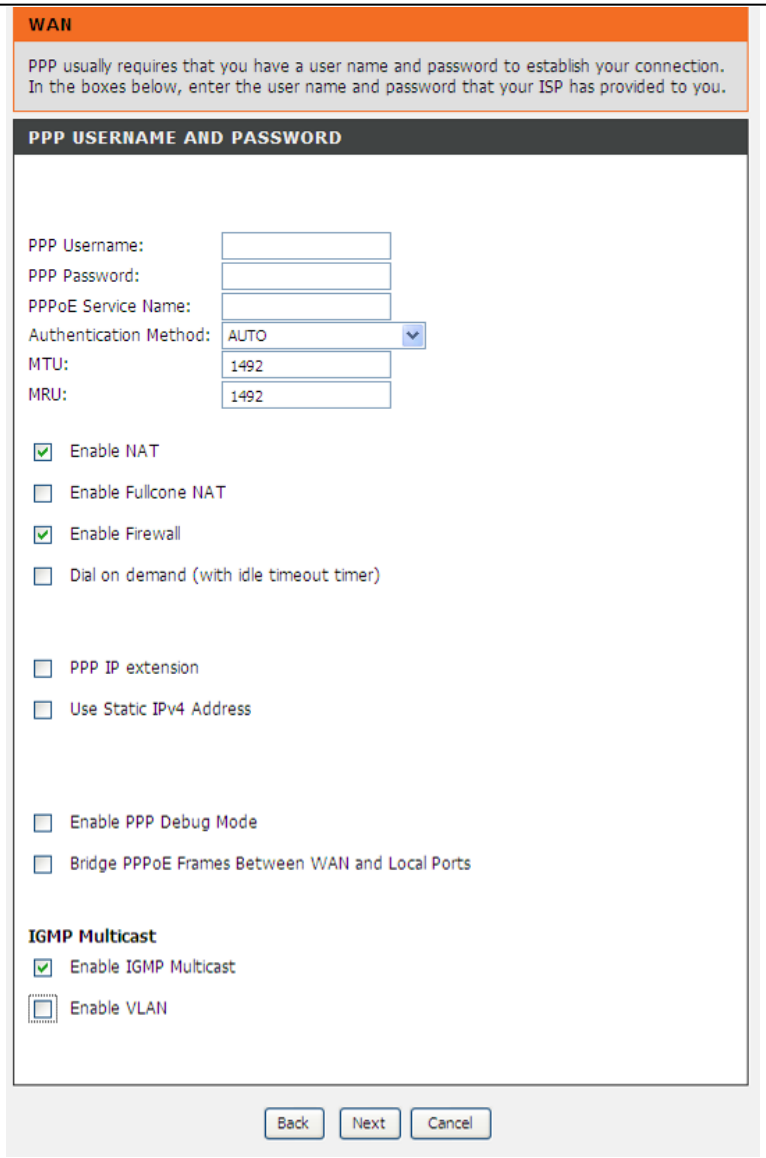
PPP IP Extension:
Router passes the obtained IP address to the local PC and acts as a bridge only modem.

Use Static IPv4 Address:
Enter Static IPv4 Address

Enable the **Enable IGMP Multicast** to send IGMP query packets to the IPTV clients.

Enable VLAN and type the **VLAN ID (0-4095)** which your ISP assigns.

Click on the **Next button** to go to the next window.



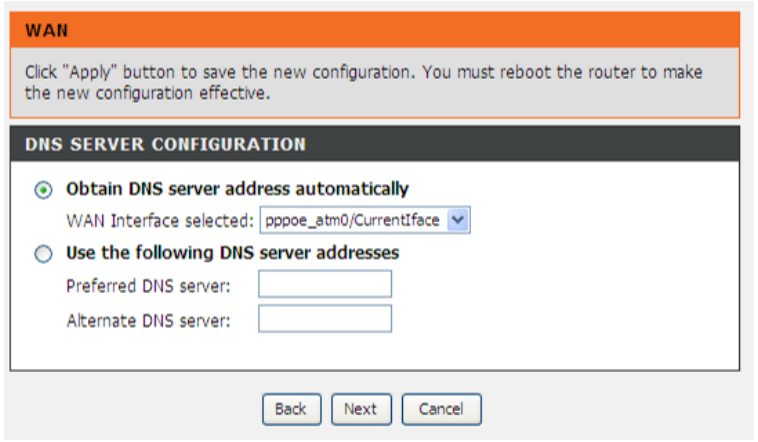
DNS AND DEFAULT GATEWAY

Select **Obtain DNS server address automatically** to get DNS from your ISP.

Or

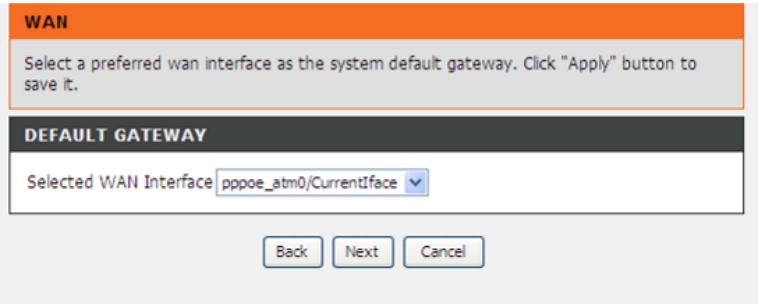
Select **Use the following DNS server addresses** to type the DNS IPs in the **Preferred DNS server** and **Alternate DNS server.**

Click on the **Next button** to go to the next window.



DEFAULT GATEWAY

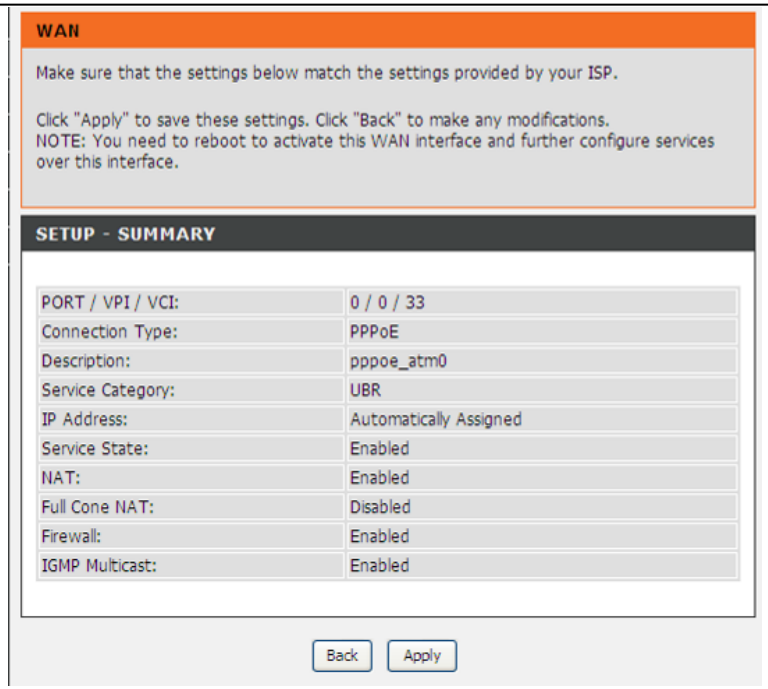
Click on the **Next button** to go to the next window.



SETUP-SUMMARY

Check your Internet setting.

Click on the **Apply** to apply your setting..



For IP over Ehternet connection

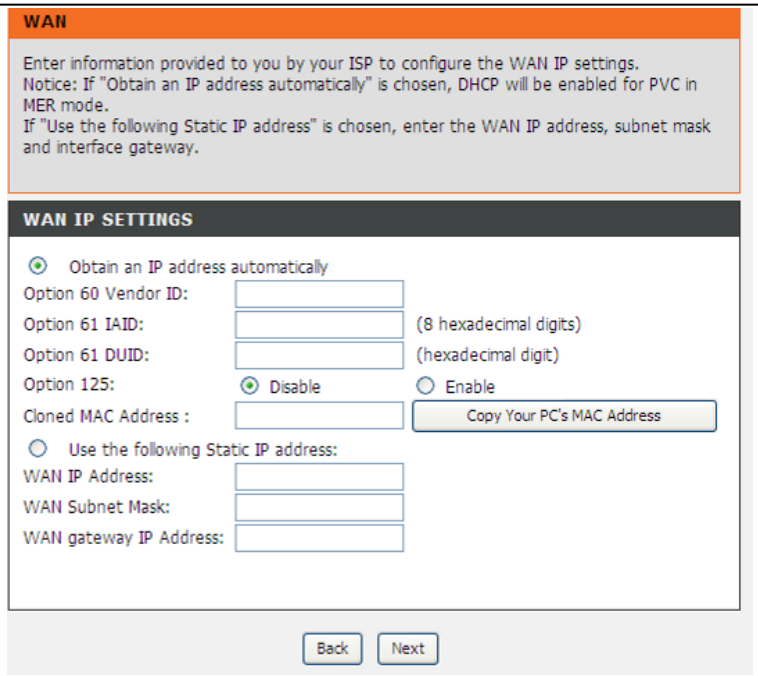
Please Choose **Obtain an IP address automatically** or **Use the following Static IP address**.

When you choose **Obtain an IP address automatically**, set **Option 60 Vendor ID**, **Option 61 IAID**, **Option 61 DUID** which are provided by your ISP.

Select to enable or disable **Option 125** which is provided by your ISP.

When you choose **Use the following Static IP address**, Enter the **WAN IP Address**, **WAN Subnet Mask** and **WAN gateway IP address** which are provided by your ISP.

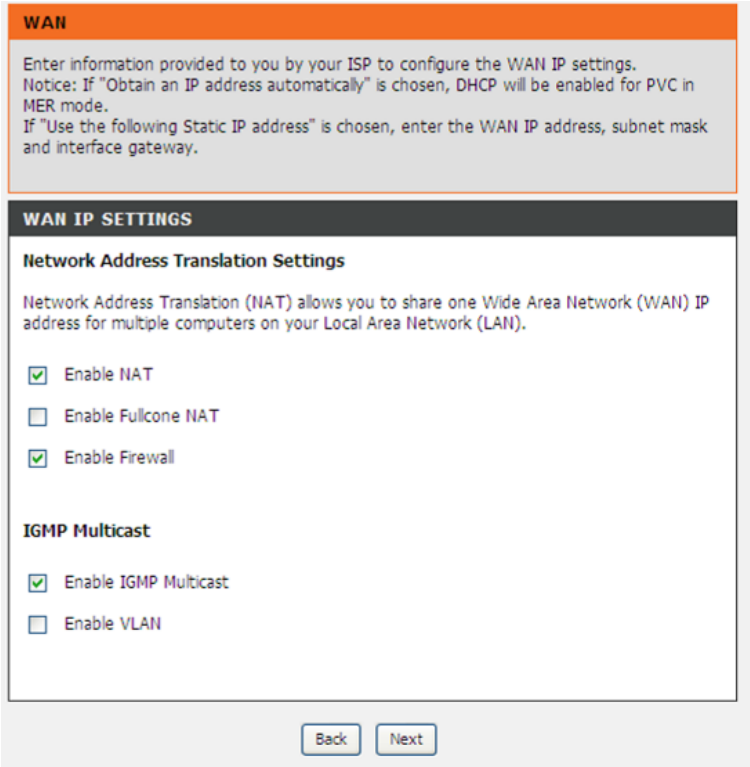
Click **Next** to go to the next page.



WAN IP SETTING

Please Choose to enable **NAT**, **Firewall** and **IGMP Multicast**.

Click **Next** to go to the next page.

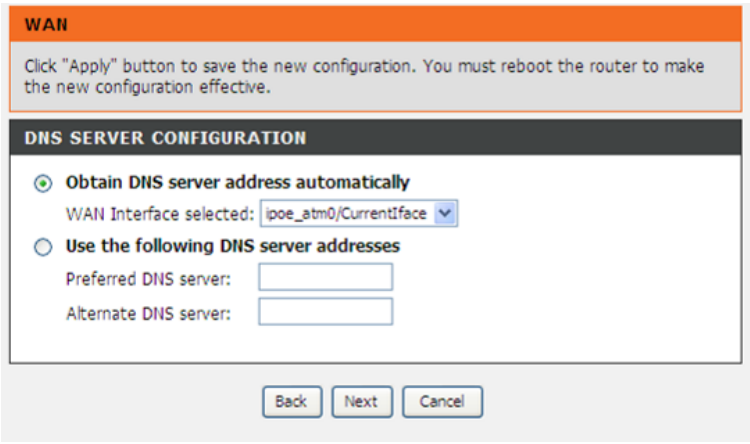


DNS SERVER CONFIGURATION

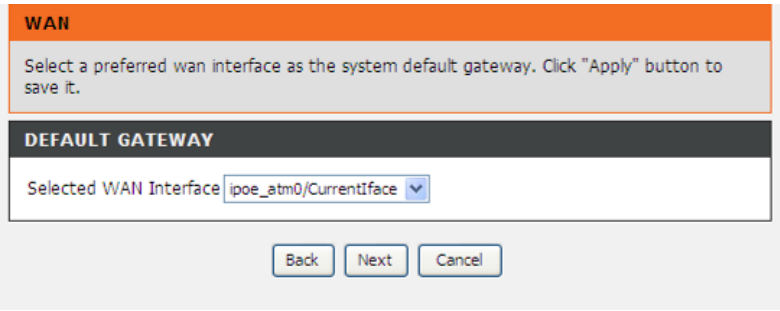
Please Choose **Obtain DNS server address automatically** or **Use the following DNS server address**.

Set **Primary DNS Address** and **Secondary DNS** Server IP **Address** as instructed by your ISP when you choose **Use the following DNS server address**.

Click **Next** to go to the next page.



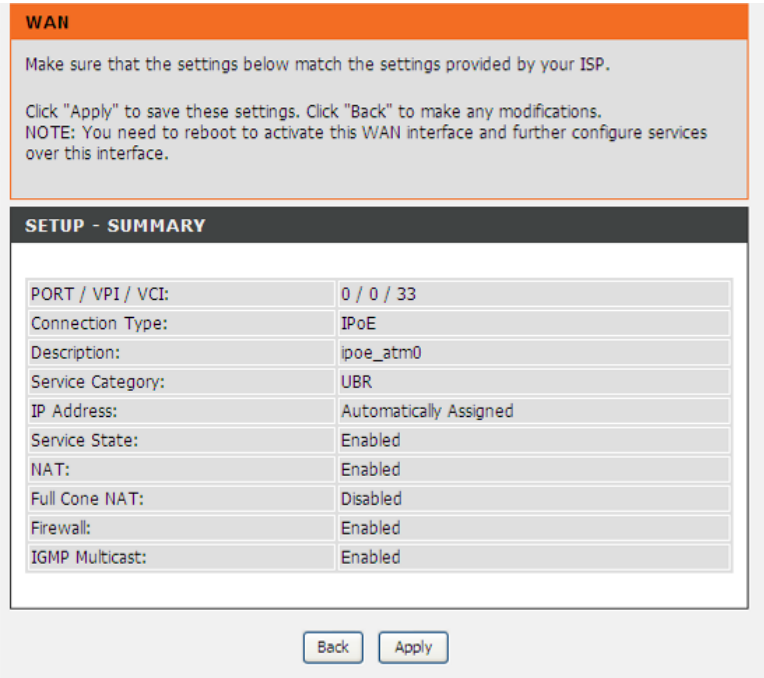
Please Choose the **WAN Interface**



Click **Next** to go to the next page.

Check WAN setup summary,

click **Apply** button to apply the setting.



WIRELESS

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section will also need to be duplicated onto your wireless clients and PC.

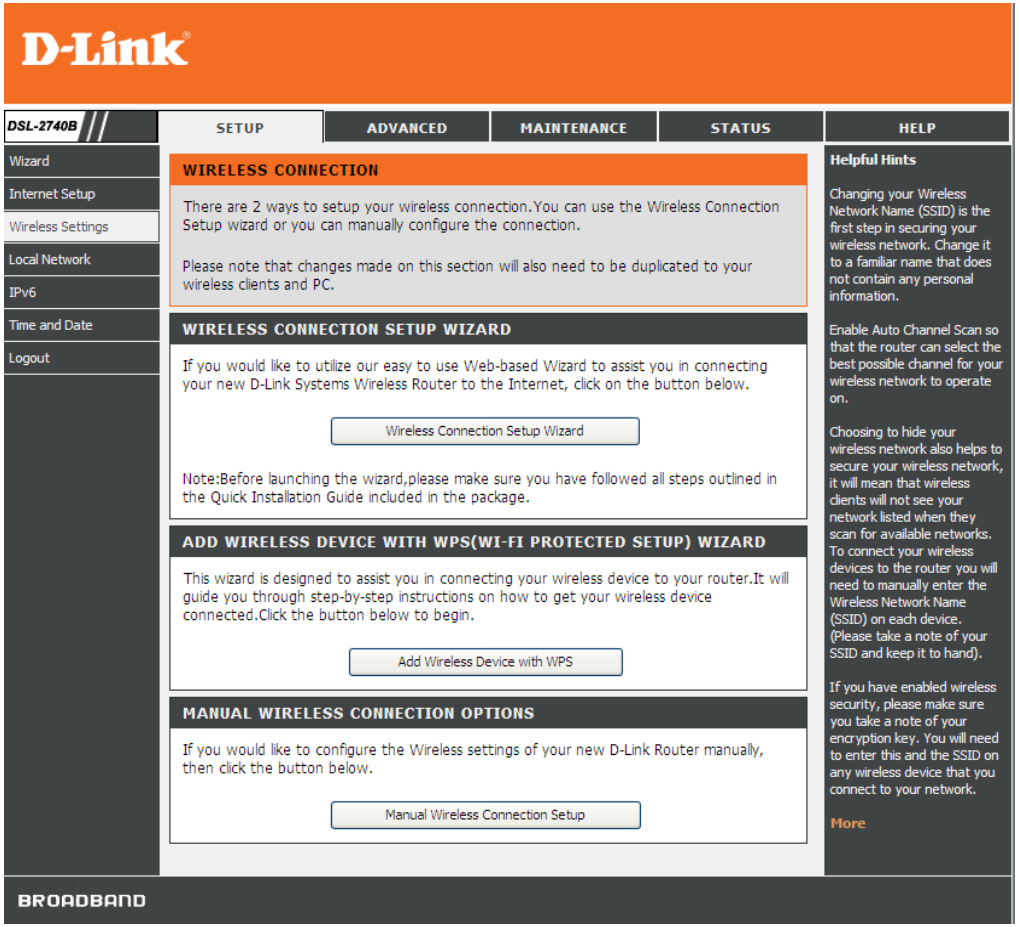
To access the **WIRELESS** (WLAN) settings window, click on the **Wireless Setup** button in the **SETUP tab**.

Wireless Network Setting
Click on the **Wireless Connection Setup Wizard** button to setup the wireless connection in an easy way. It will use Web-based Wizard to assist you in connecting to your new D-Link Systems Wireless Router.

Note:Before launching the wizard,please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

Click on the **Add Wireless Device with WPS** button. This wizard is designed to assist you in connecting your wireless device to your router with WPS. It will guide you through step-by-step instructions on how to get your wireless device connected.

If you would like to configure the Internet settings of you new D-Link Router manually,then click on the **Manual Wireless Connection Setup** button.



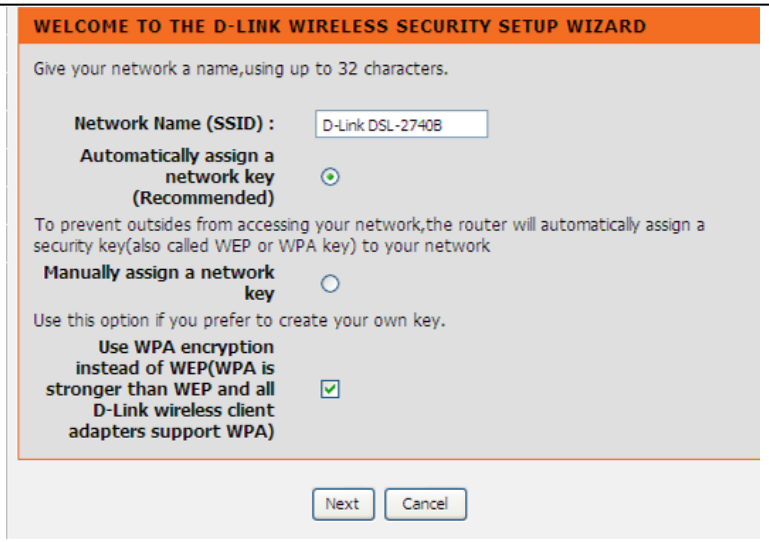
Welcome to the D-Link Wireless Security Setup Wizard
Enable Your Wireless Network Your wireless network is enabled by default. You can simply uncheck the below checkbox to disable wireless

Network Name (SSID) identifies members of the Service Set. Accept the default name or change it to something else. If the default SSID is changed, all other devices on the wireless network must also use the same SSID.

Automatically assign a network key (Recommended) In order to protect your network from hackers and unauthorized users; we adapt Auto (WPA or WPA2) for your wireless security mode. We provide user a random pre-shared key by automatically.

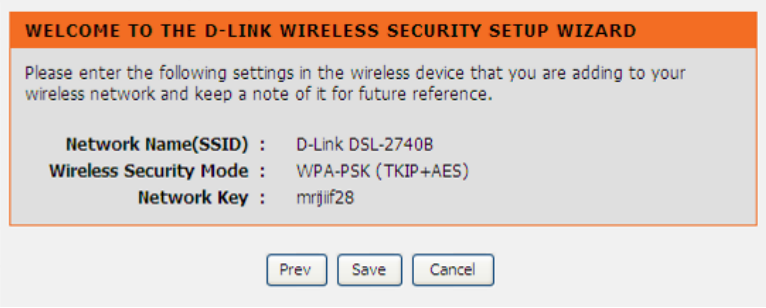
Manually assign a network key You can also set it manually if you do not prefer the key we generate. Type a string (8-63 characters, such as a~z, A~Z, or 0~9.) on the **Pre-Shared** key.

Click **Next** button to go to the next page.
Click **Cancel** button to return to the main menu of Wireless Setup page.



Check your wireless network setting.

Click **Save** button to apply your setting.
Click **Prev** button to pre-page to modify your setting.
Click **Cancel** button to cancel your setting.



Add Wireless Device with WPS

The wizard shows the option to setup WPS by **Auto** or **Manual**.
Auto -- Select this option if your wireless device supports WPS(Wi-Fi Protected Setup)
Manual -- Select this option to display the current wireless settings for you to configure the wireless device manually.

Click **Next** button to go to the next page.
Click **Cancel** button to return to the main menu of Wireless Setup page.

Add Wireless Device with WPS (Automatically)
This page allows you to select PIN or PBC to use WPS method.

PIN -- Enter the PIN code from your wireless device and click the below **Connect** button to start the handshaking.

PBC-- Please press the **Connect** button and hold on for 3 seconds on your wireless device and presses the **Connect** button below within 120 seconds to start the handshaking.

Click **Prev** to go back to previous page.

Add Wireless Device with WPS (WI-FI PROTECTED SETUP) WIZARD

This page will count down the timer and please start WPS on the wireless device you are adding in time.

Add Wireless Device with WPS (Manually)

This screen shows the information for the SSID, Wireless Security Mode and the Network key and allow you to modify the current setting, if you select **Auto** in the previous page, you won't see this page and please refer to next column.

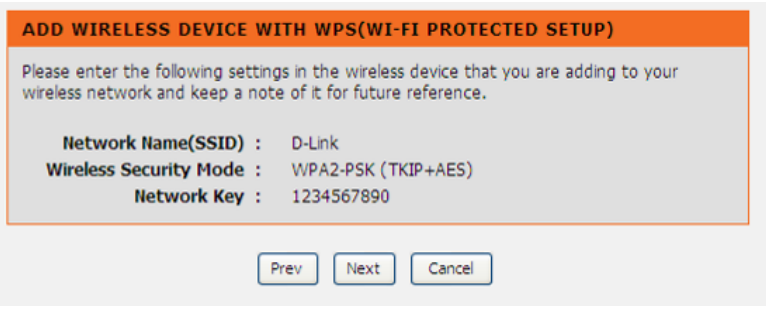
Please type network name on the **Network Name SSID.**

Please type network key on the **Network Key**

Click **OK** button to process the next page.

Add Wireless Device with WPS (WI-FI PROTECTED SETUP)

Finally it will show all the configurations. You can check if it is exact, please click the **Next** button.



Manual WIRELESS Connection Setup SETTINGS
Click on the **Enable Wireless** box to allow the router to operate in the wireless environment. You can use the **Add New** button to set the schedule.

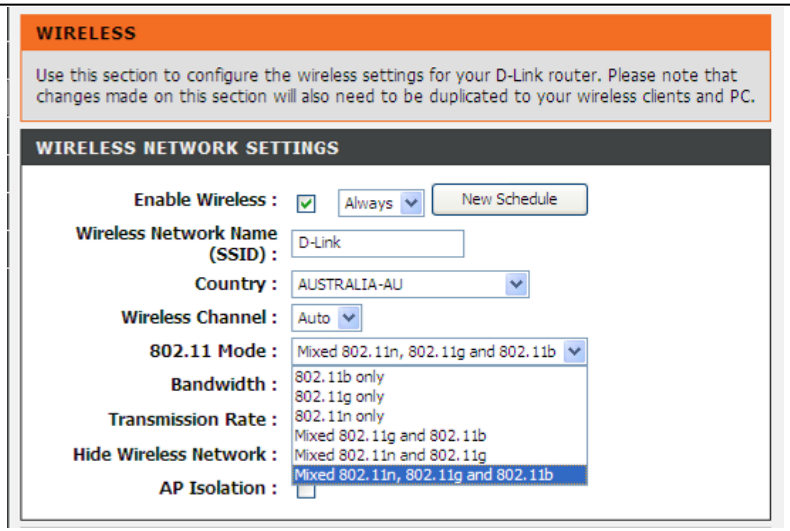
The **SSID** identifies members of the Service Set. Accept the default name or change it to something else. If the default SSID is changed, all other devices on the wireless network must also use the same SSID.

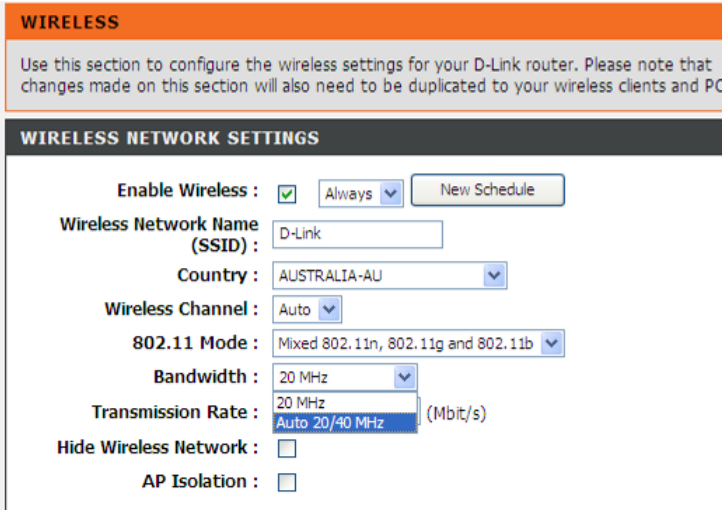
Enable Auto Channel Scan so that the router can select the best possible channel for your wireless network to operate on.

The **Wireless Channel** can let you select the channel of your access point. Channel availability is different for different countries due to their regulation.

Select **802.11 Mode** to operate in b/g/n mode. Or select specified mode to use. **802.11b only**, **802.11g only**, **802.11n only**.

Mixed 802.11g and 802.11b which means DSL-2740B will detect the clients to use 802.11g or 802.11b to synchronize.





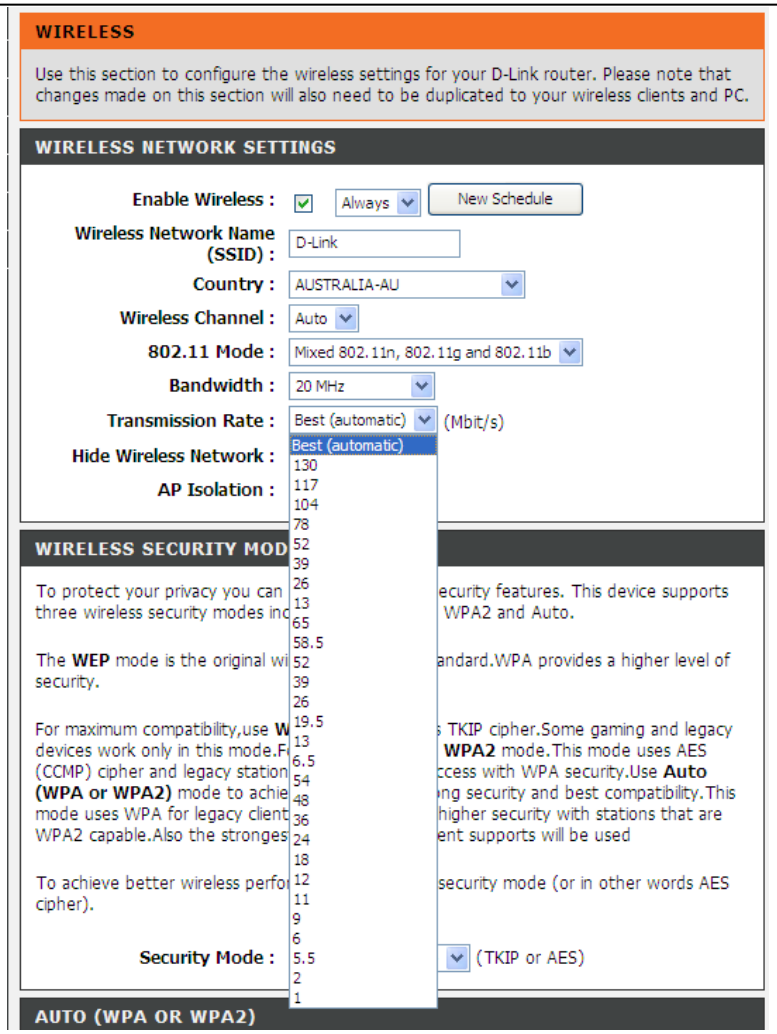
	MANRATE	HT20/GI=0	HT40/GI=0	HT40/GI=1
MCS 0	0x80	6.5Mbps	13.5Mbps	X
MCS 1	0x81	13Mbps	27Mbps	X
MCS 2	0x82	19.5Mbps	40.5Mbps	X
MCS 3	0x83	26Mbps	54Mbps	X
MCS 4	0x84	39Mbps	81Mbps	X
MCS 5	0x85	52Mbps	108Mbps	X
MCS 6	0X86	58.5Mbps	121.5Mbps	X
MCS 7	0x87	65Mbps	135Mbps	150Mbps
MCS 8	0x88	13Mbps	27Mbps	X
MCS 9	0x89	26Mbps	54Mbps	X
MCS 10	0x8a	39Mbps	81Mbps	X
MCS 11	0x8b	52Mbps	108Mbps	X
MCS 12	0x8c	78Mbps	162Mbps	X
MCS 13	0x8d	104Mbps	216Mbps	X
MCS 14	0x8e	117Mbps	243Mbps	X
MCS 15	0x8f	130Mbps	270Mbps	300Mbps

Mixed 802.11n, 802.11g and 802.11b which means DSL-2740B will detect the clients to use 802.11n, 802.11g or 802.11b to synchronize.

Channel Width, Choose 20MHz or Auto 20/40MHz to decide the Transmission Rate.

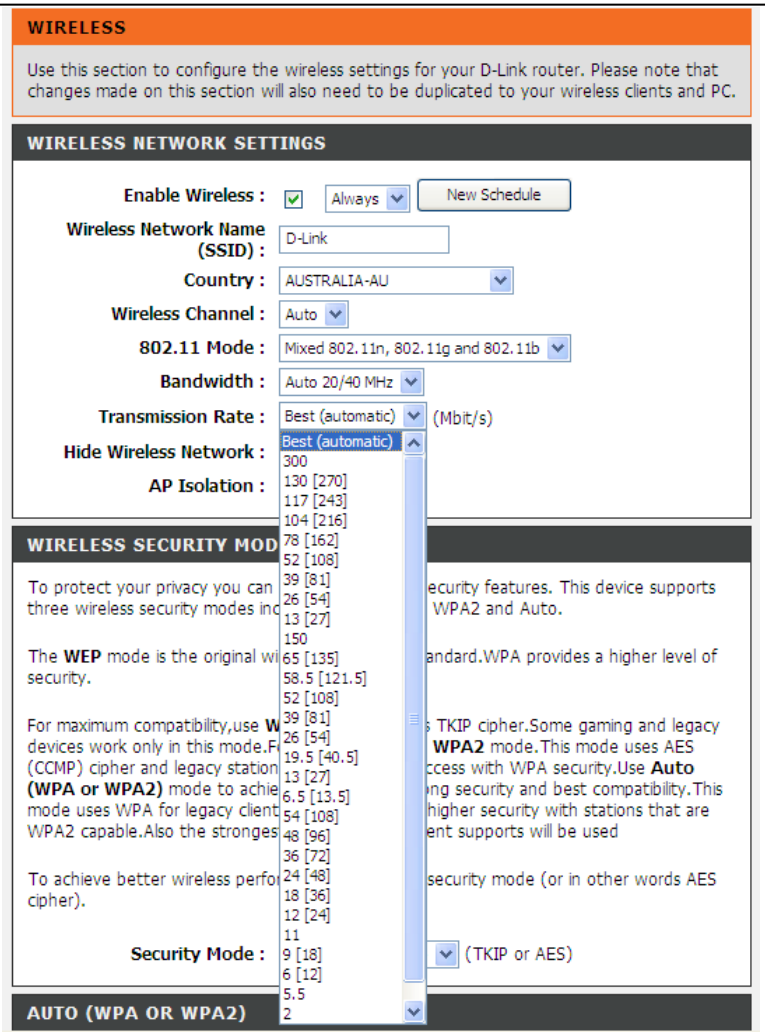
Transmission Rate, suggest keeping the Best (automatic) selection. This is related to Receive Sensitivity as follows,

If you only use the Transmission rate of the 20MHz, please refer to the right picture.



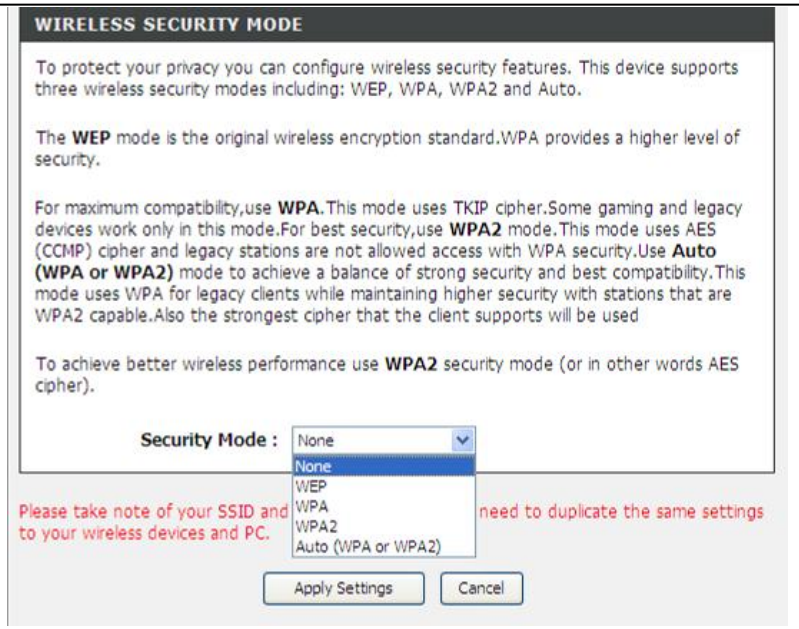
If you want to use the max. rate 150Mbps or the max. rate 300Mbps on 40MHz, please choose the **Channel Width:** Auto 20/40MHz

Choose Visible or Invisible to decide if you want to show its SSID.



WIRELESS SECURITY Mode

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: **WEP**, **WPA**, **WPA2**, Auto(WPA or WPA2). WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.



WIRELESS SECURITY MODE – WEP

WEP (Wireless Encryption Protocol) encryption can be enabled for security and privacy. WEP encrypts the data portion of each frame transmitted from the wireless adapter using one of the predefined keys. The router offers 64 or 128 bit encryption with four keys available.

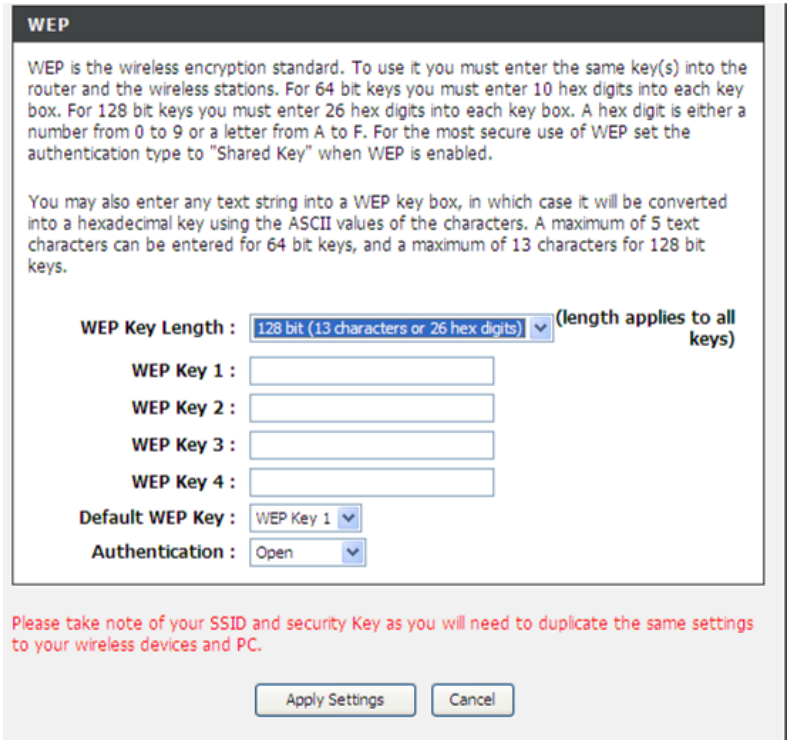
Select **WEP Key Length** from the drop-down menu. (**128 bit** is stronger than **64 bit**)

Specify the encryption key from the **Current Network Key** drop-down menu.

Enter the key into the **WEP Key** field 1~4. (Key length is outlined at the bottom of the window.)

Select **Authentication** type from the drop-down menu. (**Shared** is better than **Open**)

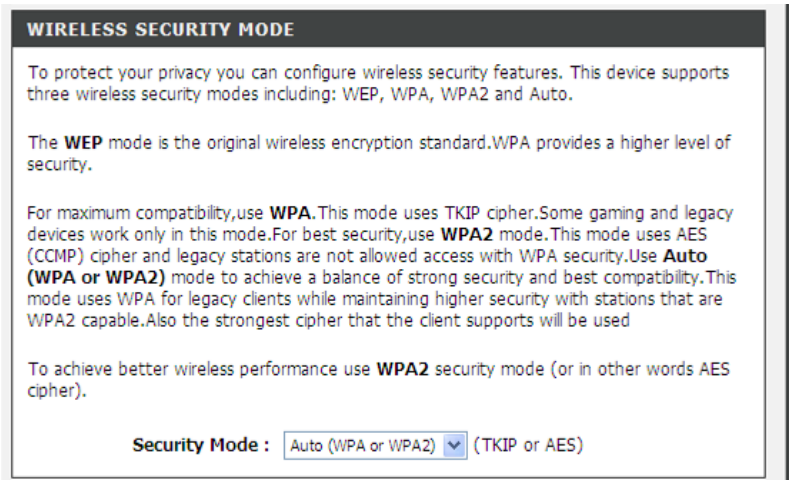
Click on the **Apply Settings** button to apply settings.



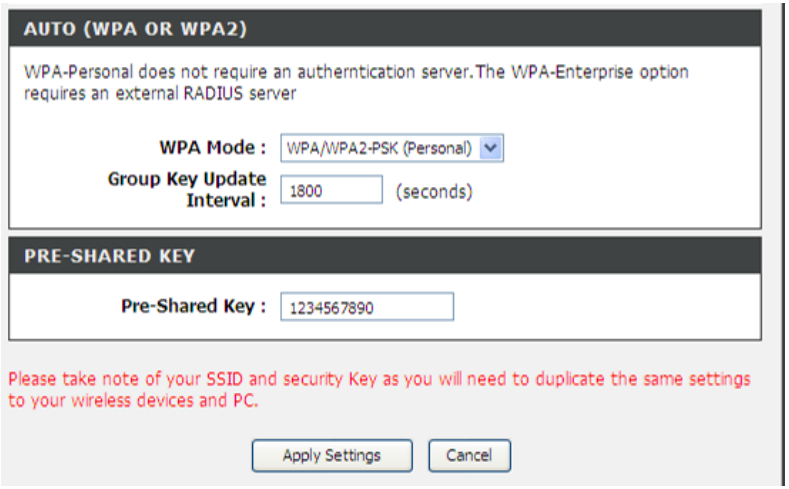
WIRELESS SECURITY MODE – WPA, WPA2

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2** mode. This mode uses AES (CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

Choose **WPA** / **WPA2** / **Auto(WPA or WPA2)** on the **Security Mode**



Type the value seconds on the **Group Key Update Interval.** The default value is 1800.



WPA / WPA2 -PSK (Personal)

Type the string on the **Pre-Shared Key**

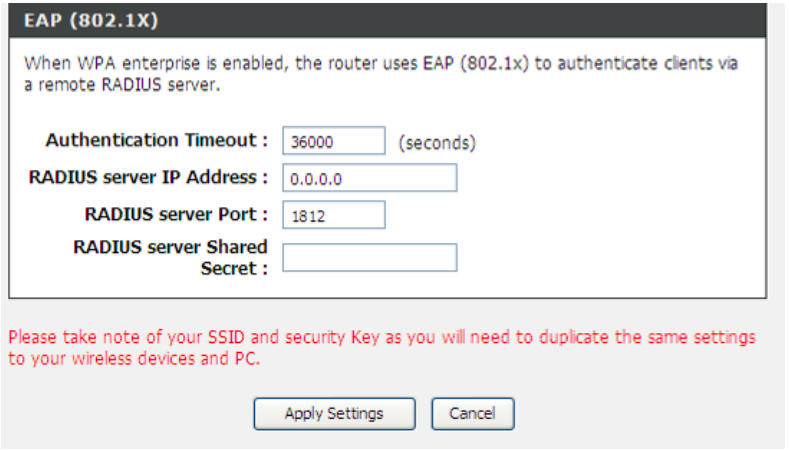
Click the **Apply Settings** button to save the configuration.

WPA / WPA2 (Enterprise)

Some network-security experts now recommend that wireless networks use 802.1X security measures to overcome some weaknesses in standard WEP applications. A RADIUS server is used to authenticate all potential users. .

Enter your RADIUS server data: **IP Address, Port,** and **Key**.

Click on the **Save Settings** button to apply settings.



LOCAL NETWORK

You can configure the LAN IP address to suit your preference. Many users will find it convenient to use the default settings together with DHCP service to manage the IP settings for their private network. The IP address of the Router is the base address used for DHCP. In order to use the Router for DHCP on your LAN, the IP address pool used for DHCP must be compatible with the IP address of the Router. The IP addresses available in the DHCP IP address pool will change automatically if you change the IP address of the Router.

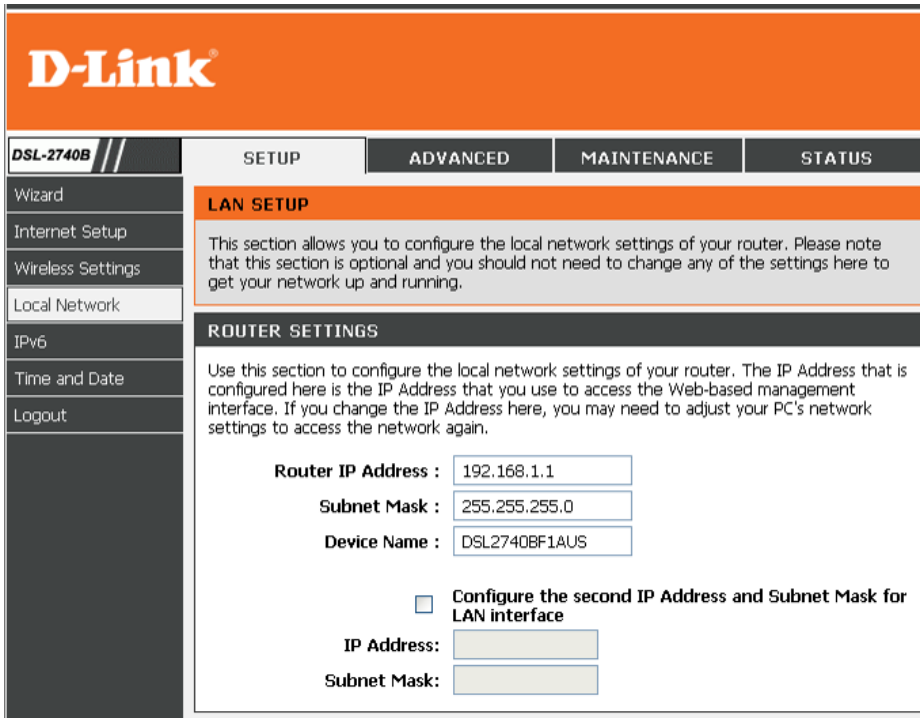
To access the **Local Network** setting window, click on the **Local Network** button in the **SETUP tab**.

ROUTER SETTINGS
To change the **Router IP Address** or **Subnet Mask**, type in the desired values.

DHCP SERVER SETTINGS (OPTIONAL)
The **Enable DHCP Server** is selected by default for the Router's Ethernet LAN interface.

Set the **DHCP IP Address Range** and the default is from **192.168.1.2** to **192.168.1.254**. The IP address pool can be up to 253 IP addresses.

.

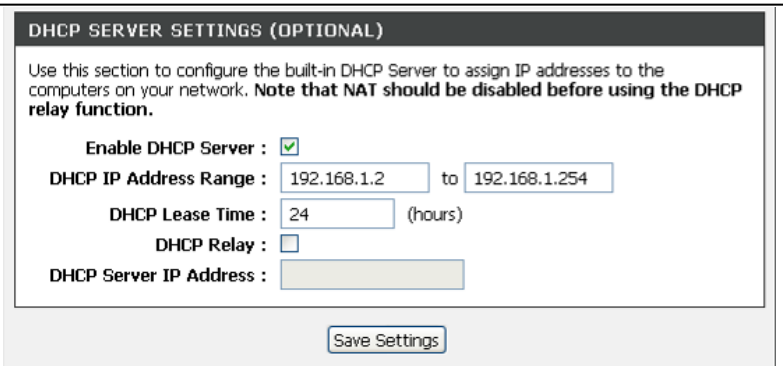


Set the value hours on the **DHCP Lease Time**

If you don't want DSL-2740B to be the DHCP server, you can enable

DHCP relay to pass the DHCP discover packets of the clients to another DHCP server.

Please set the DHCP server IP address on the **DHCP Server IP Address**



ADD/EDIT DHCP RESERVATION (OPTIONAL)

Select the **Enable** to let you reserve the **IP Address** for the designated PC with the configured **MAC Address**.

The **Computer Name** can help you recognize the PC with the **MAC Address**, such as "Father's Laptop".

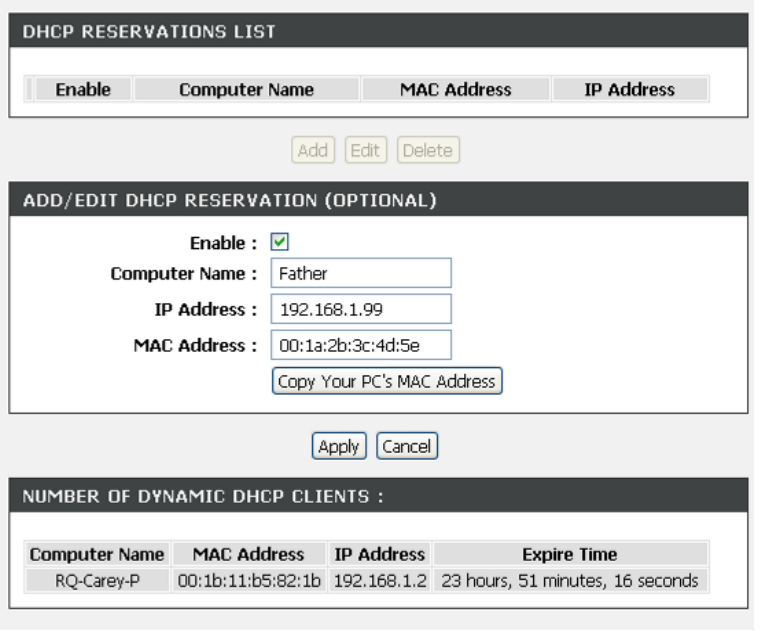
Clicking on the **Copy Your PC's MAC Address** button to help you get the Mac address from the PC you are using now browsing this web page.

Click on the **Save button** to save the settings

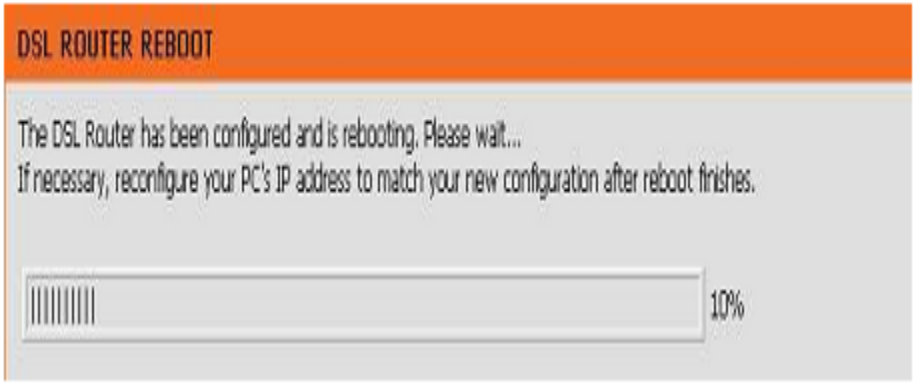
DHCP RESERVATIONS LIST
After saved the DHCP reservation, the **DHCP RESERVATIONS LIST** will list the configuration.

The **NUMBER OF DYNAMIC DHCP CLIENTS** shows how many DHCP clients (PC or Laptop) connected to the router currently.

Click on the **Save Settings** button.



You will be asked to reboot by a pop-up window. Click on the **OK** to reboot the router.



LAN SETUP
Do not turn the Router off while it is rebooting.

You might need to re-configure your PC NIC settings to enter the Router's web manager after reboot.

IPv6

The **IPv6** configuration option allows you configure IPv6 internet connection. You can configure follow **IPv6 Internet Connection Setup Wizard** utilize or **Manually Ipv6 Internet Connection Setup**.

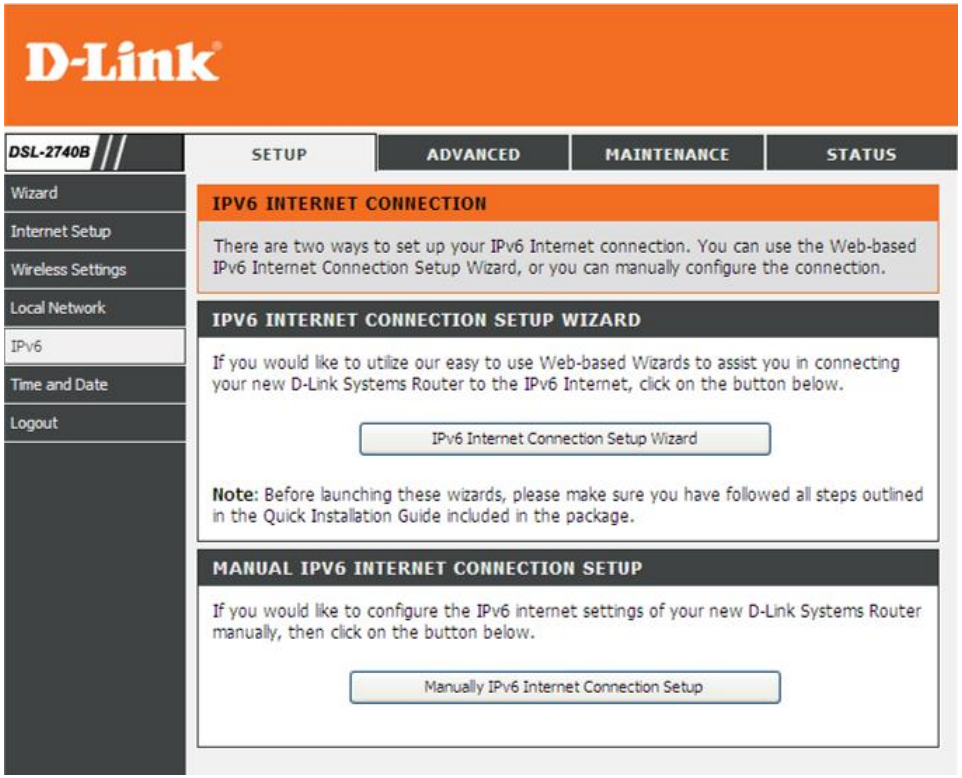
To access the **IPv6** setting window, click on the **IPv6** button in the **SETUP tab**

IPv6 INTERNET CONNECTION

There are two ways to set up your IPv6 Internet connection.

IPv6 Internet Connection Setup Wizard
You can use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the IPv6 Internet.

Manual IPv6 Internet Connection Setup
You can configure the IPv6 internet settings of your new D-Link Systems Router manually



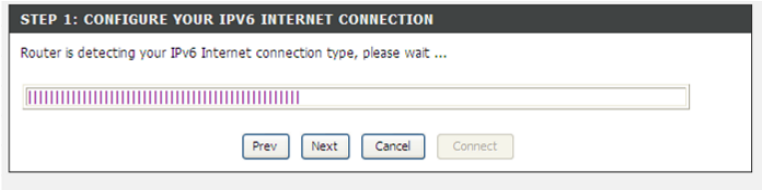
IPv6 Internet Connection Setup Wizard

Welcome to the D-Link IPv6 Internet Connection Setup Wizard

This wizard will guide you through a step-by-step process to configure a new connection to the IPv6 Internet

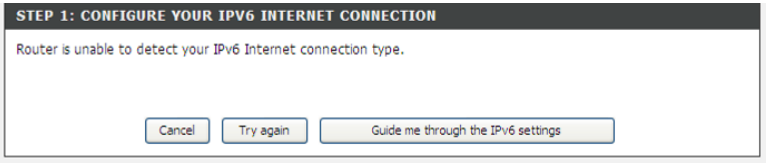
Click on the **Next** button.

Step 1: Configure Your IPv6 Internet Connection



Router is detecting your IPv6 Internet connection type

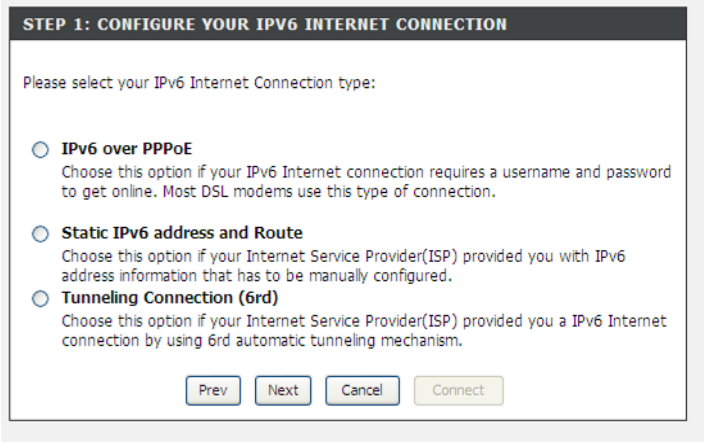
Click on the **Next** button.



If Router unable to detect your IPv6 Internet connection type

Click **Try again** button to detecting again or click **Guide me through the IPv6 setting** button to select your Internet Connection type.

Choose one of your IPv6 connection type



IPv6 over PPPoE

Static IPv6 address and Route

Tunneling Connection (6rd)

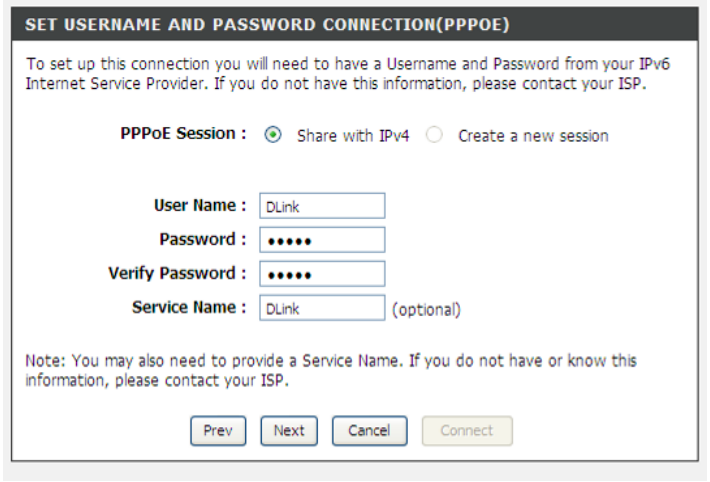
Click on **Next** button

IPv6 over PPPoE

To set up this connection you will need to have a Username and Password from your IPv6 Internet Service Provider

Type **User Name**, **password**, **Verify password** and **service Name** (if necessarily)**.**

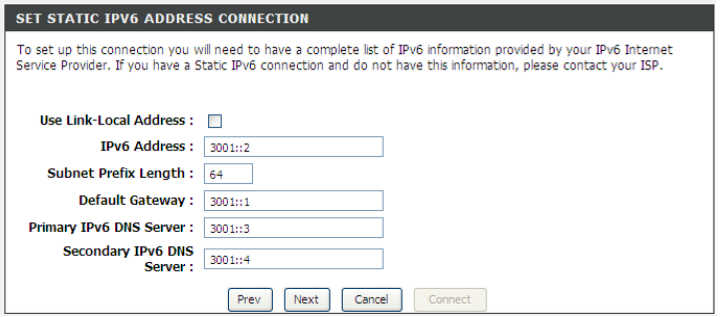
Click on **Next** button



Static IPv6 address and Route

To set up this connection you will need to have a complete list of IPv6 information provided by your IPv6 Internet Service Provider.

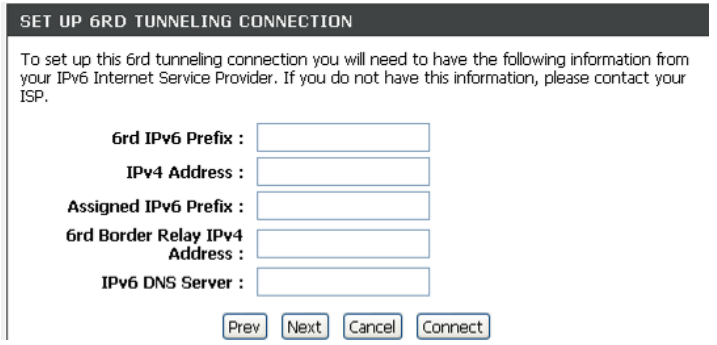
Click on **Next** button



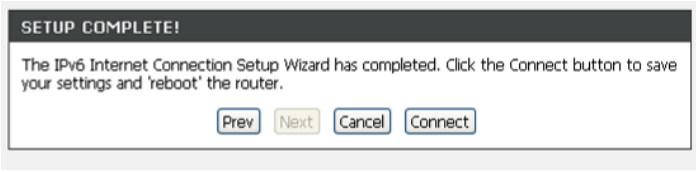
Tunneling Connection (6rd)

To set up this connection you will need to have a complete list of IPv6 information provided by your IPv6 Internet Service Provider.

Click on **Next** button

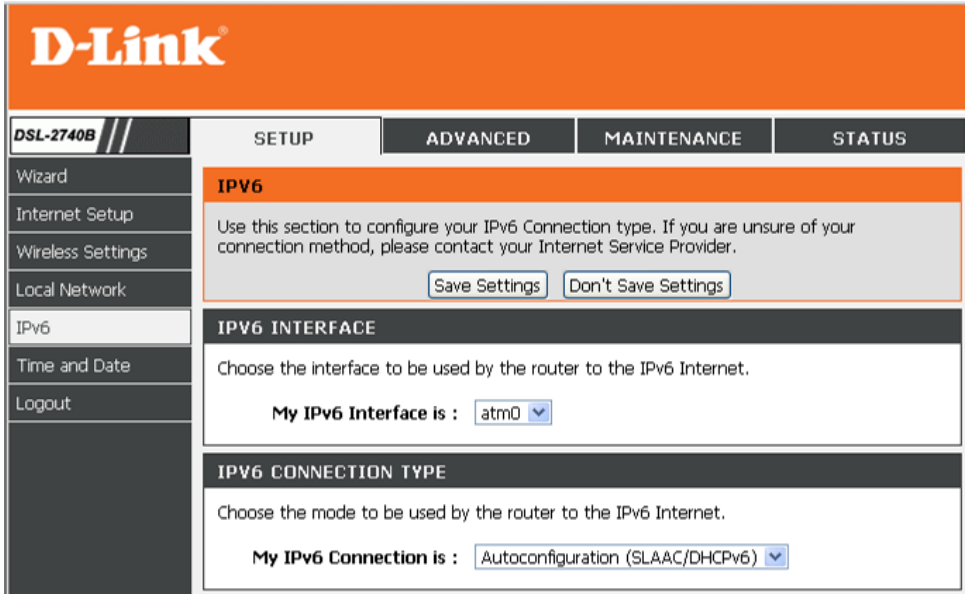


SETUP COMPLETE



After setup IPv6 connection by **Wizard**, click **Connect** button to establish IPv6 Internet connection

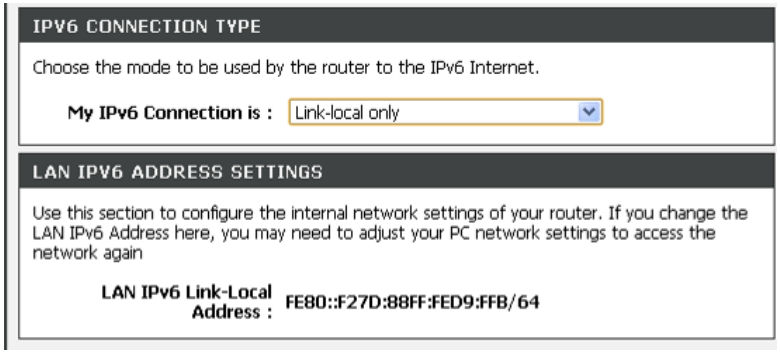
Manual IPv6 Internet Connection Setup
Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.



IPv6 INTERFACE
Choose the IPv6 Interface in the drop-down menu.

IPv6 CONNECTION TYPE
Choose the IPv6 internet connection type in the drop-down menu:
Link-local only,
Static IPv6,
Autoconfiguration (SLAAC/DHCPv6),
PPPoE,
DS-Lite.

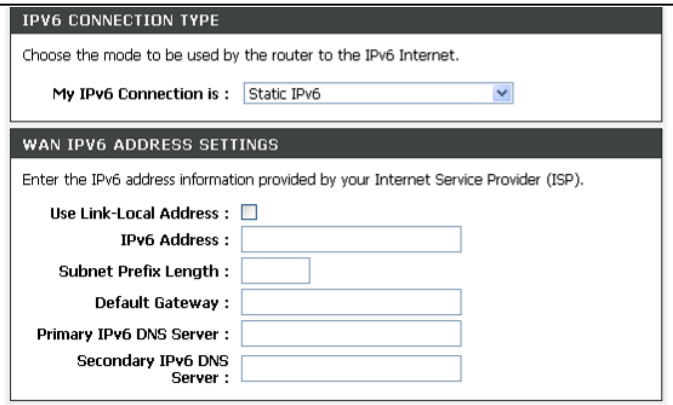
Connection type: Link-local only



LAN IPv6 ADDRESS SETTING

Link-local only is communication with in internal network. The **LAN IPv6 Link-local Address** is used default setting.

Connection type: Static IPv6



WAN IPv6 ADDRESS SETTINGS

You can check **Use Link-Local Address box** to Link-local only, or type the WAN **IPv6 Address** and **Subnet Prefix Length**.

Type **Default Gateway**, **Primary IPv6 DNS server** and **Secondary IPv6 DNS server**.

These information provided by your Internet Service Provider (ISP)

LAN IPv6 ADDRESS SETTINGS

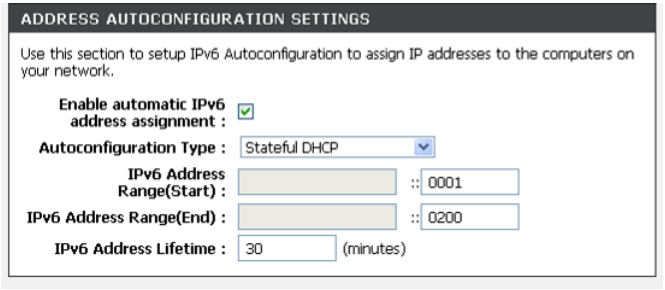
Configure the internal network settings of your router. You can change the **LAN IPv6 Address**.

ADDRESS AUTOCONFIGURATION SETTINGS

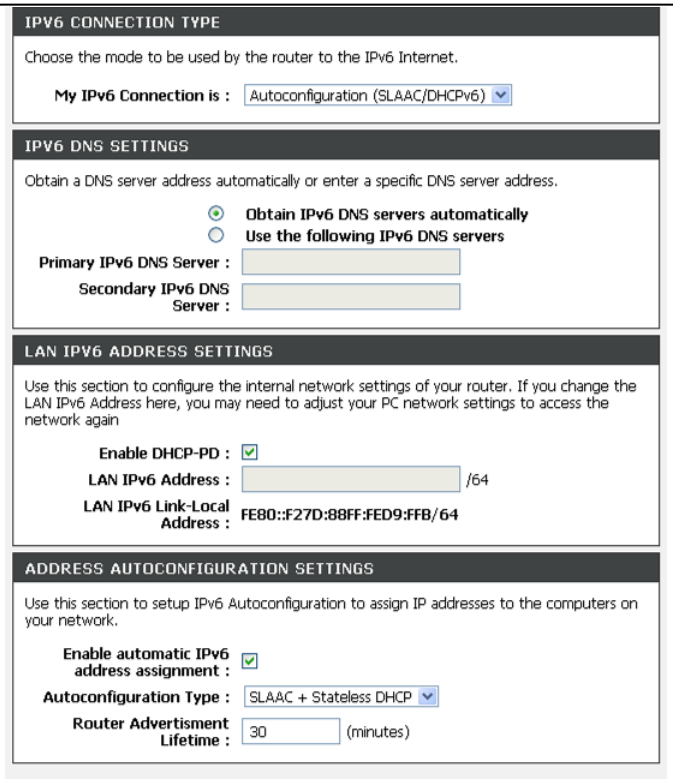
SLAAC+Stateless DHCP to set computers on Router network obtained IPv6 address by stateless DHCP.

SLAAC+RDNSS to set computers on Router network obtained IPv6 address by RDNSS

Stateful DHCP to set computers on Router network obtained IPv6 address by Stateful DHCP, you need type the IPv6 Address Range (Start and End)



Connection type: Autoconfiguration (SLAAC/DHCPv6)



IPv6 DNS SETTING

Choose Obtain IPv6 DNS servers automatically or type **Primary IPv6 DNS server** and **Secondary IPv6 DNS server**.

LAN IPv6 ADDRESS SETTINGS

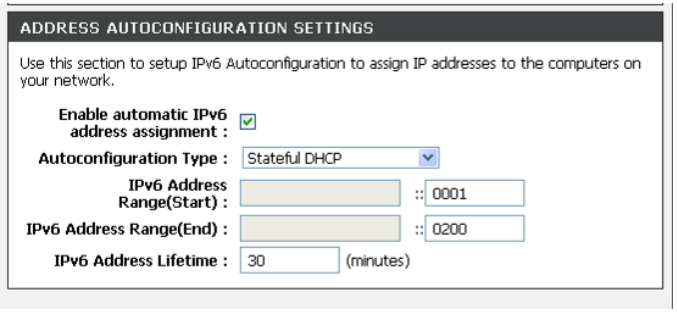
Enable DHCP-PD to used Prefix Delegation assigned IPv6 Prefix. Or you can change the **LAN IPv6 Address**.

ADDRESS AUTOCONFIGURATION SETTINGS

SLAAC+Stateless DHCP to set computers on Router network obtained IPv6 address by stateless DHCP.

SLAAC+RDNSS to set computers on Router network obtained IPv6 address by RDNSS

Stateful DHCP to set computers on Router network obtained IPv6 address by Stateful DHCP, you need type the IPv6 Address Range (Start and End)



Connection type: PPPoE

PPPoE session set **Share with IPv4**

At **Address Mode** if you choose **Dynamic IP**, router will obtained WAN IPv6 address by Dynamically or you can set static IPv6 address in **Static IP Address/Prefix Length** to router.

Type **User Name**, **Password**, **Verify Password**, **Service Name**(if necessarily),

Reconnect Mode set to **Always on**, set MTU value which you want but should be less than 1492 on the **MTU**

These information provided by your Internet Service Provider (ISP)

IPv6 DNS SETTING

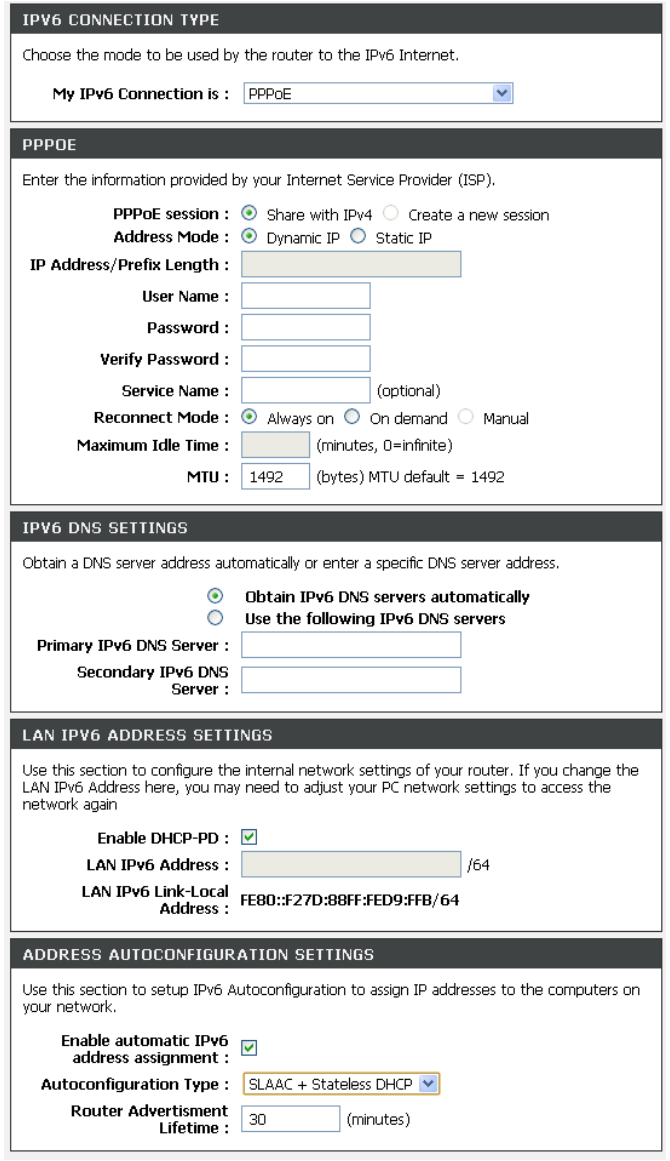
Choose Obtain IPv6 DNS servers automatically or type **Primary IPv6 DNS server** and **Secondary IPv6 DNS server**.

LAN IPv6 ADDRESS SETTINGS

Enable DHCP-PD to use Prefix Delegation assigned IPv6 Prefix. Or you can change the **LAN IPv6 Address**.

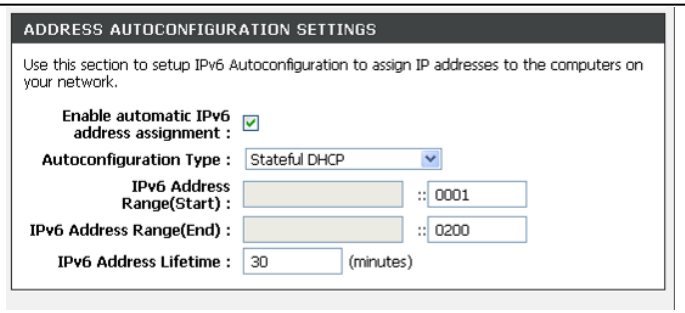
ADDRESS AUTOCONFIGURATION SETTINGS

SLAAC+Stateless DHCP to set computers on Router network obtained IPv6 address by stateless DHCP.



SLAAC+RDNSS to set computers on Router network obtained IPv6 address by RDNSS

Stateful DHCP to set computers on Router network obtained IPv6 address by Stateful DHCP, you need type the IPv6 Address Range (Start and End)

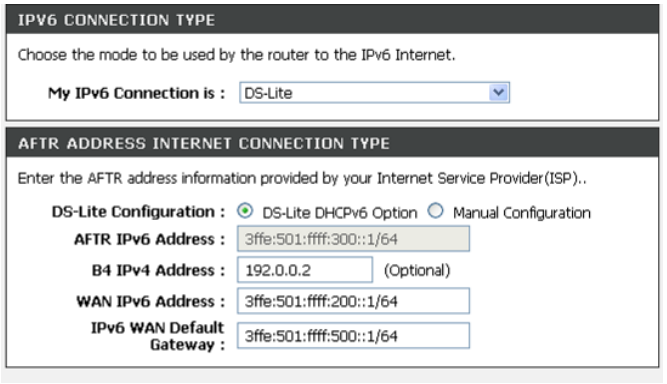


Connection type: DS-Lite

Choose **DS-Lite DHCPv6 Option**, If you choose **Manual Configuration**, need type the **AFTR IPv6 Address**.

Type **B4 IPv4 Address** (if necessarily)

Type **WAN IPv6 Address** and **IPv6 WAN Default Gateway**.



TIME AND DATE

The **Time and Date** configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

To access the **TIME** setting window, click on the **Time and Date** button in the **SETUP tab**

TIME SETTING:

Check the **Automatically synchronize with Internet time servers**

Select specific time server to use from the **First NTP time server and Second NTP time server** specific NTP server name.

TIME CONFIGURATION:

Select your operating time zone from the **Time Zone** drop-down menu.

If you need to use the daylight saving, just choose the **Enable Daylight Saving**. Daylight saving is a period from late Spring to early Fall.

Set how many hours to change the time for Daylight saving Offset.

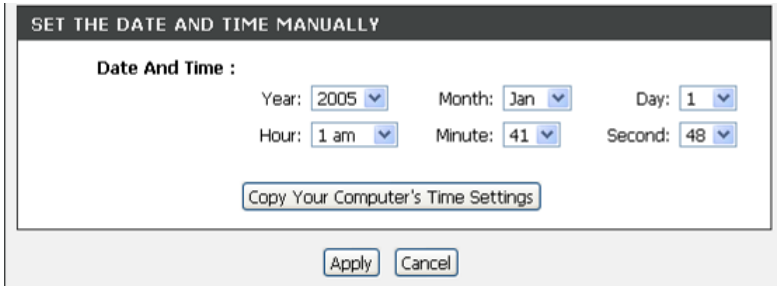
Configure Daylight Saving Dates,
Daylight Saving time starts in the most parts of the **United States** on the second Sunday of March. Each time zone in the United States starts Daylight Saving time at 2 A.M. Thus, in the United States you must use **March**, **Second**, **Sunday**, at **2:00 A.M.**

Daylight Saving time starts in the **European Union** on the last Sunday of March. Thus, in European Union, you must select **March**, **Last**, **Sunday**. The time must depend on your country's time zone. For example, In

Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT or UTC (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.**

Daylight Saving time ends in the most parts of the United States on the First Sunday of November. Each time zone in the United States must use Daylight Saving time at 2:00 A.M. Thus, in the United States you must set **November**, **First**, **Sunday**, at **2:00 A.M**.

Daylight Saving time ends in the European Union on the Last Sunday of October. For instance, in Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.**



SET THE DATE AND TIME MANAULLY

You can also use the **Copy Your Computer's Time Settings** to synchronize the Date and Time to your local PC. Or, you also can adjust **Year**/**Month**/**Day**/**Hour**/**Minute**/**Second** manually.

Please click the **Apply** button to save the configuration.

ADVANCED

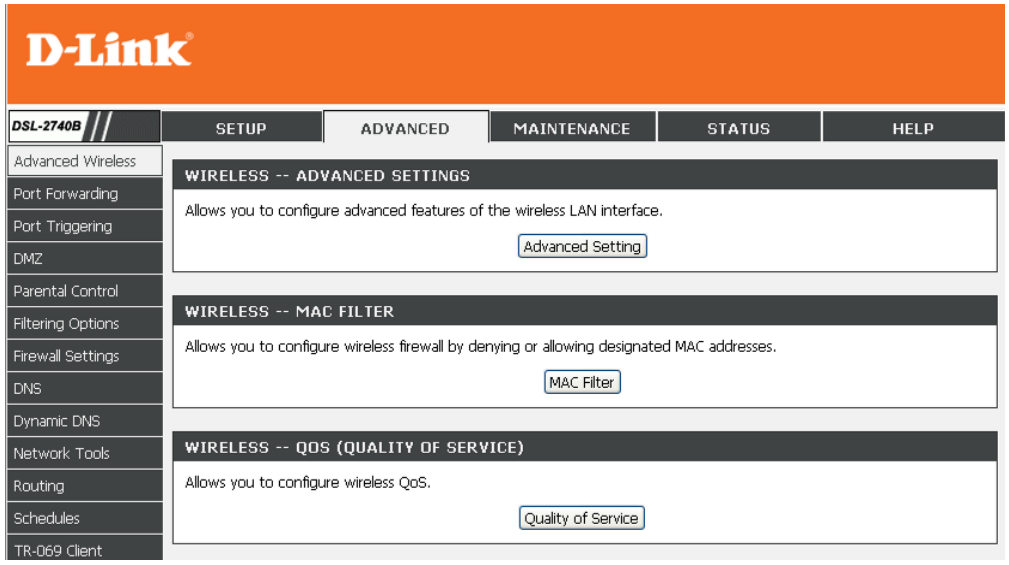
This chapter includes the more advanced features used for network management and security as well as administrative tools to manage the router, view status and other information used to examine performance and for troubleshooting.

ADVANCED WIRELESS

These options are for users that wish to change the behavior of their wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

To access the **Advanced Wireless** setting window, click on the **Advanced Wireless** button in the **ADVANCED tab**

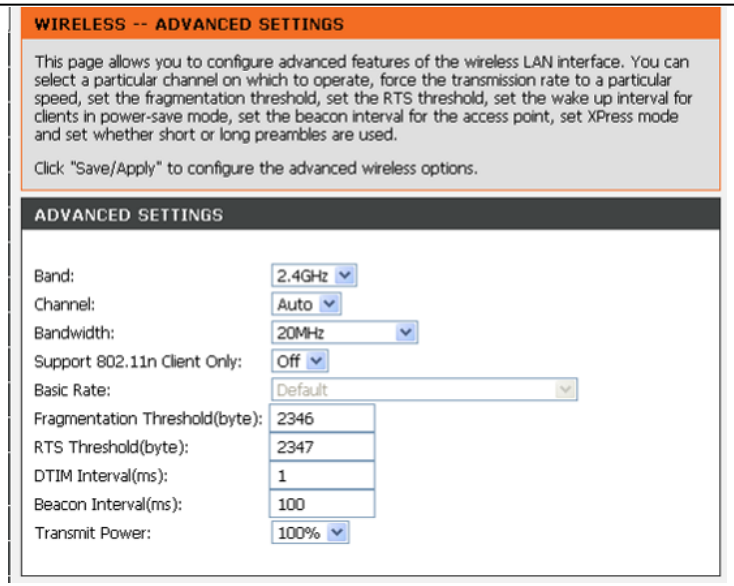
Advanced Wireless divided to **Advanced Setting**, **MAC Filter** and **Quality of Service**.



Advanced Settings

Most about wireless setting was referred in **Wireless** chapter, If you need to change the other default setting,

Please type the value on the **Fragmentation Threshold**
Please type the value on the **RTS Threshold**
Please type the value on the **DTIM Interval**
Please type the value on the **Beacom Interval**
Please enable or disable on the **XPress™ Technology**
Please choose 20%, 40%, 60%, 80% and 100% on the **Transmit Power**.



GUEST WIRELESS SETTING

You can check **Enable Wireless Guest** box to enable wireless guest network.

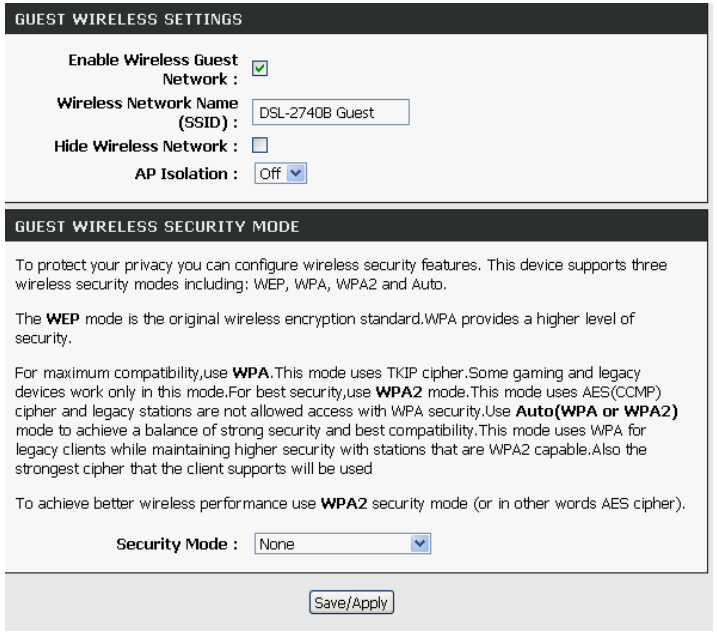
Wireless Network Name (SSID) in here is for guest wireless

If you select **Hide Wireless Network**, the wireless network will hide when the wireless client surveying.

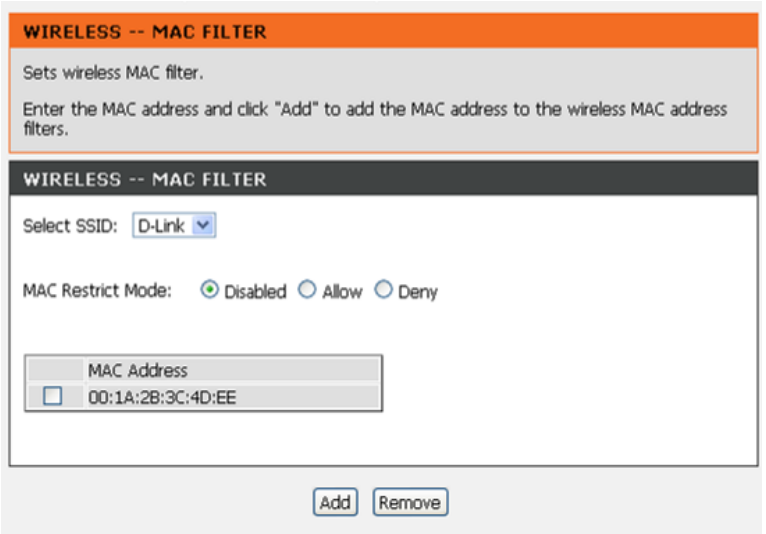
Enable **AP Isolation** can isolate the guest WLAN with other LAN or WLAN client in router.

You can also set **Security Mode** for guest WLAN.

Please click the **Save/Apply** button to save the configuration.



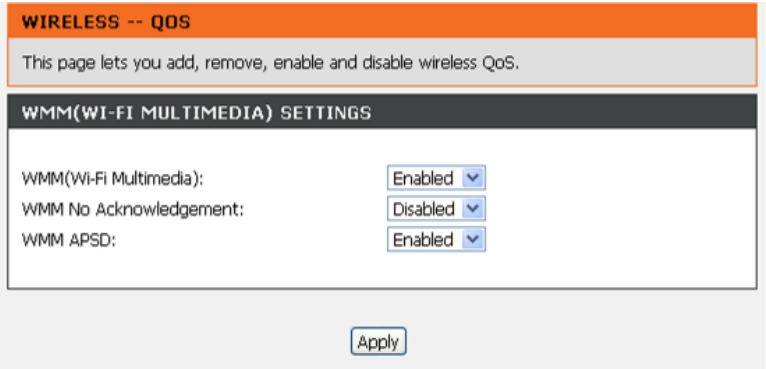
WIRELESS MAC FILTER



You can choose the **Disable/ Allow All/ Deny All** of **Wireless MAC Filter.**

Disable: You don't want to launch the feature.
Allow All: Support Wlan devices make connection, except the mac address which is added in the filter table.
Deny All: Support deny all Wlan devices make connection, except the mac address which is added in the filter table.

Press **Add** / **Remove** button to add/remove the MAC Filter in the list
Type filter name on the FILTER NAME
Type wireless mac address on the Wireless MAC Address
Wireless Filter - Maximum 32 entries can be added.



You can choose Enable or Disable to decide if the data has the WMM on the **WMM(Wi-Fi Multimedia)**

WMM No Acknowledge means that the receiver doesn't have to send back the Acknowledge packet

Enable **WMM APSD** can reduce power lost.

Please click the **Apply** button to save the configuration.

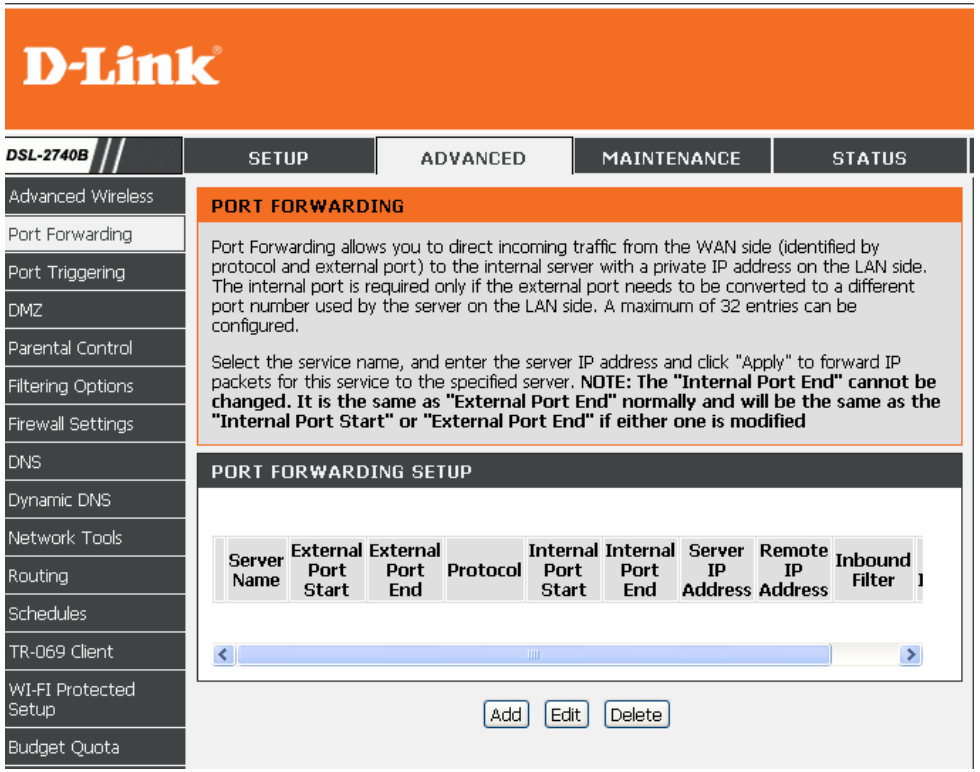
PORT FORWARDING

Use the **PORT FORWARDING** window to open ports in your router and re-direct data through those ports to a single PC on your network (WAN-to-LAN traffic). The Port Forwarding function allows remote users to access services on your LAN such as FTP for file transfers or SMTP and POP3 for e-mail. The DSL-2740B will accept remote requests for these services at your Global IP Address, using the specified TCP or UDP protocol and port number, and then redirect these requests to the server on your LAN with the LAN IP address you specify. Remember that the specified Private IP Address must be within the useable range of the subnet occupied by the Router.

To access the **PORT FORWARDING** settings window, click on the **PORT FORWARDING** button in the **ADVANCED tab**

PORT FORWARDING SETUP

Press **Add** button to add port forwarding.

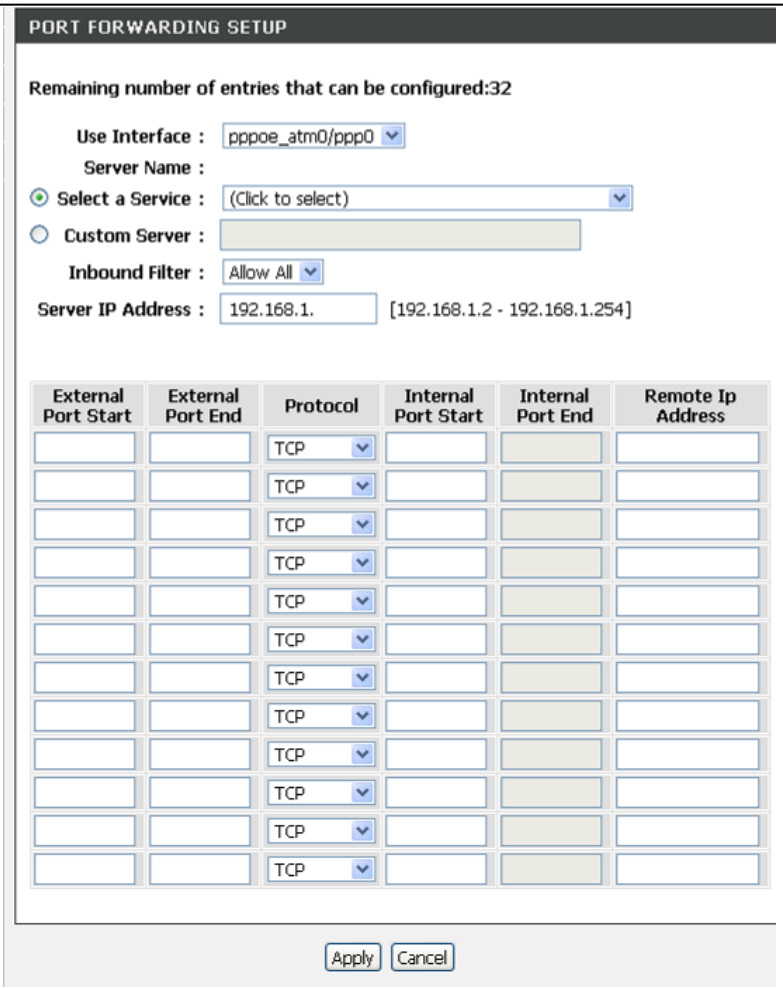


Select a Service drop-down menu for a pre-configured application or select **Custom Server** type a name input box to define your own application.

The **External Port** shows the ports opened for remote users in the WAN side of the router. The **TCP/UDP** means the protocol type of the opened ports.

The **Internal Port** shows the ports opened in the PC with the appointed **IP Address**. The **TCP/UDP** means the protocol type of the opened ports.

Please click the **Apply** button to save the configuration.



PORT TRIGGERING

Some applications such as games, video conferencing, remote access applications and others require that specific ports in the Router's firewall be opened for access by the applications.

To access **PORT TRIGGERING** setting windows, click on the PORT TRIGGERING button in the **ADVANCED left menu** directory

PORT TRIGGERING

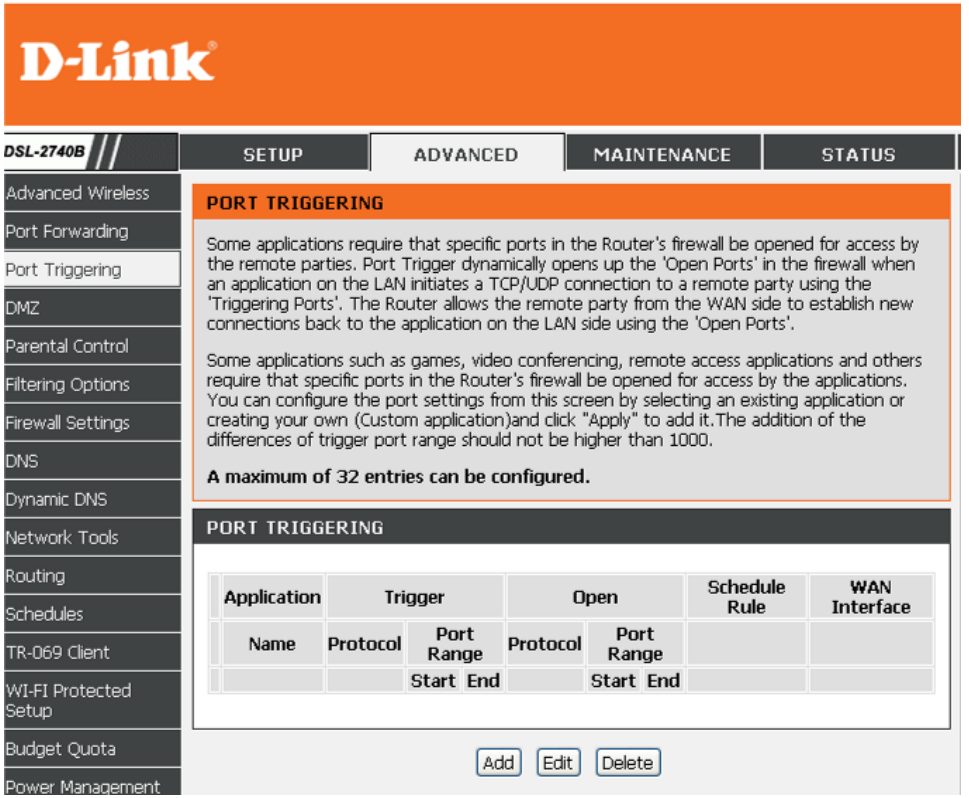
Press **Add** button to add port forwarding.

Select a Service drop-down menu for a pre-configured application or select **Custom Server** type a name input box to define your own application.

The **External Port** shows the ports opened for remote users in the WAN side of the router. The **TCP/UDP** means the protocol type of the opened ports.

The **Internal Port** shows the ports opened in the PC with the appointed **IP Address**. The **TCP/UDP** means the protocol type of the opened ports.

Please click the **Apply** button to save the configuration.

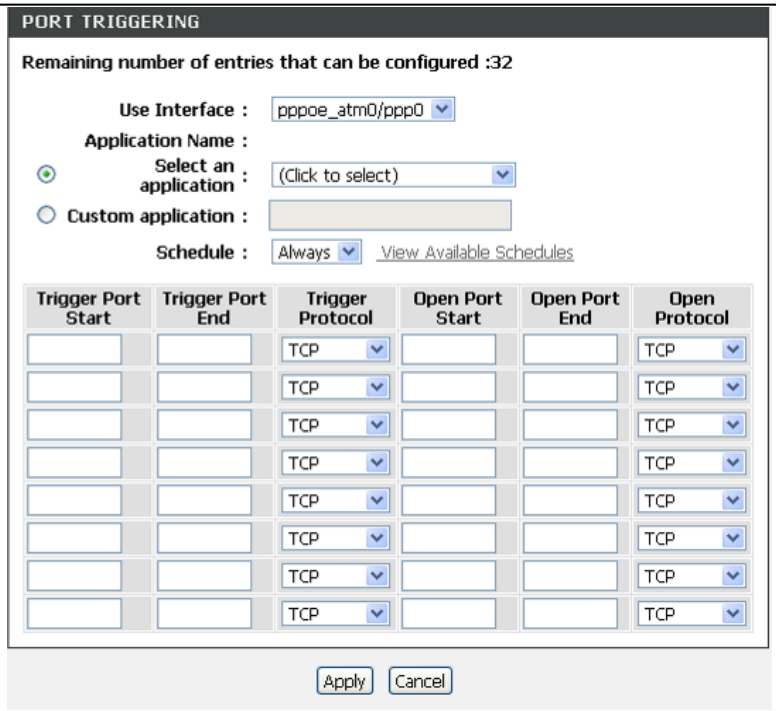


Select a Service drop-down menu for a pre-configured application or select **Custom Server** type a name input box to define your own application.

The **External Port** shows the ports opened for remote users in the WAN side of the router. The **TCP/UDP** means the protocol type of the opened ports.

The **Internal Port** shows the ports opened in the PC with the appointed **IP Address**. The **TCP/UDP** means the protocol type of the opened ports.

Please click the **Apply** button to save the configuration.



DMZ

The DSL Router will forward IP packets from the WAN that do not belong to any of the applications configured in the Port Forwarding table to the DMZ host computer

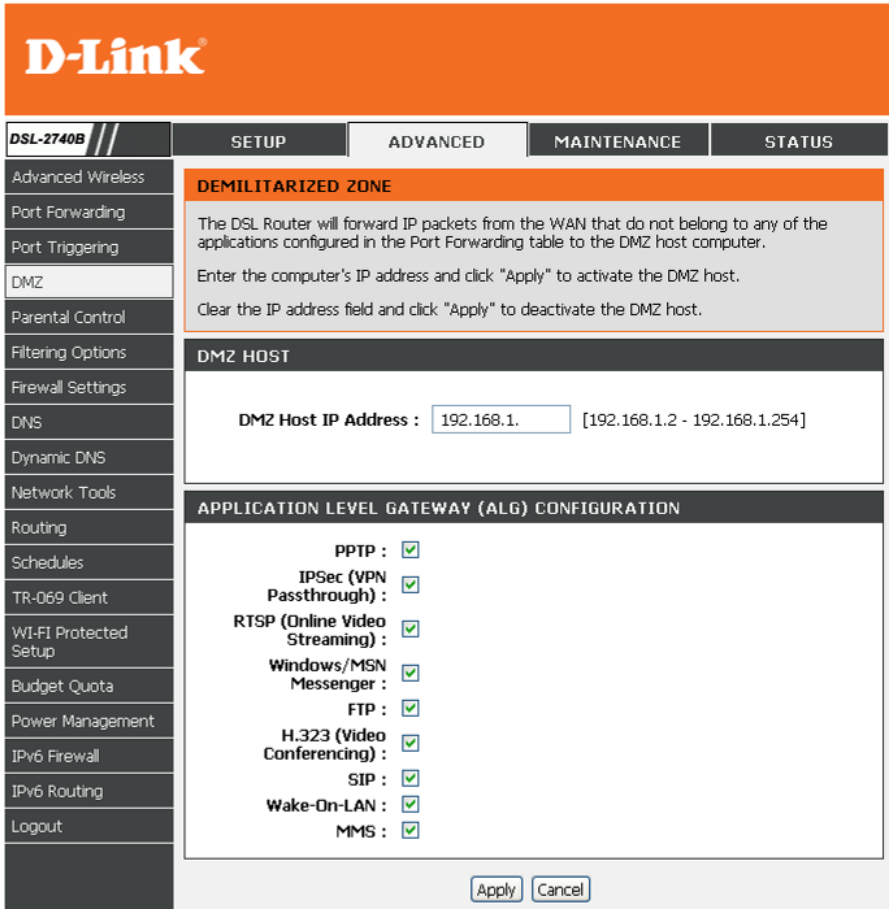
To access **DMZ** setting windows, click on the PORT TRIGGERING button in the **ADVANCED** tab

DMZ SETTING

Please type the DMZ client IP on the DMZ IP Address.

APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION

Pleasse check wich ALG to enable.

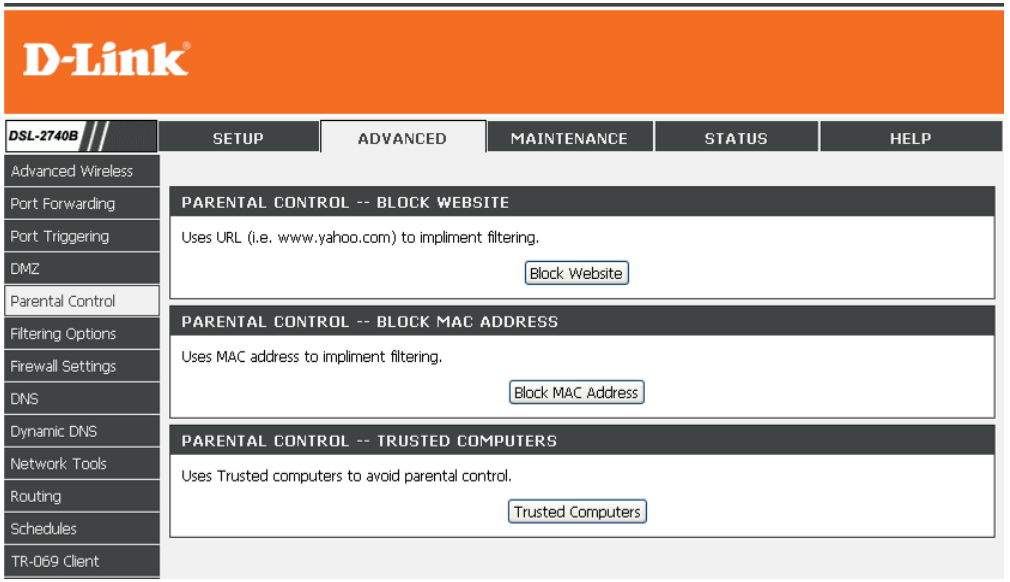


PARENTAL CONTROL

Parental Control provides the restricting Internet access. Block Websites allows you to quickly create a list of all web sites that you wish to stop users from accessing. Block MAC Address restrictions Client or PCs connected to Router to access the Internet. Trusted Computers allowed exclude a range of IP not restricted by Block Website

To access **PARENTAL CONTROL** setting windows, click on the **PARENTAL CONTROL** button in the **ADVANCED** tab

PARENTAL CONTROL divided into **Block Website**, **Block Address** and **Trusted computer**.

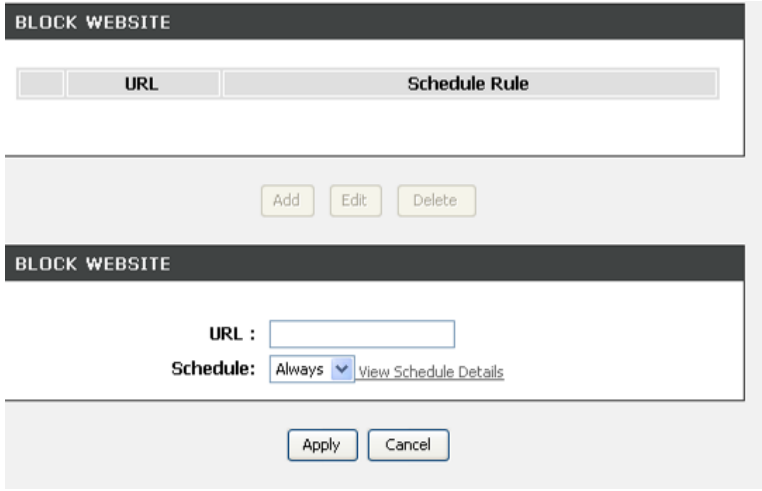


BLOCK WEBSITE

Press **Add** / **Edit** / **Delete** button and type the website URL which you want to block on the Website.

Schedule set the day and time to block.

After setting, please click **Apply** button and then it will show in list.

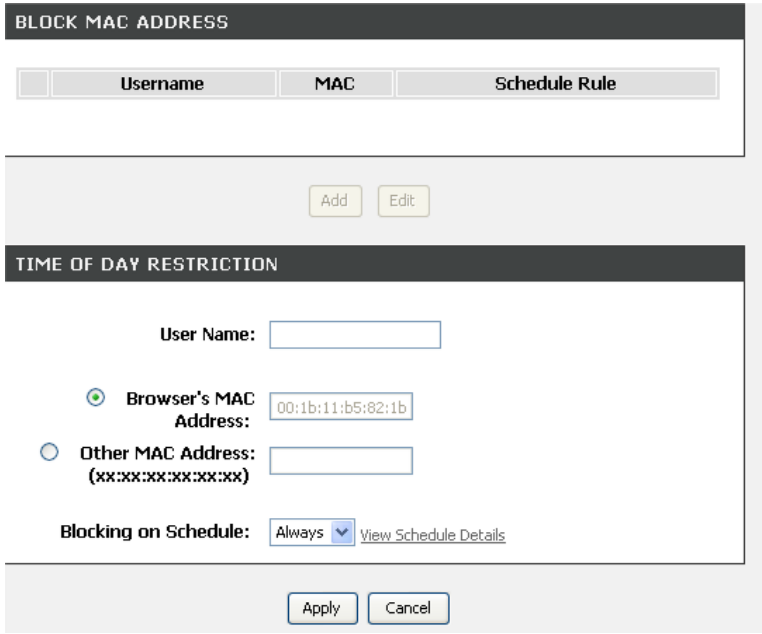


BLOCK MAC ADDRESS

Press **Add** / **Edit** / **Delete** button and type the MAC Address of LAN device which you want to block

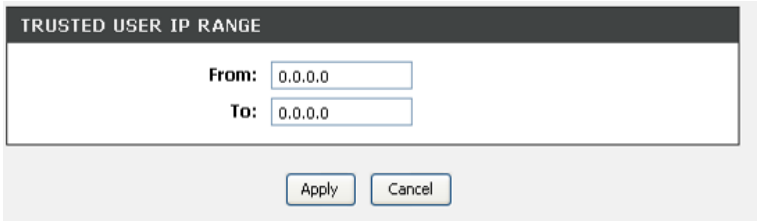
Schedule set the day and time to block.

After setting, please click **Apply** button and then it will show in list.



Trusted COMPUTERS

Allowed excluded a range of IP not restricted by Block Website

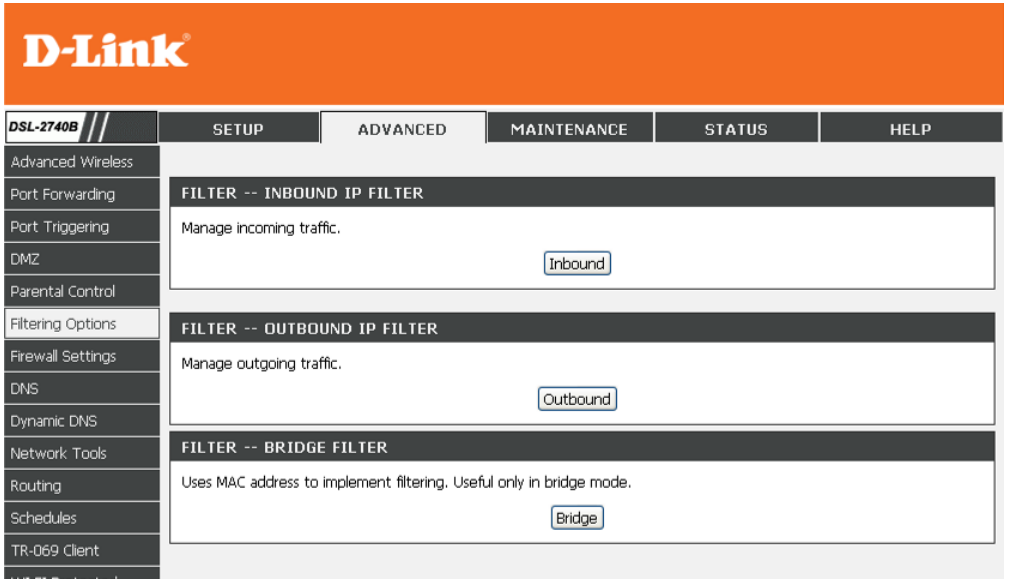


Filtering Option

By default, all outgoing IP traffic from the LAN is allowed. The Inbound Filter allows you to create a filter rule to filter incoming IP traffic by specifying a filter name and at least one condition below. The Outbound Filter allows you to create a filter rule to block outgoing IP traffic by specifying a filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect.

To access Filter Option setting windows, click on the **Filtering Option** button in the **ADVANCED** tab

Filtering Option divided into **Inbound IP Filter**, **Outbound IP Filter** and **Bridge Filter**.



INBOUND IP FILTER

Press **Add** / **Edit** / **Delete** button to active inbound filter

Type the filter name on the **Filter Name**.

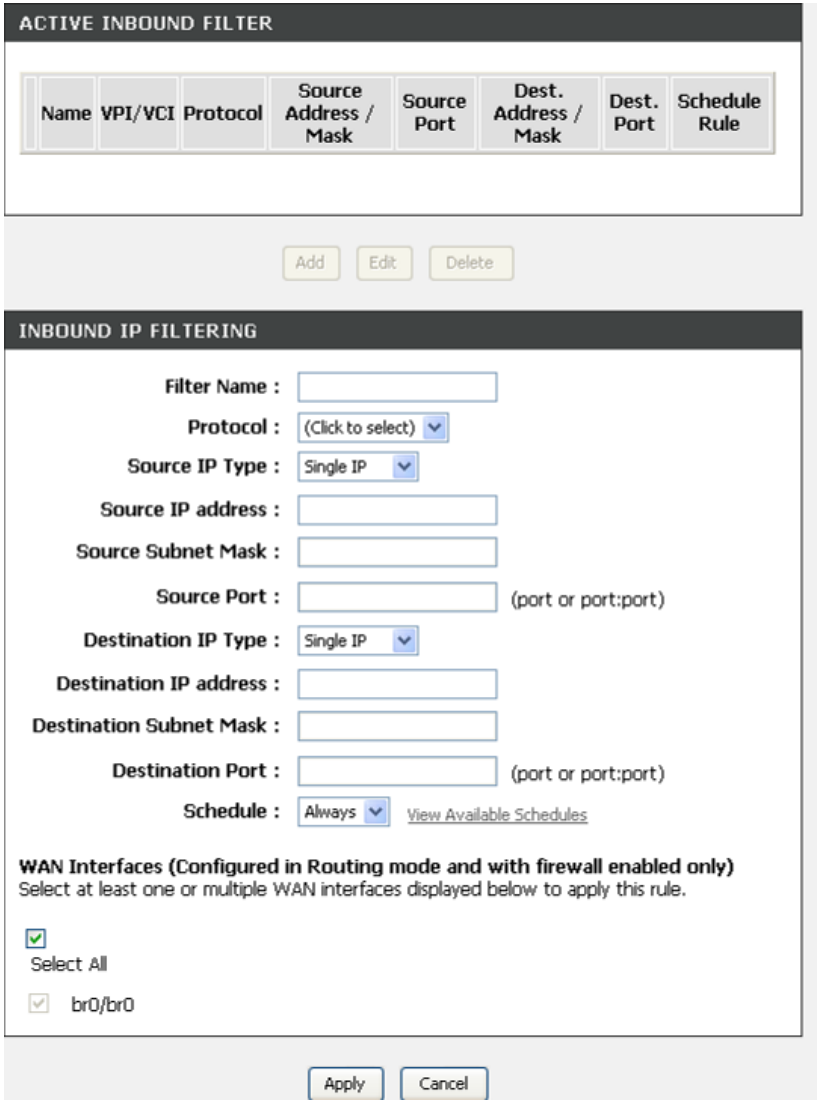
Choose ICMP, TCP/UDP, TCP or UDP on the **Protocol**.

Type **Source IP address**, **Source Subnet Mask** and **Source Port**(port or port::port means from which port to which port)

Type **Destination IP address**, **Destination Subnet Mask** and **Destination Port**(port or port::port means from which port to which port)

Set the schedule on the **Schedule**, Always or never, or View Available Schedules

Please click **Apply** button to add the policy in the list.



OUTBOUND IP FILTER

Press **Add** / **Edit** / **Delete** button to active inbound filter

Type the filter name on the **Filter Name**.

Choose ICMP, TCP/UDP, TCP or UDP on the **Protocol**.

Type **Source IP address**, **Source Subnet Mask** and **Source Port**(port or port::port means from which port to which port)

Type **Destination IP address**, **Destination Subnet Mask** and **Destination Port**(port or port::port means from which port to which port)

Set the schedule on the **Schedule**, Always or never, or View Available Schedules

Please click **Apply** button to add the policy in the list.

BRIDGE FILTERING

Press **Add** / **Edit** / **Delete** button to active inbound filter

Type the filter name on the **Filter Name**.

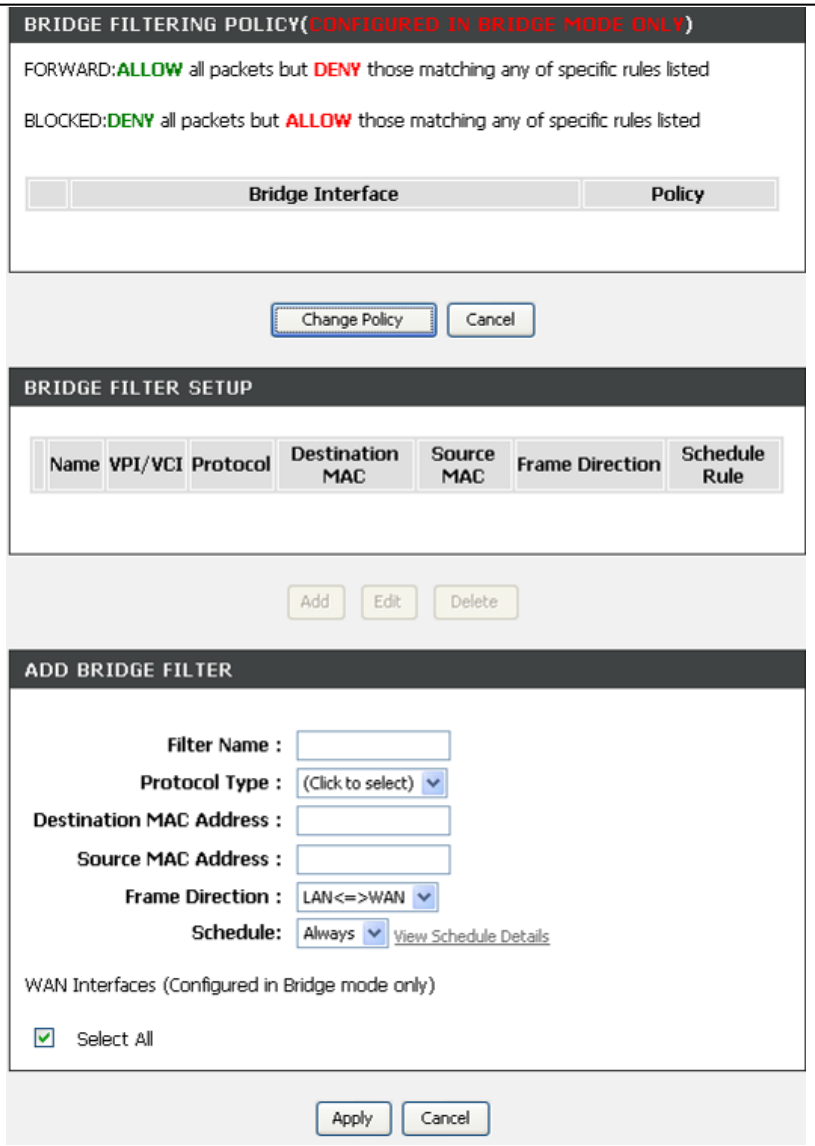
Choose ICMP, TCP/UDP, TCP or UDP on the **Protocol**.

Type **Destination MAC Address** and **Source MAC address**,

Select Frame Direction, LAN <=>WAN or WAN => LAN or LAN => WAN

Set the schedule on the **Schedule**, Always or never, or View Available Schedules

Please click **Apply** button to add the policy in the list.



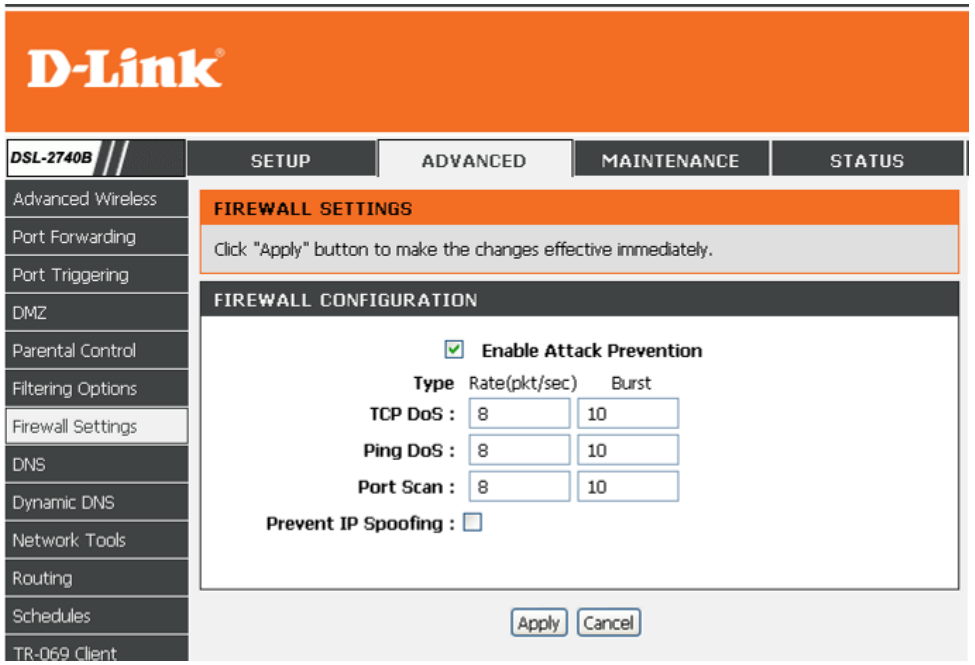
FIREWALL SETTING

The router already provides a simple firewall by virtue of the way NAT works. By default NAT does not respond to unsolicited incoming requests on any port, thereby making your WAN invisible to Internet cyber attackers.

To access Firewall setting windows, click on the **Firewall Setting** button in the **ADVANCED** tab

FIREWALL CONFIGURATION

Check **Enable Attack Prevention** box to enable firewall. And then default value will shows in **TCP DoS**, **Ping DoS** and **Port Scan.**



DNS SETUP

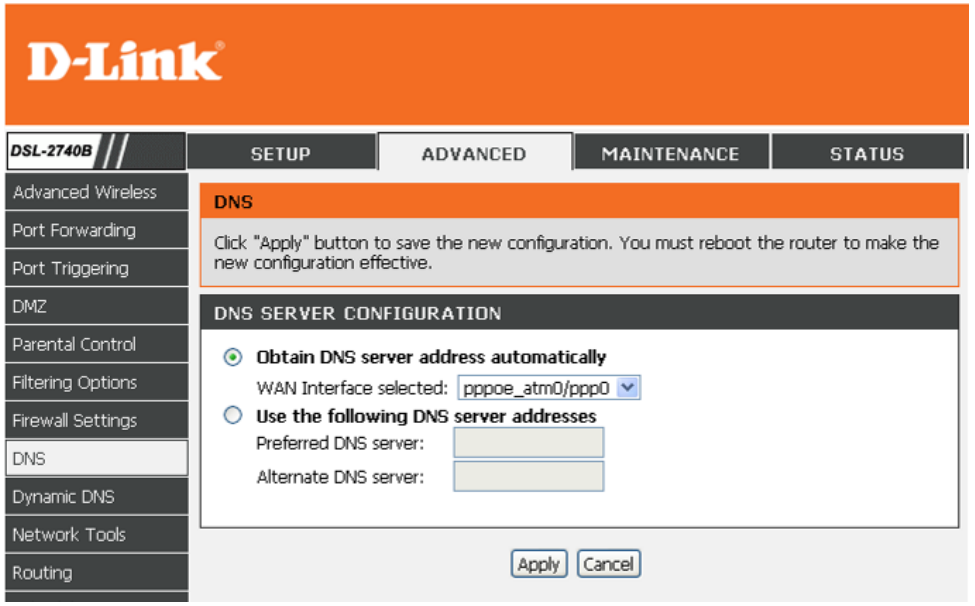
The **DNS** is used to resolve the DNS name to IPs. You can type or get automatically.

To access the **DNS** setting window, click on the **DNS** button under the **ADVANCED** tab.

DNS SERVER CONFIGURATION

If you are using the Router for DHCP service on the LAN and are using DNS servers on the ISP's network, check **Obtain DNS server address automatically** box.

If you have DNS IP addresses provided by your ISP, enter these IP addresses in the available entry fields for the **Primary DNS Server** and the **Secondary DNS Server**.



Dynamic DNS

The **Dynamic DNS** feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (for example: www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server and your friends don't mind what your IP address is, and then just type the DDNS name to reach. You can use the D_Link DDNS server, https://www.dlinkddns.com to have a free DDNS.

To access the **Dynamic DNS** setting window, click on the **Dynamic DNS** button under the **ADVANCED** tab.

DDNS CONFIGURATION

Press **Add** / **Edit** / **Delete** button to modify your D-DNS list.

Choose which DDNS web site to use on the **D-DNS provider**.

Type which Host name which you registered with your DDNS service provider. on the **Host Name**.

Please choose which interface name to use on the **Interface**.

Type the username/password on the **username/password** for your DDNS account.

After configure the DNS settings as desired, click on the **Apply** button to apply settings.

NETWORK TOOL

The **NETWORK TOOL** feature allows you to configure **PORT MAPPING, IGMP, QOS, ADSL** and **SNMP**

To access the **NETWORK TOOL** setting window, click on the **NETWORK TOOL** button under the **ADVANCED** tab.

Port Mapping
Port Mapping supports multiple port to PVC and bridging groups. Each group will perform as an independent network.

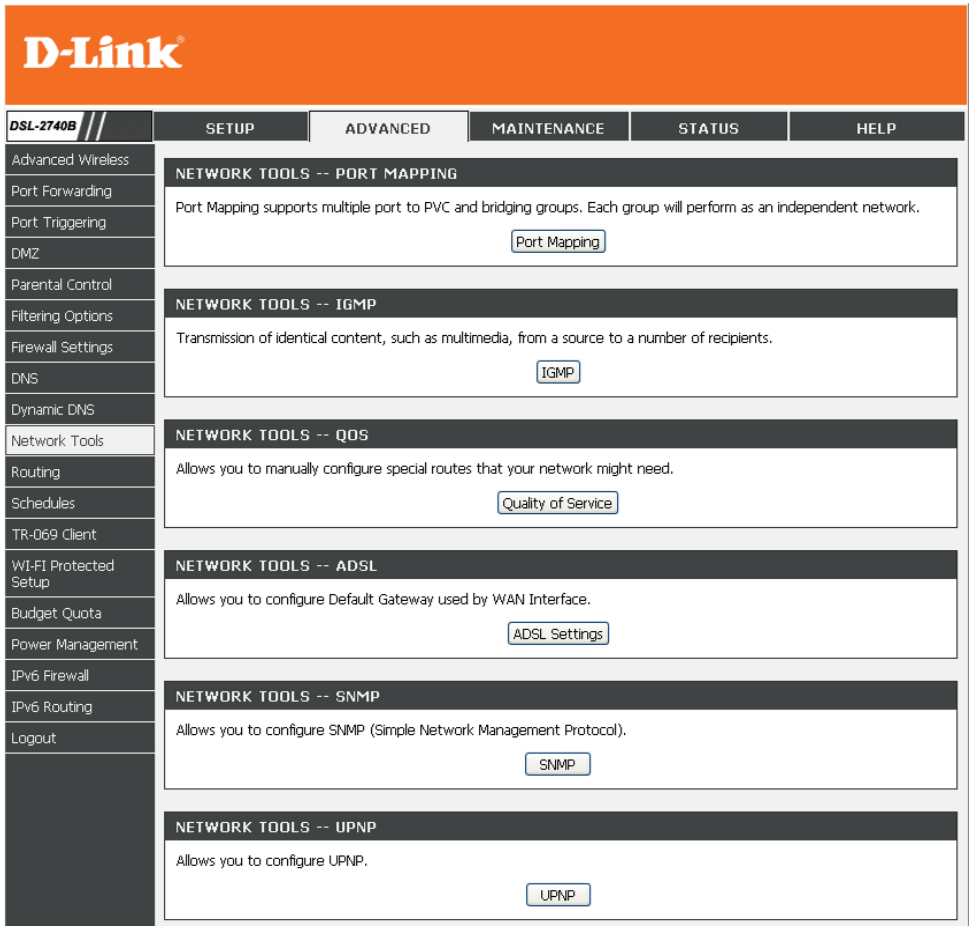
IGMP
Transmission of identical content, such as multimedia, from a source to a number of recipients.

QoS of Service
Allows you to manually configure special routes that your network might need.

ADSL Settings
Allows you to configure Default Gateway used by WAN Interface.

SNMP
Allows you to configure SNMP (Simple Network Management Protocol).

UPNP
Allows you to configure UPnP.



Port Mapping

Port Mapping supports multiple ports to PVC and bridging groups. Each group will perform as an independent network. To support this feature, you must create mapping groups with appropriate LAN and WAN interfaces using the Add button. The Remove button will remove the grouping and add the ungrouped interfaces to the Default group. Only the default group has IP interface.

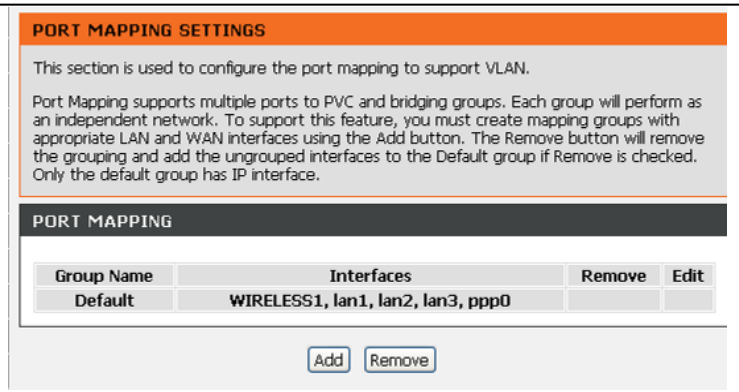
Click **Add** button to add port mapping configuration

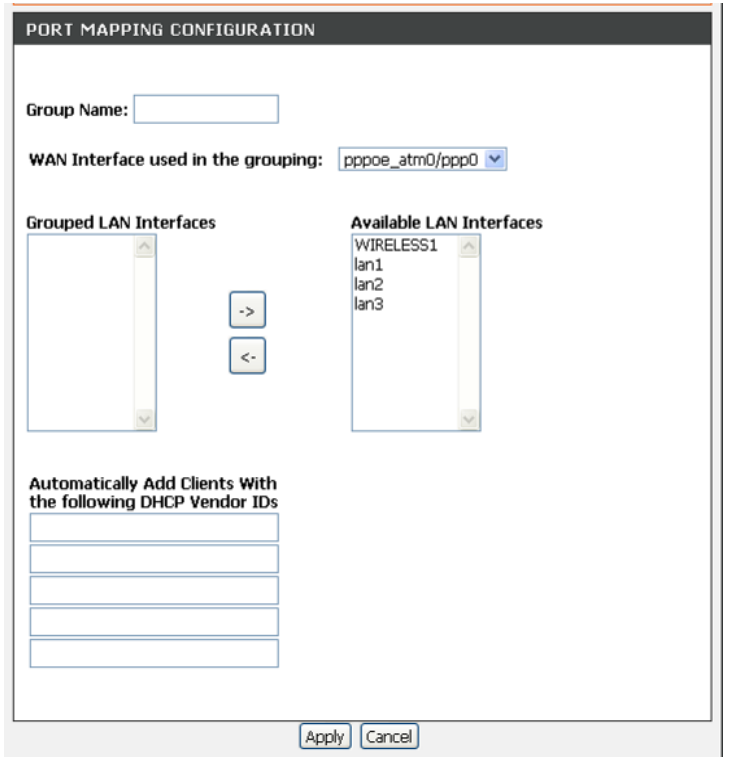
In **Add** page, please type the **Group name** which you want to assign in the GROUP Name.

Choose which wan interface you want to use in the **WAN Interface** used in the grouping

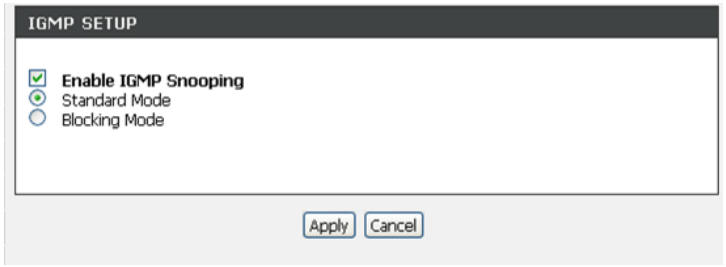
Choose which LAN Interface you want to use to join the group in the **Grouped LAN Interfaces** from the **Available LAN Interfaces**.

Click on the **Apply** button to save settings.





IGMP

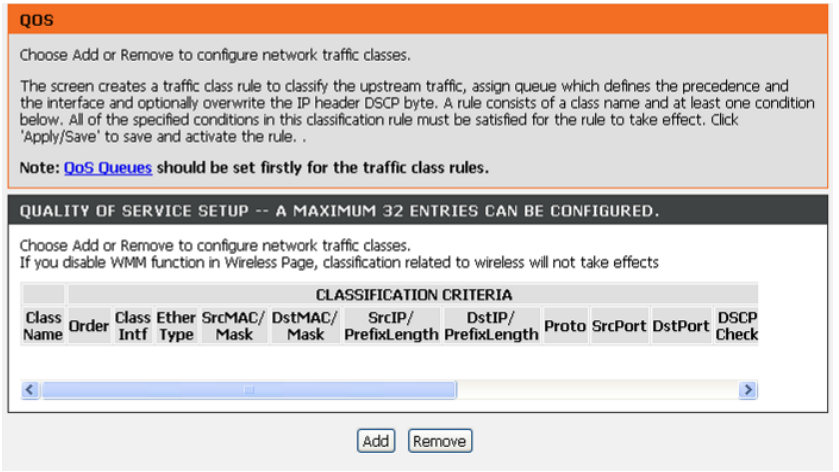


Transmission of identical content, such as multimedia, from a source to a number of recipients.

Please choose to enable the **IGMP Snooping** and **Standard Mode** or **Blocking Mode** to work.

Click on the **Apply** button to save settings.

QoS



Quality of Service is a feature that allows you to allocate or guarantee the throughput or speed of Internet for certain computer.

In **Add** page, type the traffic class name in the **Traffic Class Name**.

If added more than one rules, you can select priority in the **Rule Order**.

Enable or Disable the rule in the **Rule Status**.

Specify Classification Criteria:

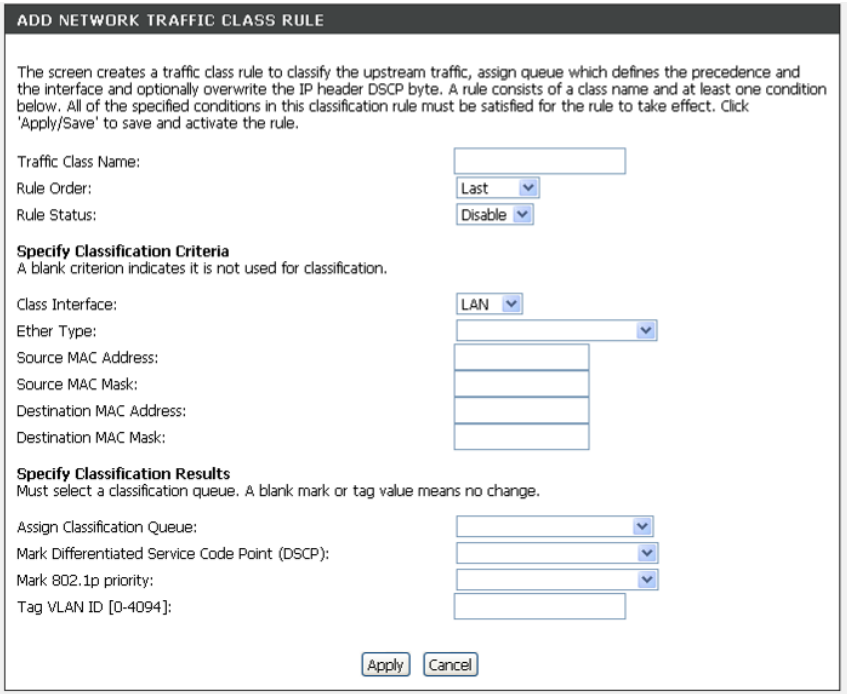
Select **Class Interface** and **Ether Type** in the drop-down menu.

Type the **Source MAC Address**, **Source MAC Mask**, **Destination MAC Address** and **Destination MAC Mask**.

Specify Classification Results:

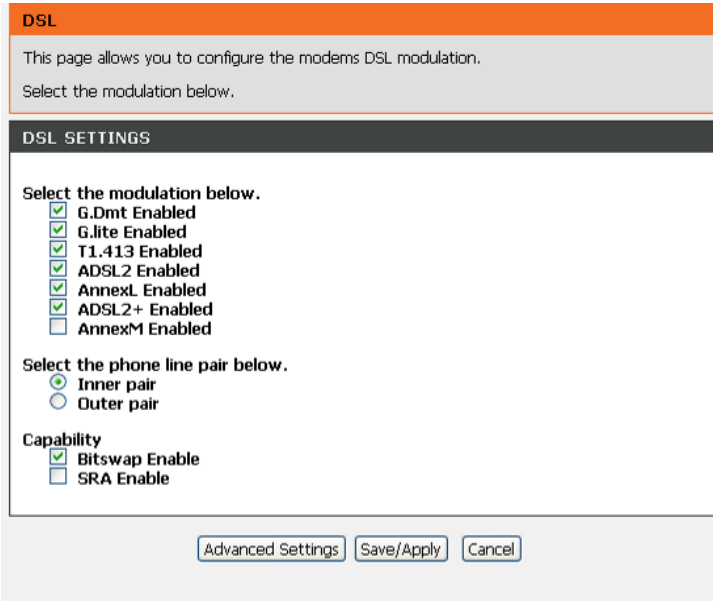
Select **Assign Classification Queue**, **Mark Differentiated Service Code Point (DSCP) and Mark 802.1p priority** in the drop-down menu. Type the **Tag VLAN ID [0-4094].**

Click on the **Apply** button to save settings.



DSL Settings

The DSL settings page contains a modulation and capability section to be specified by your ISP. Consult your ISP to select the correct settings for each. Then click on Apply if you finish or click on Advanced Settings if you want to configure more

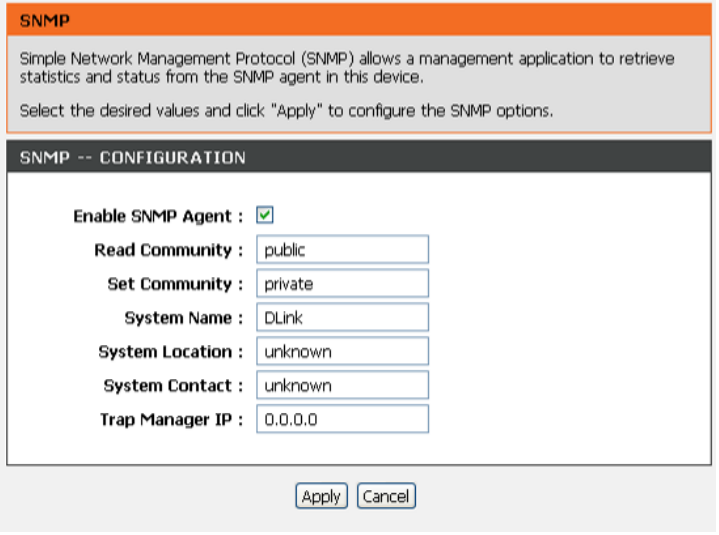


SNMP

Simple Network Management Protocol (SNMP) that provides a means to monitor status and performance as well as set configuration parameters. It enables a management station to configure, monitor and receive trap messages from network devices.

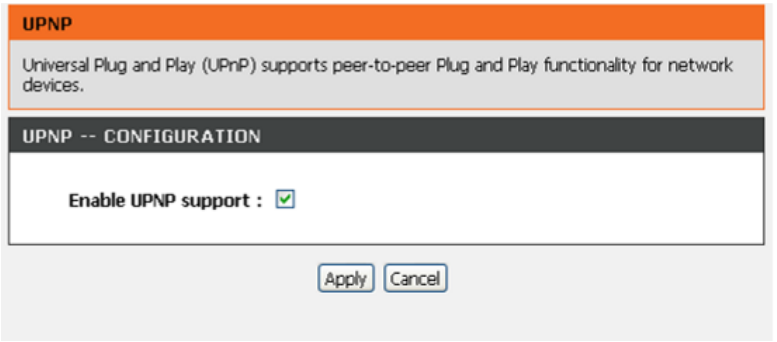
Choose to enable the **Enable SNMP Agent**

Type the **Read Community**, **Set Community, System Name, System Location, System Contact** and **Trap Manager IP** which is the SNMP like MG-Soft installed PC's IP.



UPNP

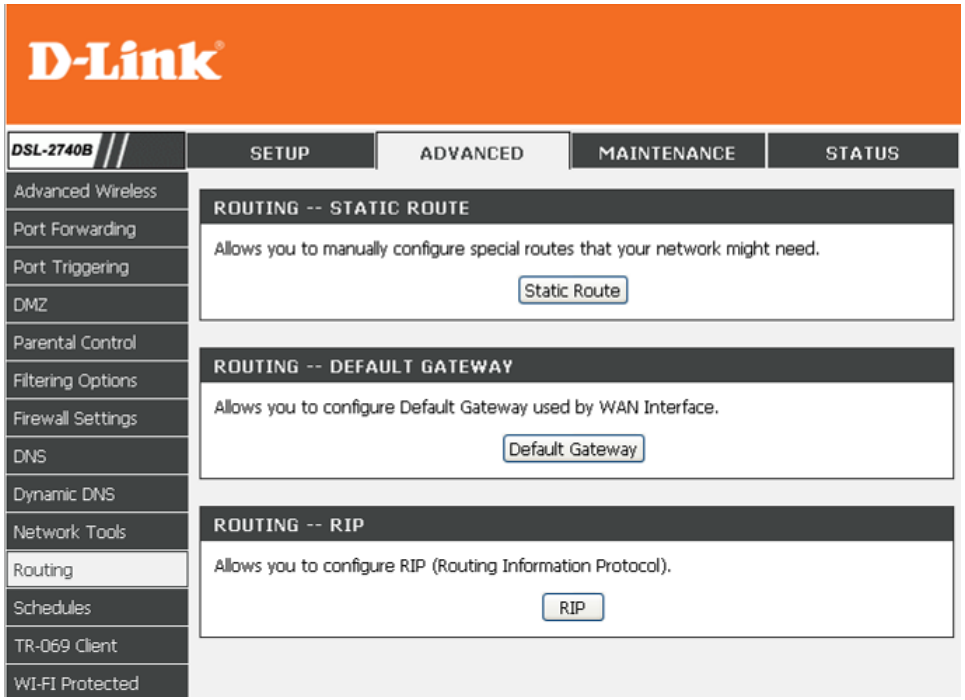
Choose to Enable/Disable Upnp Configuration



ROUTING SETUP

To access the **Routing** setting window, click on the **Routing** button under the **ADVANCED** tab.

Routing Setup divide into **STATIC ROUTE**, **DEFAULT GATEWAY** and **RIP**



STATIC ROUTE

Please click the Add set a static routing policy in the list.

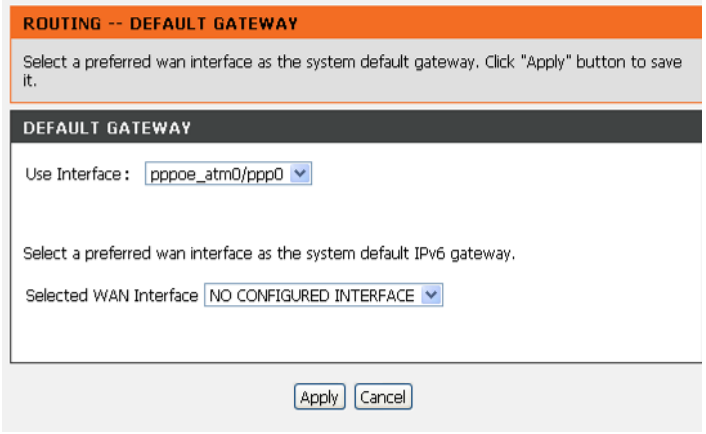
Please type the **Destination Network Address** and **Subnet Mask**.

Please select to type the Gateway IP or the interface to be the routing interface.

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

DEFAULT GATEWAY

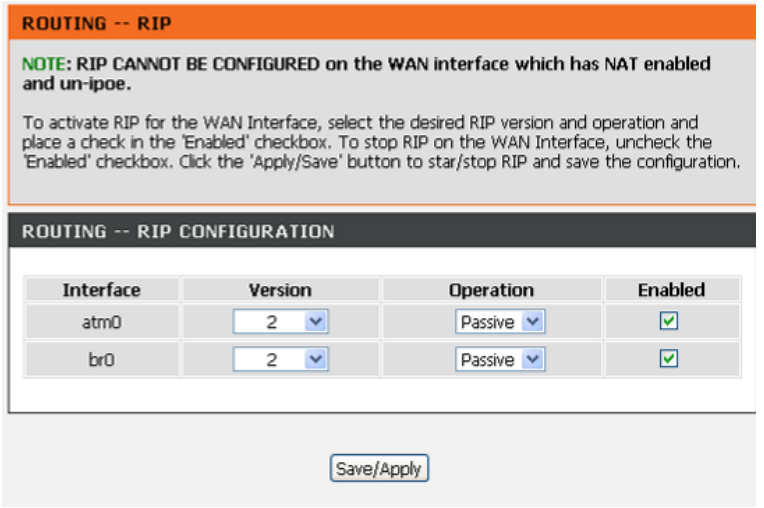
Please select **Use Interface** and press **Apply** button



RIP Configuration

Please choose the **Version** and **Operation**, and then decide to Enable or not.

RIP CANNOT BE CONFIGURED on the WAN interface which has NAT enabled and un-ipoe.



SCHEDULE

Schedule allows you to create scheduling rules to be applied for your firewall. Maximum of 16 entries

To access the **SCHEDULE** window, click on the **Schedules** button under the **ADVANCED** tab.

Press **Add** / **Edit** / **Delete** button to modify your **SCHEDULE RULE** list.

Type **Name** for your schedule.

Select **Day(s)** or **ALL Day-24hrs** to active your firewall and type **Star Time** to **End Time**.

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

TR-069 Client

TR-069 is a WAN management protocol which allows your ISP to perform monitoring, configuration and firmware upgrade on your router remotely.

To access the **TR-069 Client** Configuration window, click on the **TR-069 Client** button under the **ADVANCED** tab.

TR-069 CLIENT

Inform: Select to **Enable** or **Disable** TR-069 client functionality.

Inform Interval: Interval (seconds) between two Inform messages.

ACS URL: Enter the URL of your ISP's ACS

ACS User Name: Enter the authentication user name

ACS Password: Enter the authentication password

WAN Interface used by TR-069 client: Select your WAN interface.

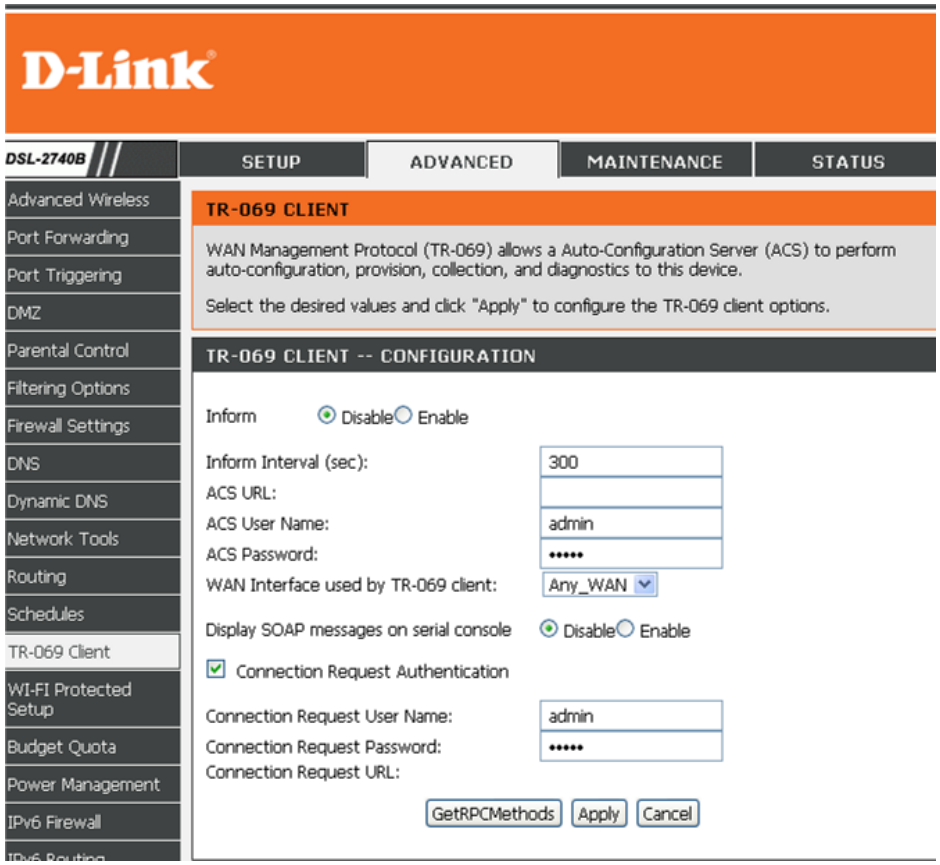
Display SOAP message on serial consoles: Select **Disable** or

Enable to display SOAP message on console

Connection Request Auththentication: Enable authentication for user connection

Connection Request User Name: Enter the authentication user name for the ACS to login

Connection Request Password: Enter the authentication password for the ACS to login



WI-FI PROTECTED SETUP

Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method.

To access the **WI-FI PROTECTED SETUP** window, click on the **WI-FI Protected Setup** button under the **ADVANCED** tab.

Wi-Fi Protected Setup

Please select to **Enable** or **Lock** Wireless Security Settings

PIN Settings: Choose to click the **Reset PIN to Default** button or **Generate New PIN** button to show the PIN on the Current PIN.

ADD WIRELESS STATION: Please click the **Add Wireless Device** with WPS button to set the WPS.

BUDGET QUOTA

Budget Quota can be used to implement the limitation quota and other functions. You can limit the data transmission quota and time on WAN interface or LAN interface.

To access the **Budget Quota** window, click on the **Budget Quota** button under the **ADVANCED** tab.

Budget Quota

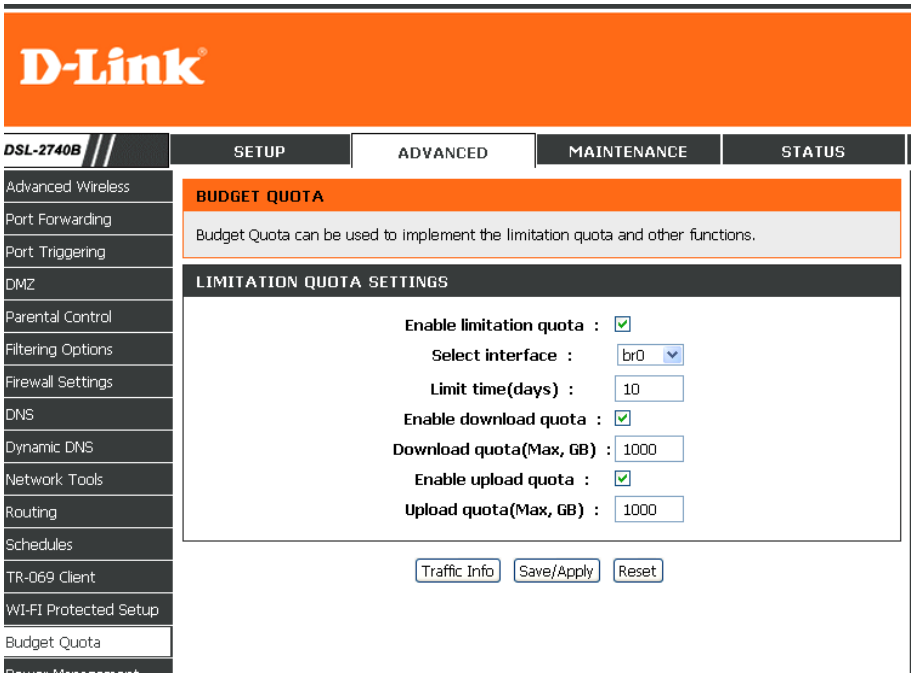
Please select to **Enable limitation Quota**

Select interface (br0, LAN1~LAN4 or WAN interface) to limit the data transmission quota.

Set **Limit time(days)**

Check **Enable Download quota** and set **Download quota(Max, GB)**

Check **Enable Upload quota** and set **Upload quota(Max, GB)**



POWER MANAGEMENT

This feature allows you to control of Hardware modules to evaluate power consumption. Use the control buttons to select the desired option, click Apply and check the status response.

To access the **POWER Management** setting window, click on the **POWER Management** button in the **ADVANCE** table

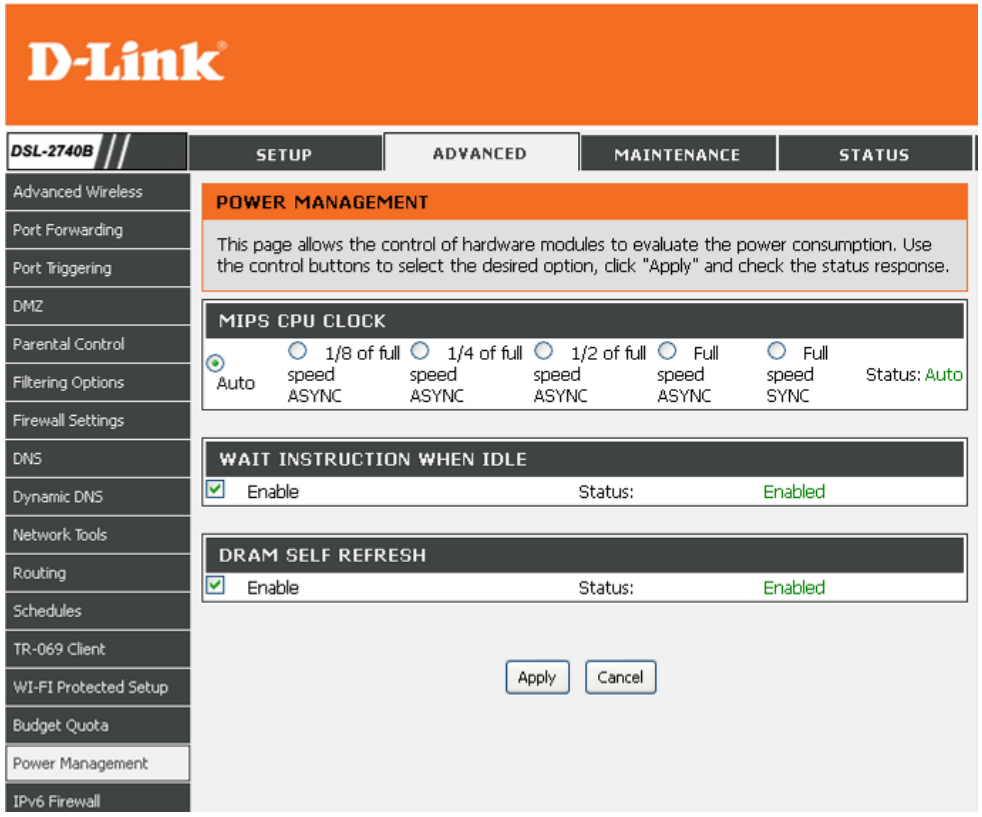
POWER MANGEMENT

mips cpu clock:
You can choose Auto, 1/8 of full speed ASYNC, 1/4 of full speed ASYNC, 1/2 of full speed ASYNC, Full speed ASYNC, Full speed SYNC and it will show on the Status. It can control the CPU's handling data speed.

Wait instruction when Idle:
The CPU can wait for the coming data to handle or idle.
Please Enable the feature if necessary.

DRAM Self Refresh:
DRAM can clear any non-processing tasks automatically. Please Enable the feature if necessary.

Please click the Apply button to save the settings.



IPV6 FIREWALL

The Firewall settings section is an advance feature used to allow or deny traffic from passing through the device. It works in the same way as ip filters with additional settings. You can create more detail rules for the device.

To access the **IPv6 Firewall** setting window, click on the **IPv6 Firewall** button in the **ADVANCE** table

ACTIVE FIREWALL RULES

Click **Add** button to add Firewall Rules.

IPV6 FIREWALL RULE

Type **Rule Name**, select **Schedule** (Schedule Rule can be set as following).

Type **Source Address Range**, select **Use Interface** and **Protocol** in drop-down menu.

Type **Dest Address Range**, **Dest Port Range** and select **Use Interface** in drop-down menu.

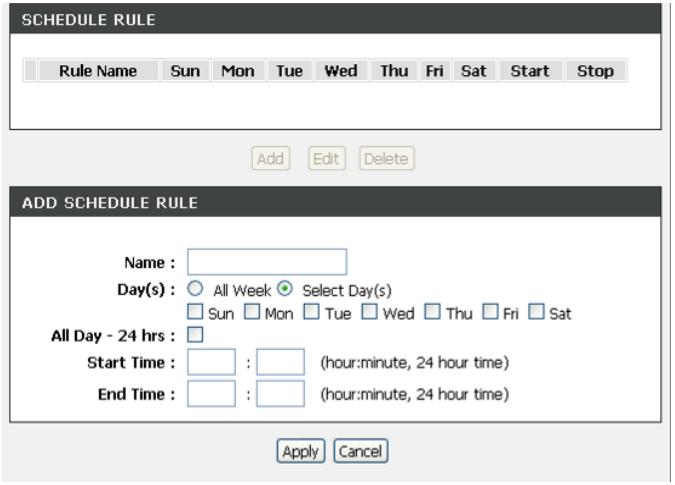
SCHEDULE RULE

Click **Add** button to add **Rules**.

ADD SCHEDULE RULE

Type **Name** for this rule and select **Day(s)**, you can sele **All Week** or **select Day(s).**

Check **All Day-24hr** or set **Start time** to **End Time**



IPV6 ROUTING

This Routing page allows you to specify custom routes that determine how data is moved around your network. A maximum 20 entries can be configured

To access the **IPv6 Routing** setting window, click on the **IPv6 Routing** button in the **ADVANCE** table

STATIC IPV6 ROUTES

Click **Add** button to add **Rules**.

STATIC ROUTE ADD/EDIT

Type **Rule/Name** for this rule.

Type **Destination IPv6/Prefix**, **Metric** and **Gate way IP Address**.

Select **Use Interface** in drop-down menu.

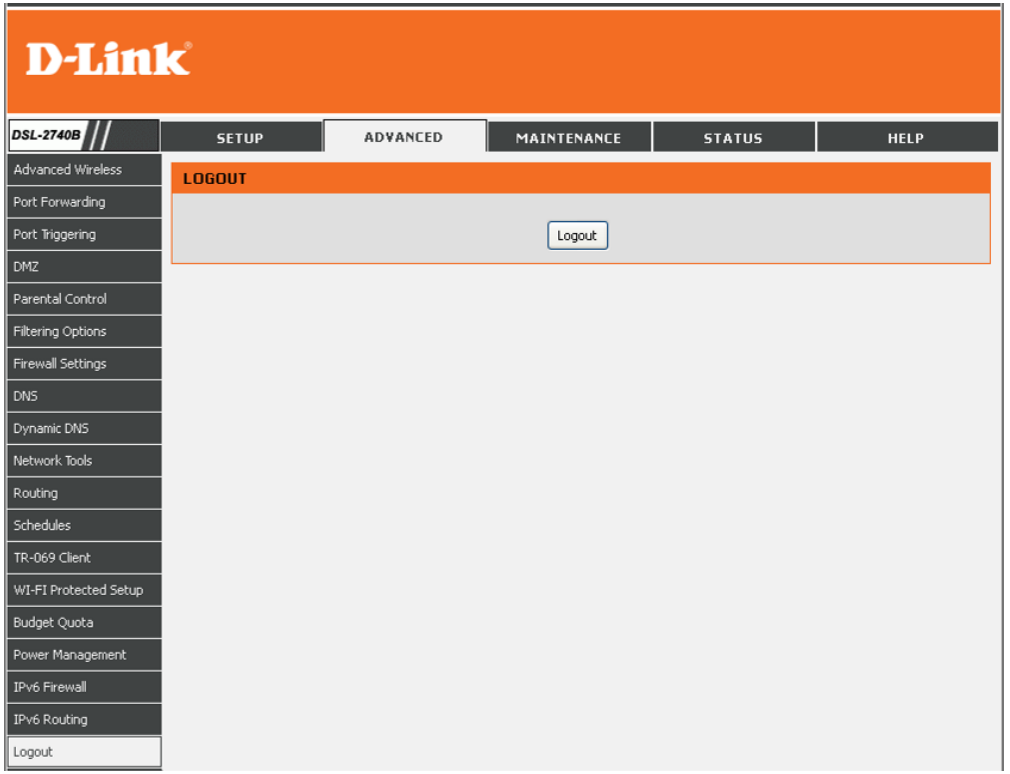
LOGOUT

The **LOGOUT** page enables you to logout of your router configuration and closes the browser.

To access the **LOGOUT** setting window, click on the **Logout** button in the **SETUP** tab

LOGOUT

Click on the **Logout** button to logout of the router configuration settings and close the browser.



MAINTENANCE

Click on the **MAINTENANCE** tab to reveal the window buttons for various functions located in this directory.

SYSTEM

To access the **SYSTEM** setting window, click on the **System** button under the **MAINTENANCE** tab

REBOOT: click **Reboot** button to reboot the router

BACKUP SETTINGS: click **Backup Settings** button to backup now setting of router.

UPDATE SETTINGS: click **Update Settings** and select a *.conf file which pre backup setting

RESTORE DEFAULT SETTING: If necessary, please click the **Restore Default Setting** button to have the default settings.

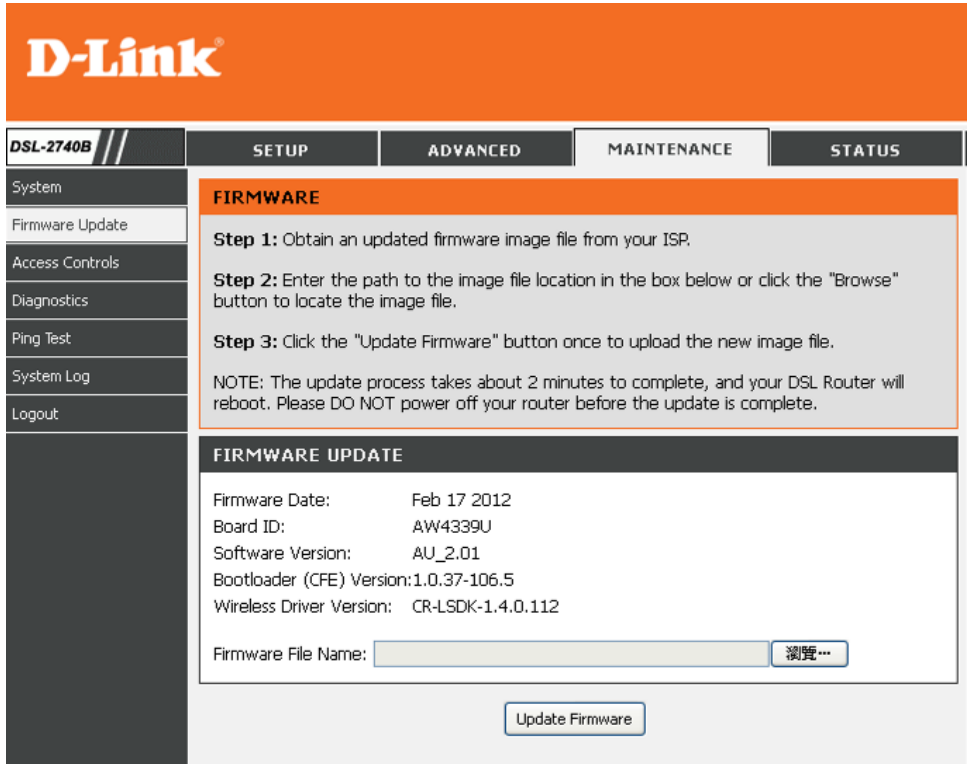
FIRMWARE UPDATE

Use the **FIRMWARE UPGRADE** window to load the latest firmware for the device. Note that the device configuration settings may return to the factory default settings, so make sure you first save the configuration settings with the **SAVE/RESTORE SETTINGS** window described above.

To access the **FIRMWARE UPGRADE** setting window, click on the **Firmware Update** button under the **MAINTENANCE** tab.

FIRMWARE UPDATE

To upgrade firmware, click on the **Choose File** button to search for the firmware file and then click the **Update Firmware** button to begin copying the file. The Router will load the file and restart automatically.



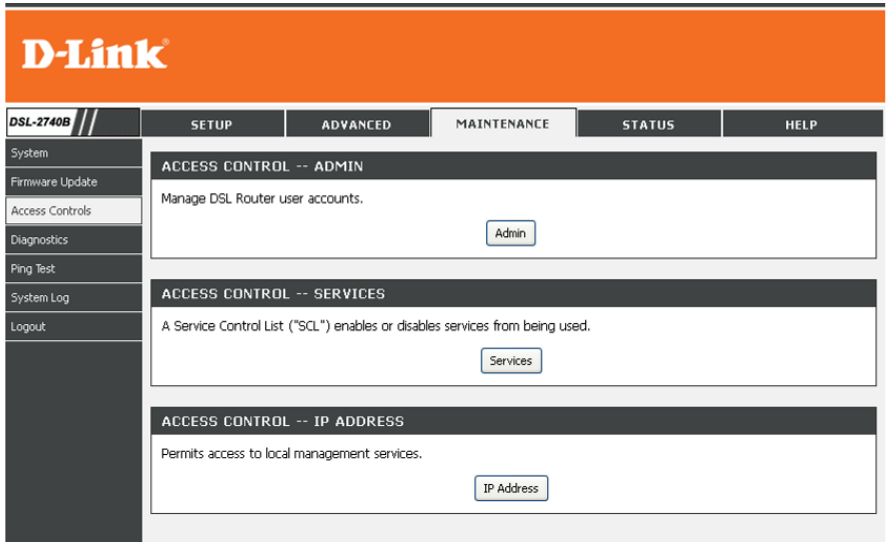
ACCESS CONTROL

To access the **ACCESS CONTROL** setting window, click on the **ACCESS CONTROL** button in the **MAINTENANCE** directory.

ADMIN
Manage DSL Router user accounts, click **Admin** button to access **ADMINISTRATOR SETTING** page.

SERVICES
A Service Control List ("SCL") enables or disables services from being used. Click **Services** button to access **SERVICES CONTROL** services page.

IP ADDRESS
Permits access to local management services. Click **IP Address** button to access **IP ADDRESS** page.



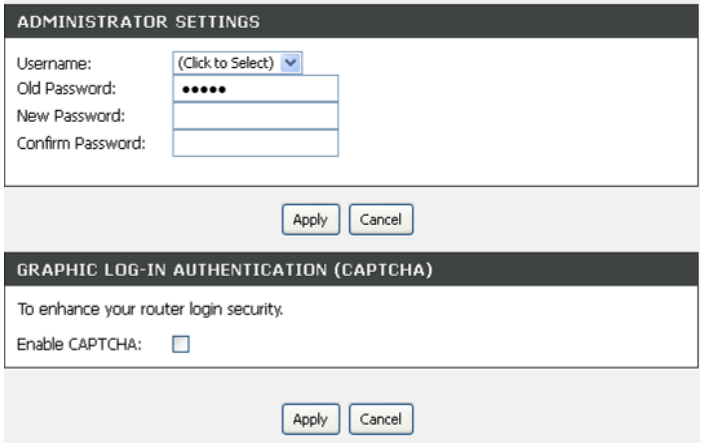
ADMINISTRATOR SETTING

The Admin option is used to set a password for access to the Web-based management.

Admin
Enter a password for the user "admin", who will have full access to the Web-based management interface.

Support
Allows an ISP technician to access your DSL Router for maintenance and to run diagnostics.

User
Allows viewing configuration settings and statistics, as well as updating the router's firmware.



SERVICES CONTROL

Services

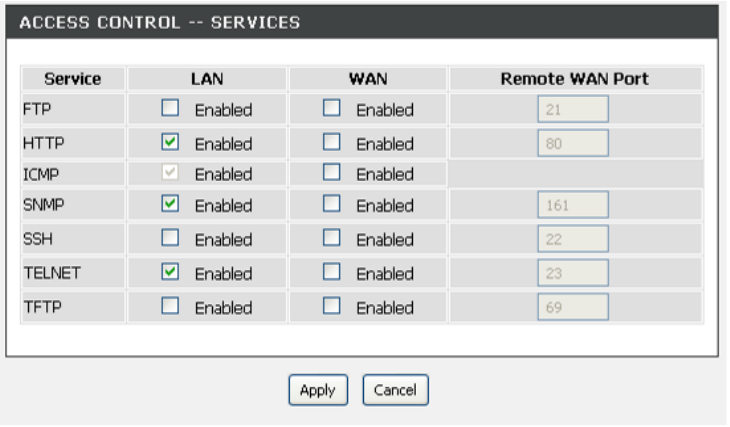
Allows access to the router via FTP, HTTP, ICMP, SNMP, SSH, TELNET, and TFTP.

LAN

Accesses the DSL router from the local network (LAN) side.

WAN

Accesses the DSL router from the ISP side.



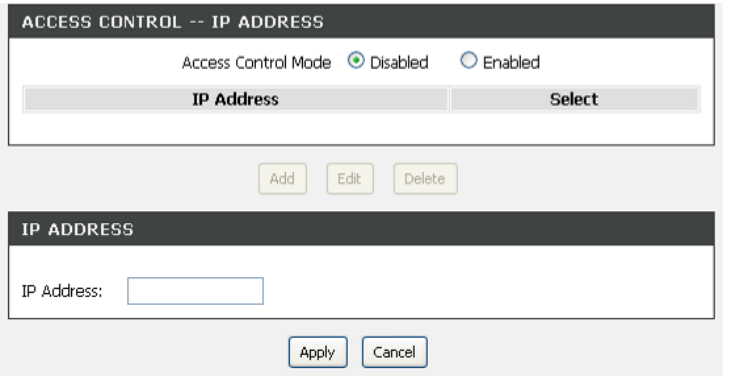
Click **Apply** button to save the settings.

IP Address

When enabled allows the filtering of IP address that can access the router. This works in conjuction with **Services**

Choose to enable or disable the **Access Control Mode**

In Add page, type the **IP address** you want to allow to access the DSL router.



Click the **Apply** button to save the settings.

DIAGNOSTICS

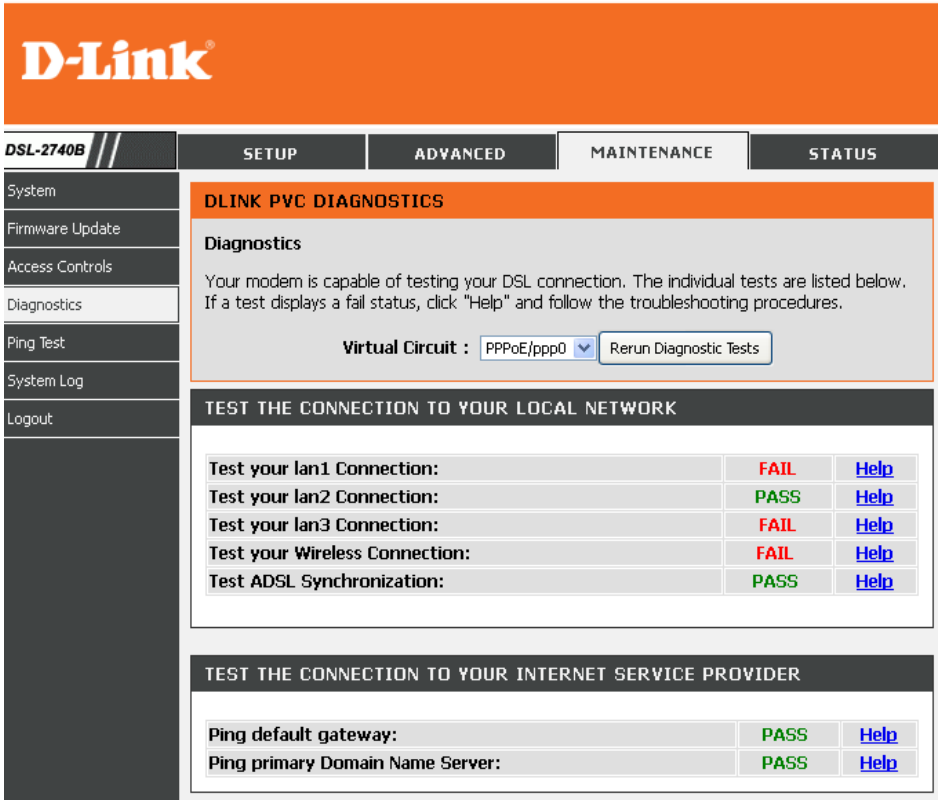
Your router is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click "Return Diagnostics Tests" at the bottom of this page to make sure fail status is consistent. If the test continues to fail, click "Help" and follow the troubleshooting procedures.

To access the **Diagnostics** setting window, click on the **Diagnostics** button under the **MAINTENANCE** tab.

Virtual Circuit:
Select a WAN interface and click **Rerun Diagnostics Tests**.

TEST THE CONNECTION TO YOUR LOCAL NETWORK:
There are Test your LAN 0/ LAN 1/ LAN 2/ LAN 3 Connection, Test your Wireless Connection and Test ADSL Synchronization and they will show PASS or FAIL

TEST THE CONNECTION TO YOUR INTERNET SERVICE PROVIDER
There are Ping ISP Default Gateway/ Primary DNS server and they will show PASS or FAIL



PING TEST

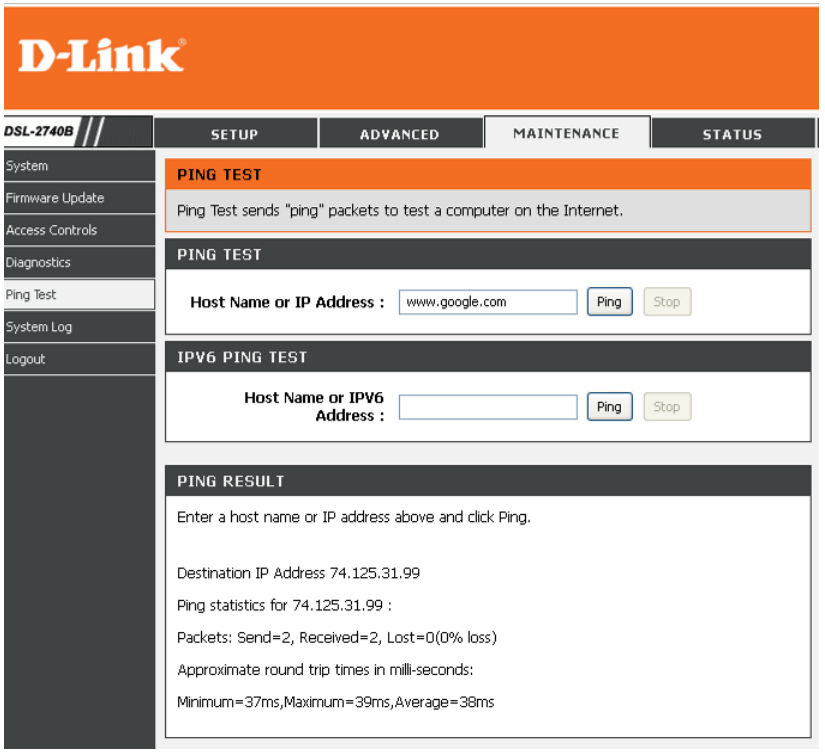
The tests on this page can be used to verify whether or not your router is working correctly. If you have rerun the tests and consulted the help file and you are still experiencing difficulties,

To access the **Ping test** setting window, click on the **Ping test Diagnostics** button under the **MAINTENANCE** tab.

PING TEST
You can type **Host Name or IP Address** and click **Ping** button

IPv6 PING TEST
You can type Host Name or IPv6 Address and click **Ping** button

PING RESULT
When you click **Sto**p button, the ping results will show in **PING RESULT** windows



SYSTEM LOG

The system Log allows you to configure local, remote and email logging, and to view the logs that have been created.

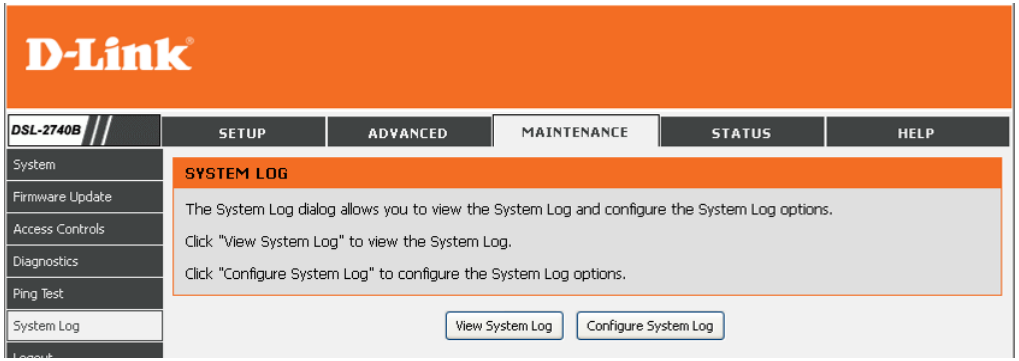
To access the **SYSTEM LOG** setting window, click on the **System Log** button under the **MAINTENANCE** tab.

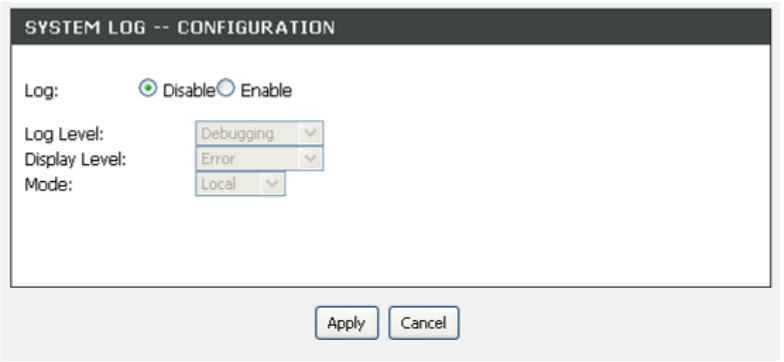
You can click **View System** button to view the system log if you enabled **Log**.

Click **Configure System Log** button to configure the system log option.

Select **Enable** and then setting **Log Level**, **Display Level** and **Mode**.

If the selected mode is **Remote** or **Both**, events will be sent to the specified IP address and UDP port of the remote syslog server.





STATUS

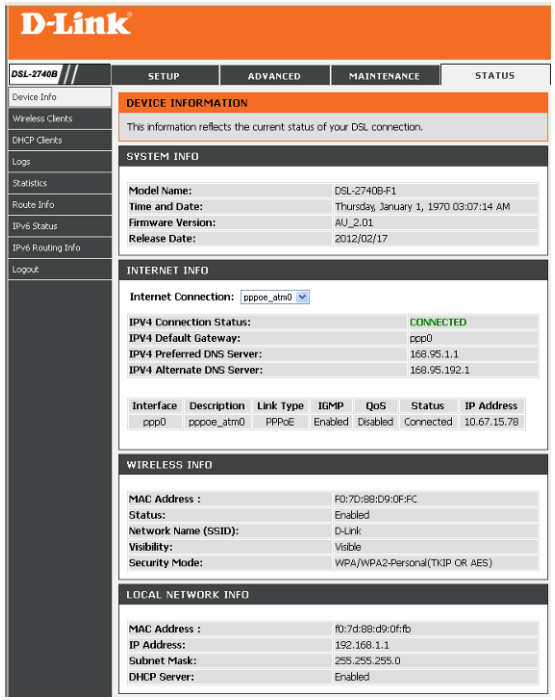
Click on the **STATUS** tab to reveal the window buttons for various functions located in this directory. The **DEVICE STATUS** window is the first item in the **STATUS** directory. Use these windows to view system information and monitor performance.

DEVICE INFO

The **Device Info** page displays a summary overview of your router status, including: Device software version and summary of your Internet configuration (both wireless and Ethernet status).

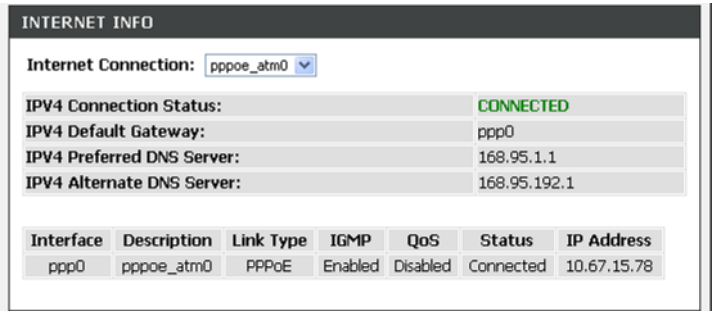
To access the **DEVICE INFO** setting window, click on the **Device Info** button in the **STATUS** tab.

This window displays current **SYSTEM INFO**, **INTERNET INFO**, **WIRELESS INFO** and **LOCAL NETWORK INFO**.

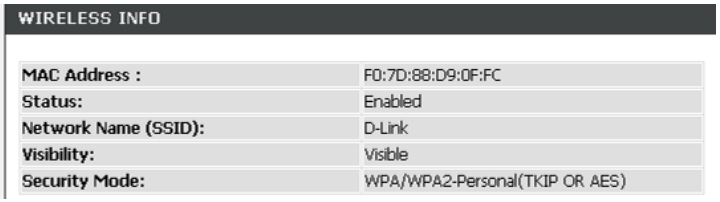


SYSTEM INFO
This window displays system information include Model Name, Time and Date, Firmware Version, Release Date.

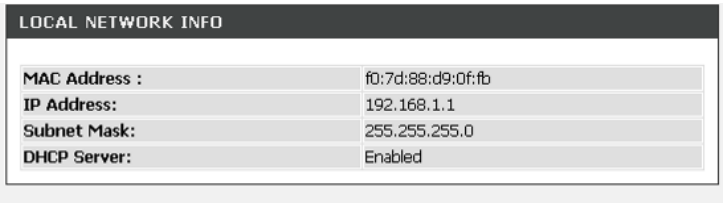
INTERNET INFO
This window displays WAN information including IP address, Mask, Default Gateway, Primary/Secondary DNS Server.



WIRELESS INFO
This window displays authenticated wireless stations and their status.



LOCAL NETWORK INFO
This window displays LAN information including MAC, IP address, Mask, and DHCP Server.

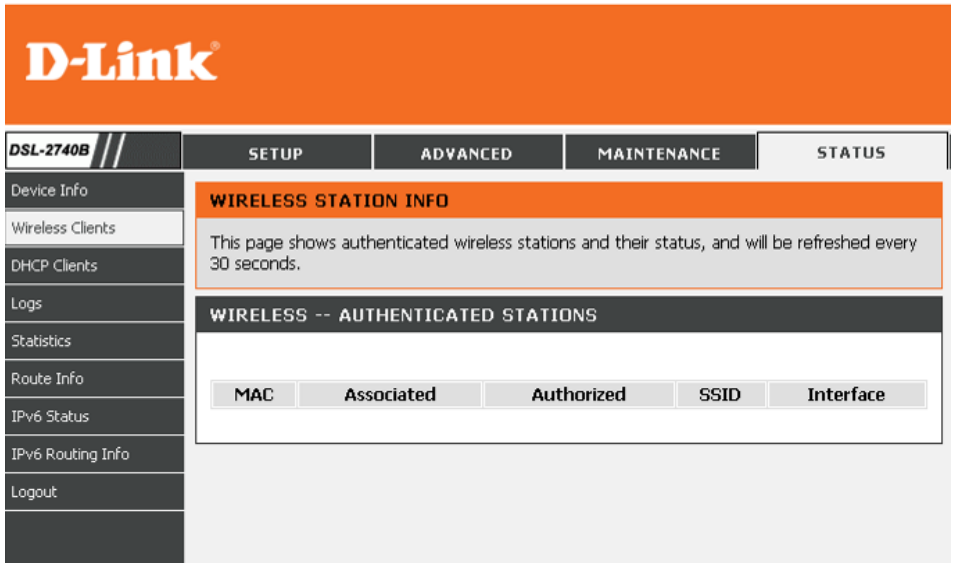


WIRELESS CLIENTS

This feature shows all the currently connected wireless and LAN computers or PCs.

To access the Wireless clients setting window, click on the **Wireless Clients** button in the **STATUS** tab.

CONNECTED WIRELESS CLIENTS
This window displays authenticated wireless stations and their status.



CONNECTED LAN CLIENTS

This window displays all the entities which link to the LAN interface successfully.

You can choose to block which entities and click the **Block** button

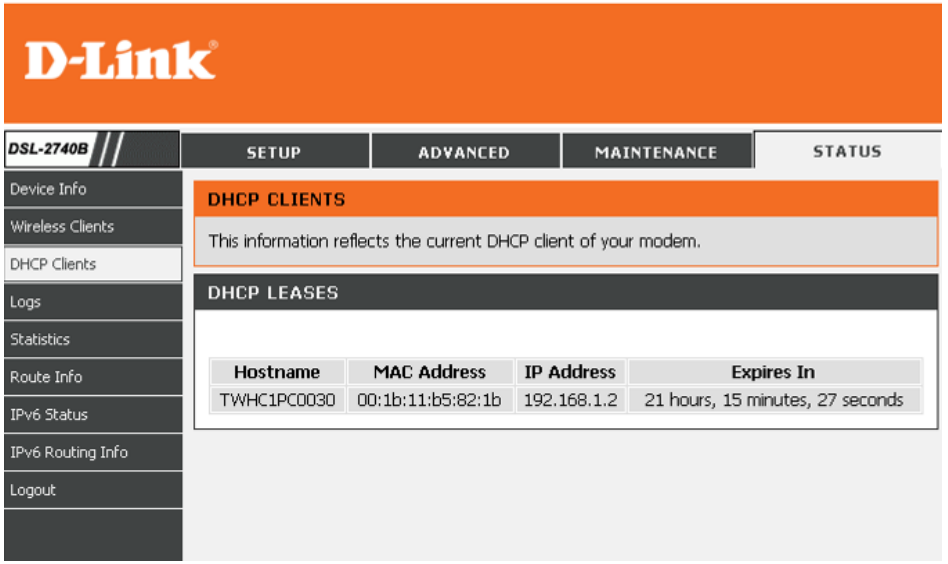
DHCP CLIENT

This feature shows all the currently connected LAN computers or PCs.

To access the DHCP clients setting window, click on the **DHCP Clients** button in the **STATUS** tab.

DHCP CLIENTS

This window displays all the entities which link to the LAN interface successfully.



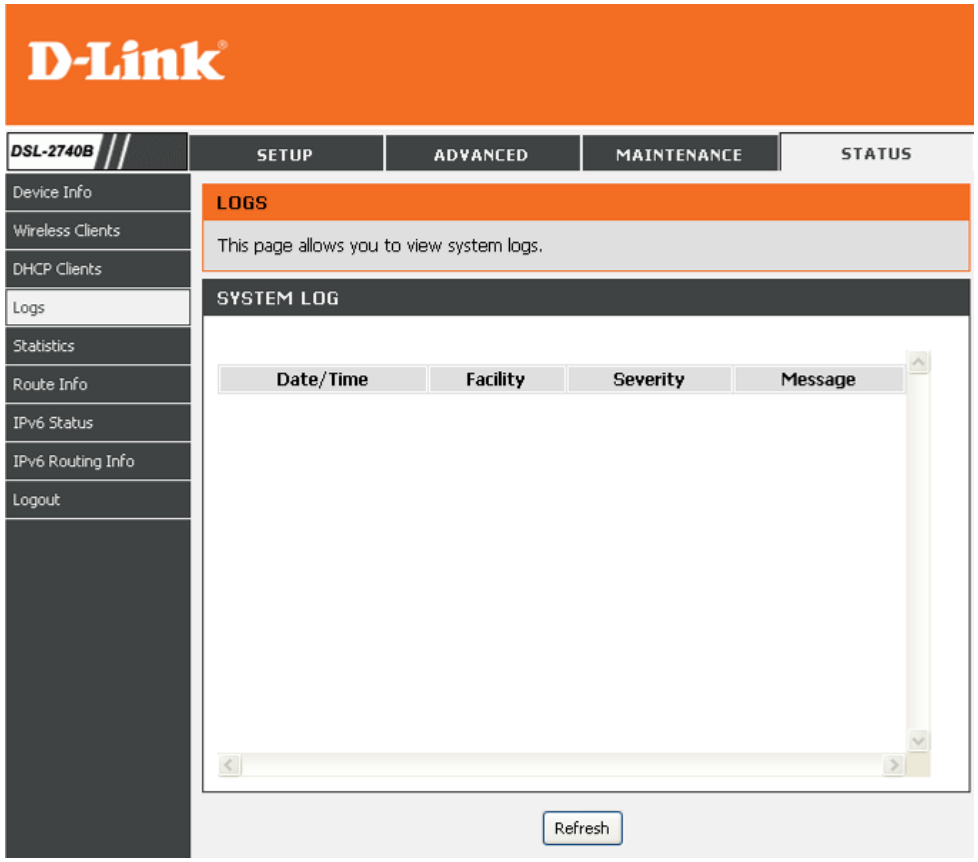
LOGS

This feature shows all the system logs.

To access the **LOGS** window, click on the Logs button in the **STATUS** tab.

LOGS

This window displays all the Logs. Click Refresh button to update new log.



STATISTICS

This information reflects the current status of your router.

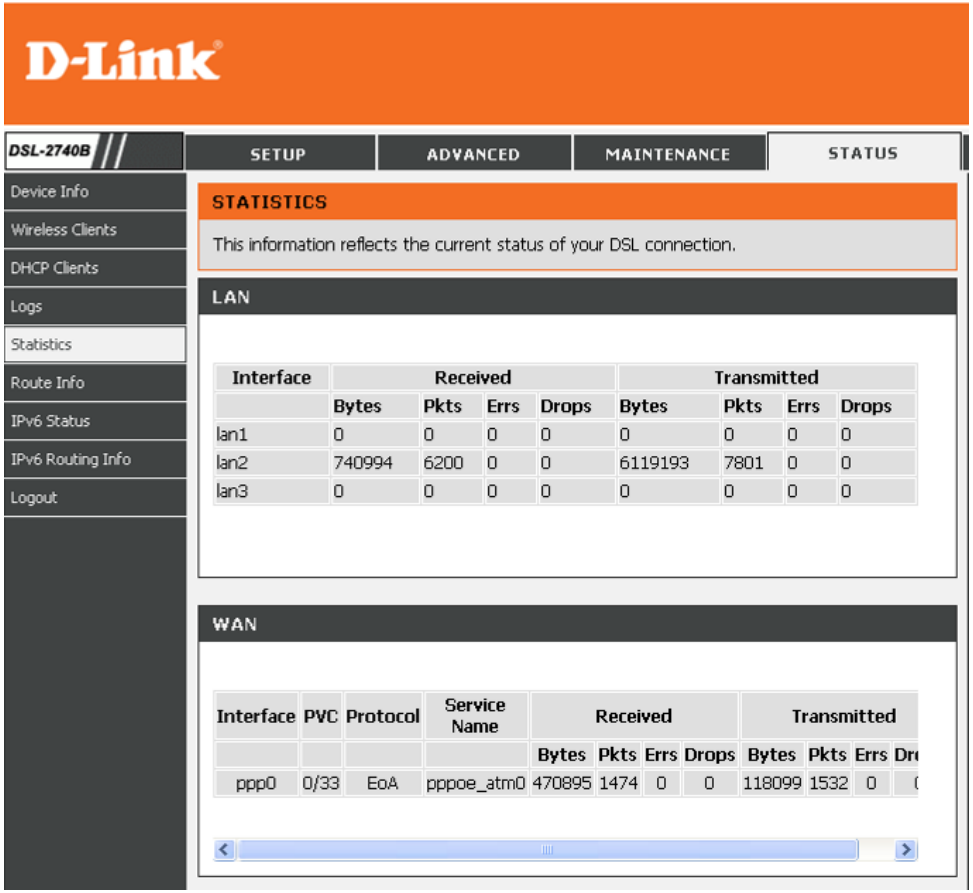
To access the **STATISICS** window, click on the Logs button in the **STATISICS** tab.

LAN STATISTICS

This window displays all the **Receiver** and **Transmitted** packet status on the LAN interface.

WAN STATISTICS

This window displays all the **Receiver** and **Transmitted** packet status on the WAN interface.

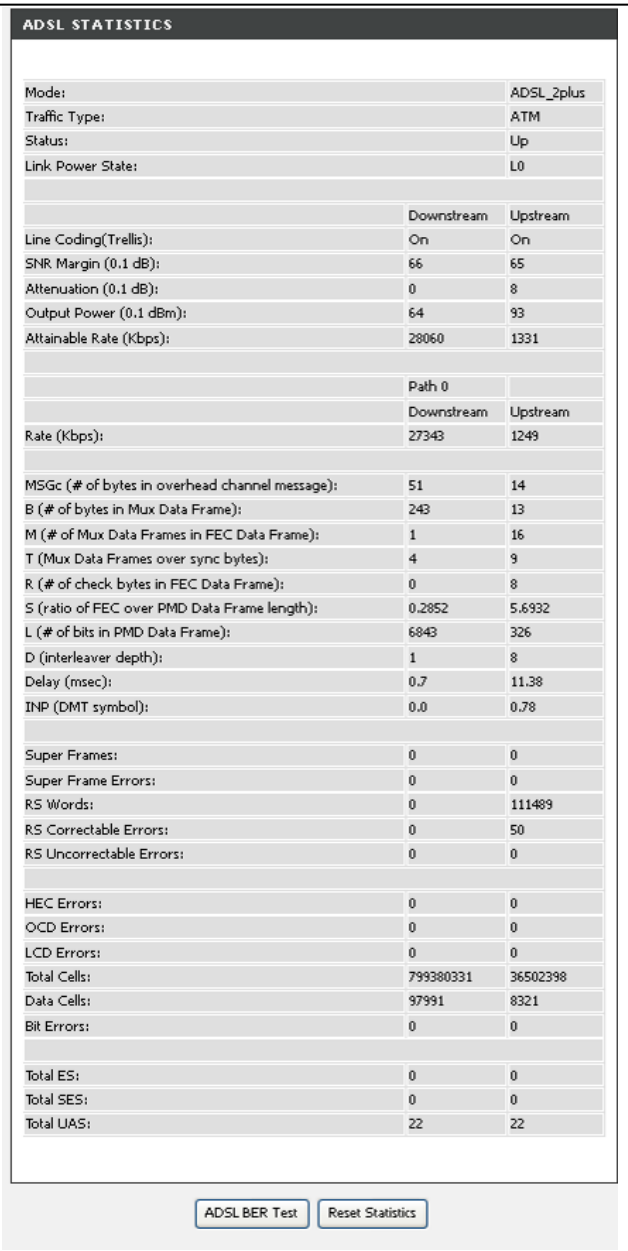


ADSL STATISTICS

This window displays all the **ADSL status**

You can click the **ADSL BER Test** button to test the ADSL connection.

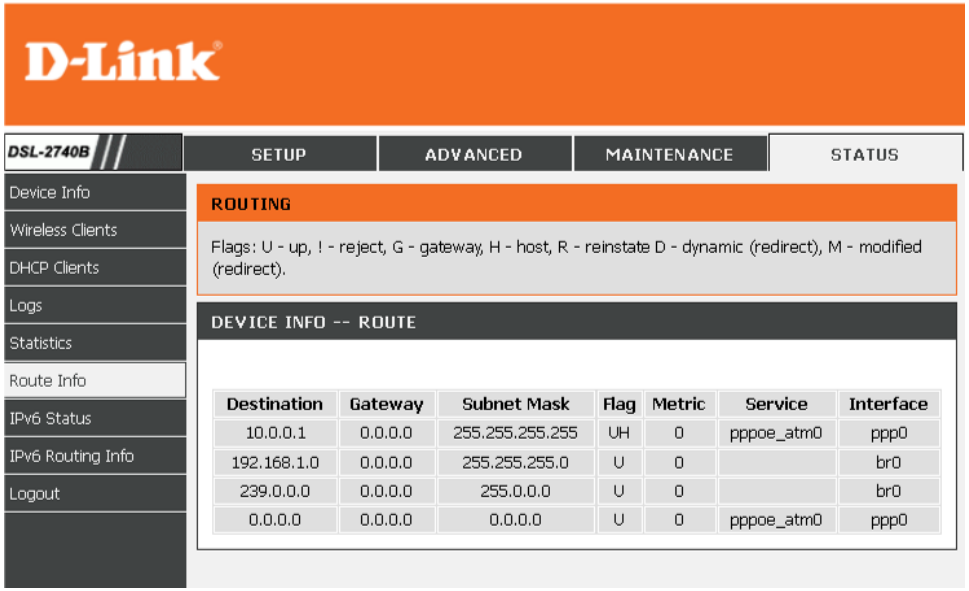
You can click the **Reset Statistics** button to set all statistics to recount.



ROUTE INFO

To access the **ROUTE INFO** setting window, click on the **ROUTE INFO** button under the **STATUS** tab.

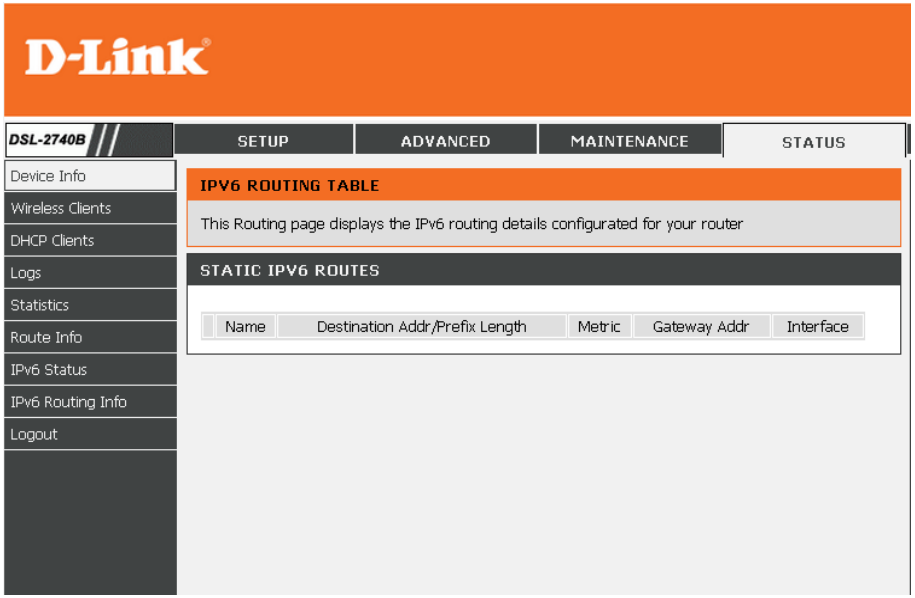
The Route Info section displays route information showing the IP addresses of the destination, gateway, and subnet mask as well as other route information



IPv6 STATUS

To access the **IPv6 Status** setting window, click on the **IPv6 Status** button under the **STATUS** tab.

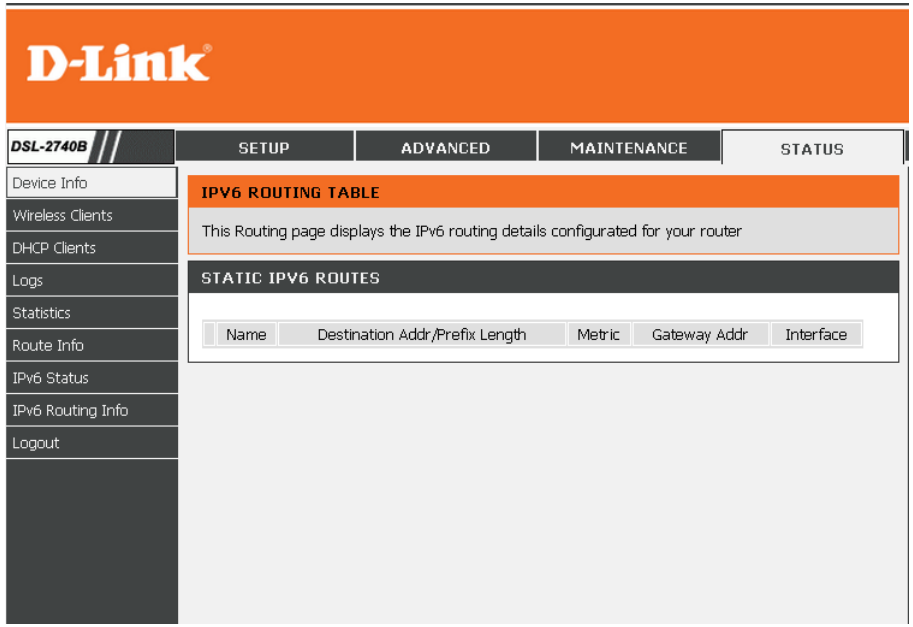
All of your IPv6 Internet and network connection details are displayed on this page.



IPv6 ROUTING INFO

To access the **IPv6 Routing Info** setting window, click on the **IPv6 Routing Info** button under the **STATUS** tab.

This Routing page displays the IPv6 routing details configurated for your router



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DSL-2740B. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.1.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself.
Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Firefox 1.5 or higher

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.

- Disable any internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.
-

- Configure your Internet settings:
  - Go to **Start > Settings > Control Panel**. Double-click on the **Internet Options** Icon. From the **Security** tab, click on the button to restore the settings to their defaults.
  - Click on the **Connection** tab and set the dial-up option to Never Dial a Connection. Click on the LAN Settings button. Make sure nothing is checked. Click on the **OK**.
  - Go to the **Advanced** tab and click on the button to restore these settings to their defaults. Click on the **OK** button three times.
  - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for the web management.

- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my 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 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, type in the default User Name “admin,” and the default Password “admin” then click on the OK button to access the web-based manager.

APPENDIX

Wireless Basics

D-Link 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 D-Link 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.

Why D-Link Wireless?
D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your 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 as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home
- Gives everyone at home broadband access
- Surf the web, check email, instant message, download multimedia files.
- 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 the office
- Remotely access your office network from home
- Share the 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 D-Link 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 you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA 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 D-Link wireless network 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.

Networking Basics

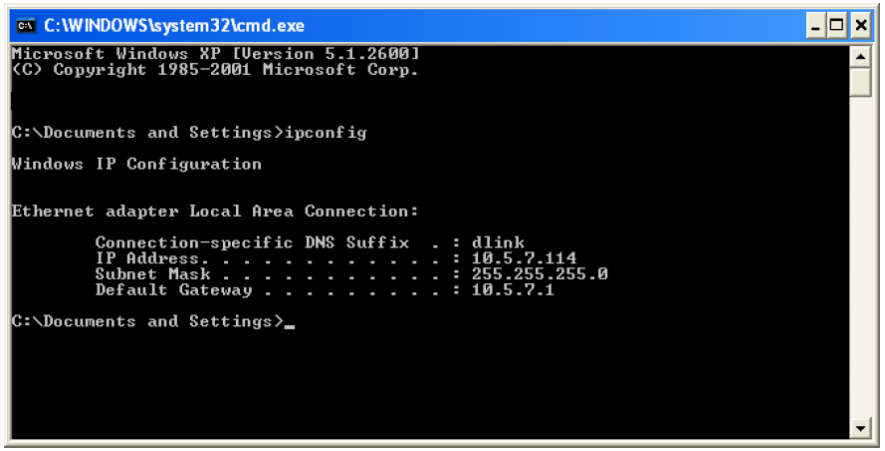
Check your IP address

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type **cmd** and click on the **OK**.

At the prompt, type **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, 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.

If you are connecting to a wireless network at a hotspot (e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.

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:

Step 1
Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.
Windows® 2000 - From the desktop, right-click on the **My Network Places** > **Properties**.

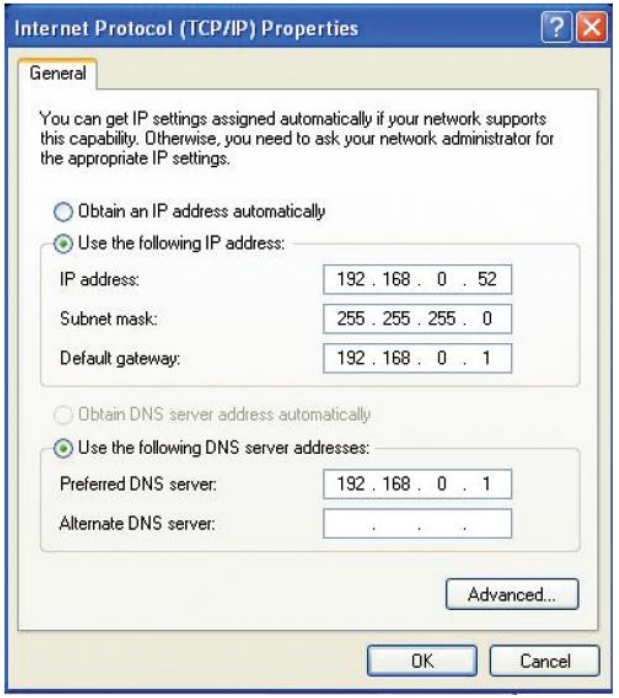
Step 2
Right-click on the **Local Area Connection** which represents your D-Link network adapter and select **Properties**.

Step 3
Highlight **Internet Protocol (TCP/IP)** and click on the **Properties**.

Step 4
Click on the **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.
Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5
Click on the **OK** twice to save your settings.



FCC Caution

Statement：

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Class B:

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a Particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/ TV technician for help.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Supprot:

DSL-2740B, DSL-2750B. DSL-2741B, DSL-2750U, DSL-2741U

IC Caution

English:

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Française:

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Contacting Technical Support

You can find software updates and user documentation on the D-Link websites.

If you require product support, we encourage you to browse our FAQ section on the Web Site before contacting the Support line.

We have many FAQ's which we hope will provide you a speedy resolution for your problem.

For Customers within Australia:

Tel: 1300-766-868

24/7 Technical Support

Web: http://www.dlink.com.au

E-mail: support@dlink.com.au

For Customers within New Zealand:

Tel: 0800-900-900

24/7 Technical Support

Web: http://www.dlink.co.nz

E-mail: support@dlink.co.nz

Technical Specifications

ADSL Standards

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

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

Protocols

- IEEE 802.1d Spanning Tree
- TCP/UDP
- ARP
- RARP
- ICMP
- RFC1058 RIP v1
- RFC1213 SNMP v1 & v2c
- RFC1334 PAP
- RFC1389 RIP v2
- RFC1577 Classical IP over ATM
- RFC1483/2684 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (AAL5)
- RFC1661 Point to Point Protocol
- RFC1994 CHAP
- RFC2131 DHCP Client / DHCP Server
- RFC2364 PPP over ATM
- RFC2516 PPP over Ethernet

Data Transfer Rate

ADSL

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

ADSL2

- G.dmt.bis full rate downstream: up to 12 Mbps / upstream: up to 1 Mbps

ADSL 2+

- Full rate downstream: up to 24 Mbps / upstream: up to 1 Mbps

Media Interface

- ADSL interface: RJ-11 connector for connection to 24/26 AWG twisted pair telephone line
- LAN interface: RJ-45 port for 10/100BASE-T Ethernet connection

WIRELESS LAN

- 802.11b/g/n standards
- Wireless speed: up to 300Mbps (802.11n)
- Frequency range: 2.4 GHz to 2.484G Hz
- Antennas: 2 non-detachable dipole antennas.
- WEP data encryption
- WPA/WPA2 (Wi-Fi Protected Access) security
- Multiple SSID
- 802.11e Wireless QoS (WMM/WME)
- MAC address-based access control

* 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.