D-Link®

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User Manual

ADSL 2+ Modem with Wireless N 300 Router

DSL-2740B

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General Information

The D-Link DSL-2740B is an ADSL2+ router offering the convenience of 4 LAN ports for additional computers. This user manual provides you with a simple and easy-to-understand format to install and configure your router.

Package Contents

ADSL2+ Modem with Wireless N 300 Router

12VDC, 1A DC CEC-compliant switching power adapter

RJ-11 telephone cable

RJ-45 Ethernet cable

Installation CD-ROM

QIG

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.*

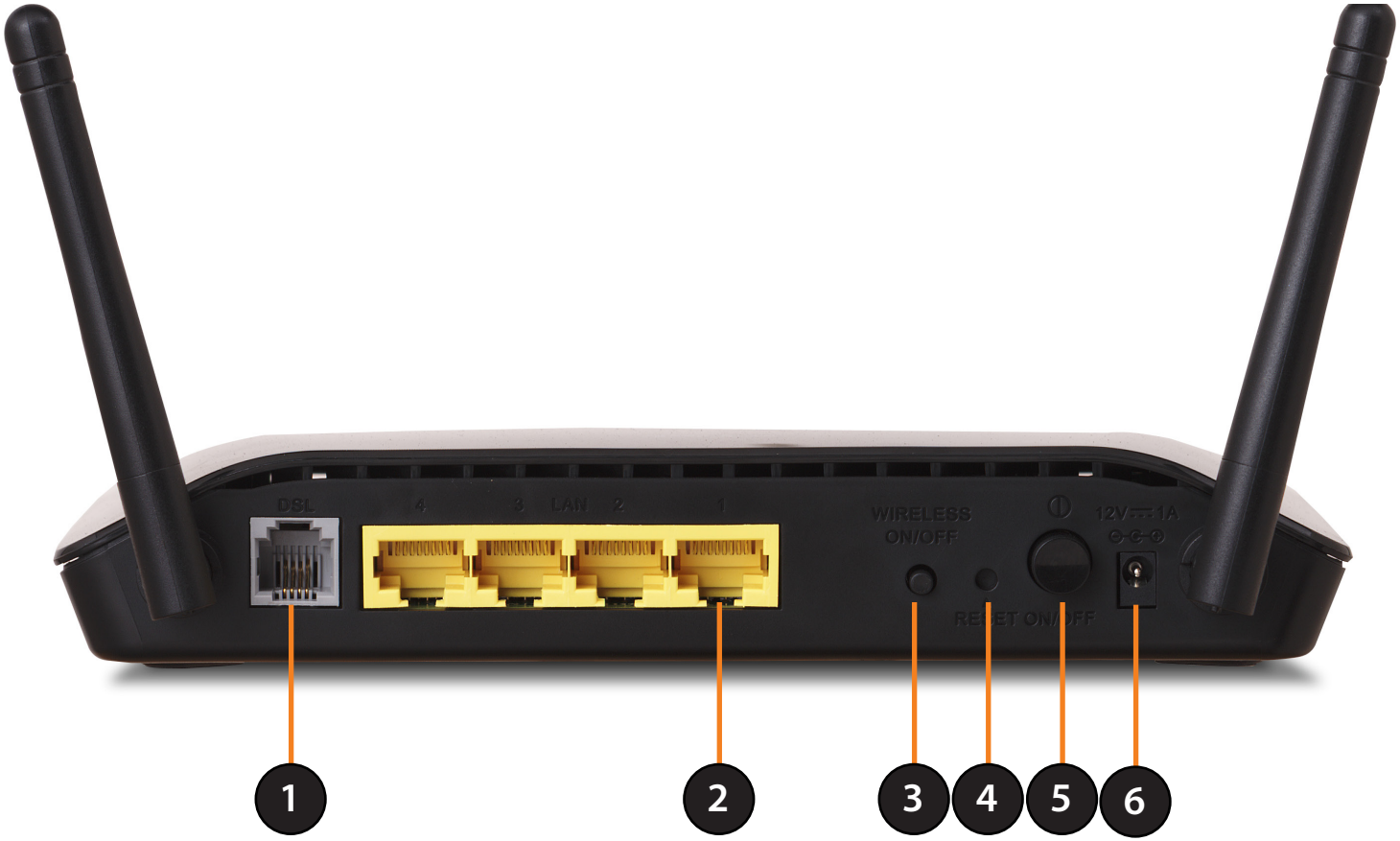
Important Safety Instructions

- Place your router on a flat surface close to the cables in a location with sufficient ventilation.
- To prevent overheating, do not obstruct the ventilation openings of this equipment.
- Plug this equipment into a surge protector to reduce the risk of damage from power surges and lightning strikes.
- Operate this equipment only from an electrical outlet with the correct power source as indicated on the adapter.
- Do not open the cover of this equipment. Opening the cover will void any warranties on the equipment.
- Unplug equipment first before cleaning. A damp cloth can be used to clean the equipment. Do not use liquid/aerosol cleaners or magnetic/static cleaning devices.
- To reduce the risk of fire, use only No. 26 AWG (or a larger diameter/smaller AWG) RJ-11 telephone cable.

Front Panel View

1	**Power LED**	• A solid green light indicates the unit is powered on. • A red light indicates a malfunction.
2	**LAN LEDs**	• A solid light indicates a connection to an Ethernet-enabled computer on ports 1-4. This LED blinks during data transmission.
3	**Wireless LED**	• A solid green light indicates the wireless function is operating correctly. A flashing green light indicates wireless traffic is passing through the router.
4	**DSL LED**	• A solid light indicates the DSL is synchronized. • A flashing LED indicates the modem is attempting to synchronize with the DSL provider.
5	**Internet LED**	• A solid green light indicates that the modem has an IP address and is connected to the Internet. • A red light indicates that the modem does not have an IP address or authentication has failed. • No light indicates that an ADSL connection is not present or the modem is in bridge mode.

Rear Panel View



1	**DSL Line**	• Connect to an active telephone line (RJ-11).
2	**LAN Ports (1-4)**	• Connect Ethernet devices such as computers, switches, and hubs.
3	**Wireless ON/OFF**	• Pressing this button to turn the Wireless feature on or off.
4	**Reset**	• Pressing the Reset button for 10 seconds restores the modem to its original factory default settings.
5	**ON/OFF**	• Press this button to turn the unit on or off.
6	**Power Receptor**	• Receptor for the supplied power adapter.

Angle View

1	**WPS Button**	• Press this button to add your device to an existing network or to create a new network.

Installing the Router

Connect the ADSL and Telephone Lines

- Connect an RJ-11 cable between the wall phone jack and the **ADSL** port on the rear panel of the router.

Connect the PC to the Router

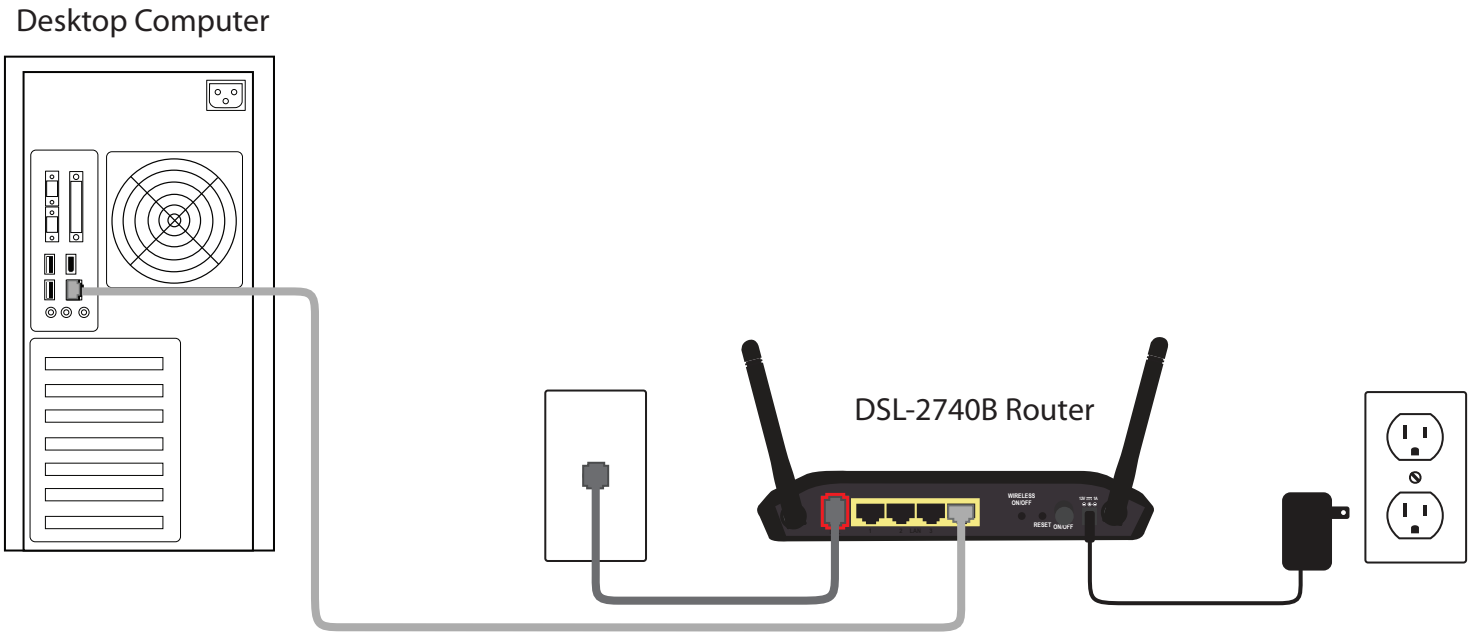
- To use the Ethernet connection, connect the Ethernet cable from the computer directly to the router. Connect one end of the Ethernet cable to the port labeled **LAN** on the back of the router and attach the other end to the Ethernet port of your computer.

- If your LAN has more than one computer, you can attach one end of an Ethernet cable to a hub or a switch and the other to the Ethernet port (labeled LAN) on the router. Note that either a crossover or straight-through Ethernet cable can be used. The router automatically recognizes the type of connection that is required.

Connect the Power Adapter

- Complete the process by connecting the supplied 12VAC, 1A power adapter to the POWER connector on the back of the device and plug the adapter into a wall outlet or power strip. Then turn on and boot up your PC and any LAN devices, such as hubs or switches, and any computers connected to them.

Installation Diagram



Configuring Your Computer

Prior to accessing the router through the LAN port, note the following necessary configurations:

- Your PC's TCP/IP address: 192.168.1.x (where "x" is any number between 2 and 254)
- The router's default IP address: 192.168.1.1
- Subnet mask: 255.255.255.0

Below are the procedures for configuring your computer. Follow the instructions for the operating system that you are using.

Windows® 7, Vista®, Windows XP, 2000

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® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center.**
Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections.**
Windows XP - Click on **Start > Control Panel > Network Connections.**
Windows 2000 - From the desktop, right-click **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 **Properties.**

Step 4

In the Internet Protocol (TCP/IP) Properties dialog box, click on the radio buttons labeled **Obtain an IP address automatically** and **Obtain DNS server address automatically.**

Step 5

Click **OK** twice to save your settings.

Mac

These are instructions for configuring your Mac OS X operating system

1. In the Mac OS X Dock, click on the **System Preferences** icon.
2. Under **Internet & Network**, click **Network**. In the **Show** menu, select **Built-in Ethernet** or Ethernet (Depending on your Mac OS version.)
3. Click the **TCP/IP** tab.
4. In the Configure menu, select **Using DHCP**.
5. Click **Apply** Now and Save if your computer prompts you to save changes.

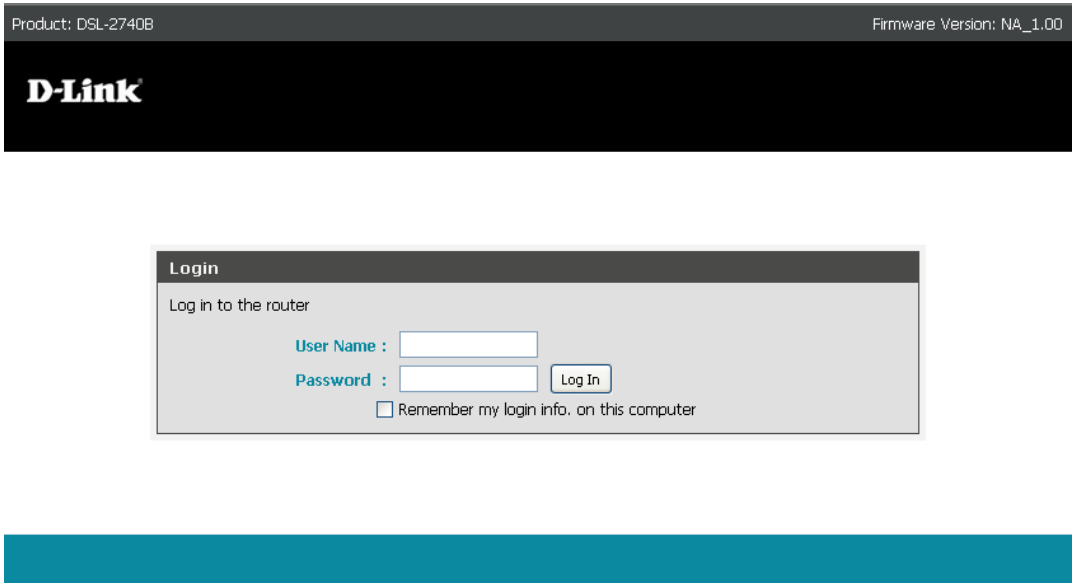
Log In To The Router

This section will explain how to log in to your router using the following steps:

1. Launch your web browser.

2. Enter the URL http://192.168.1.1 in the address bar and press **Enter**.

A login screen like the one below will be displayed after you connect to the user interface.



Note: *Use **admin/admin** as default for username and password.*

- The admin account can perform all functions (username / password: **admin** / **admin**).

Note: *Passwords can be changed at any time.*

3. Enter your user name and password, and then click **OK** to display the user interface.

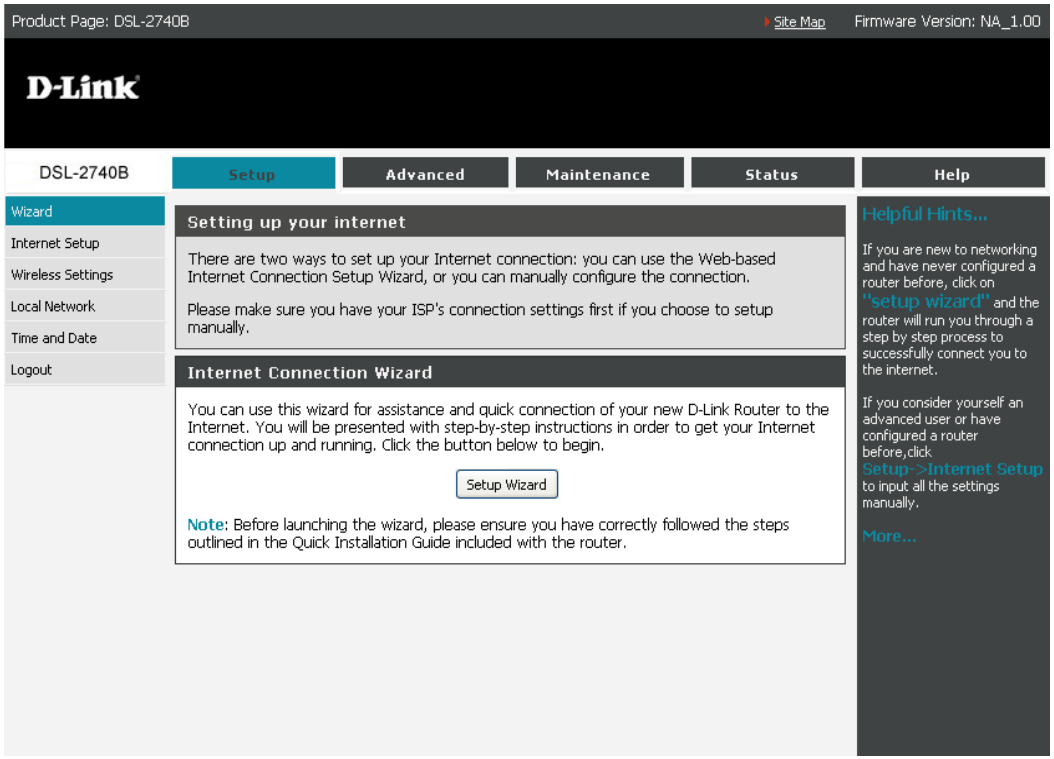
Note: *This manual has been prepared using the admin user name.*

Setup

This section will show you how to configure your new D-Link wireless router using the web-based configuration utility. Please prepare your DSL account information provided by your Internet Service Provider (ISP).

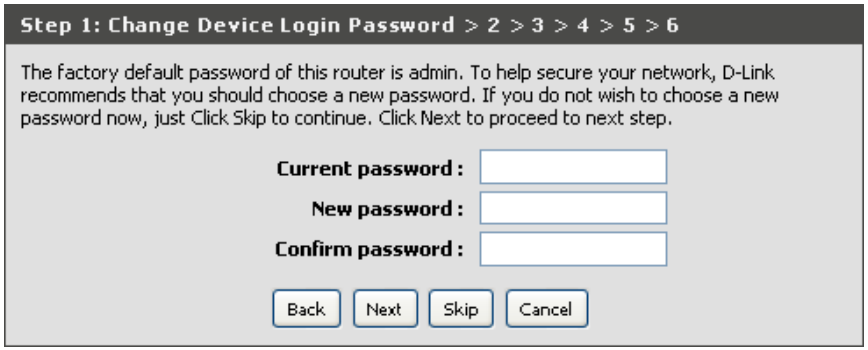
Setup Wizard

To quickly configure your router, click **Setup Wizard**.

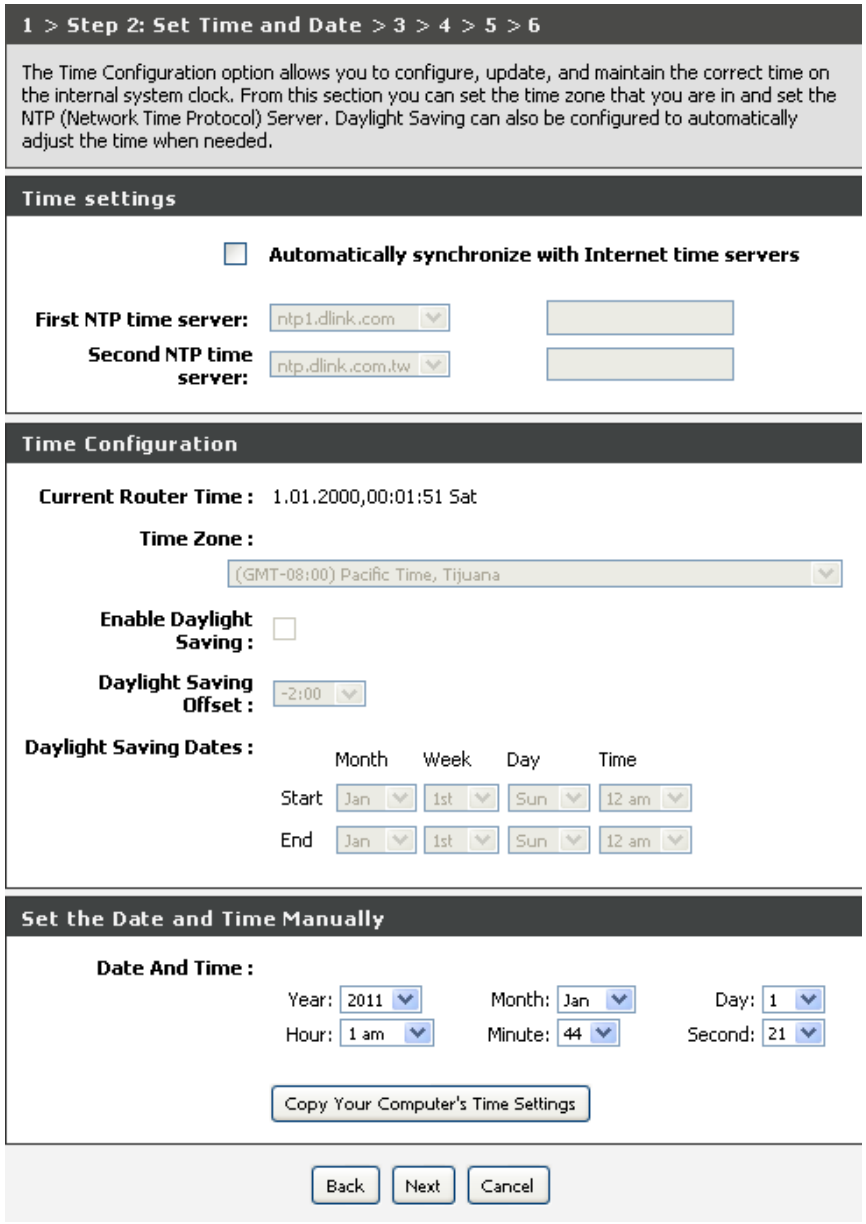


Click **Next** to continue.

Create a new password and click **Next** to continue or click **Skip** to keep your current password.

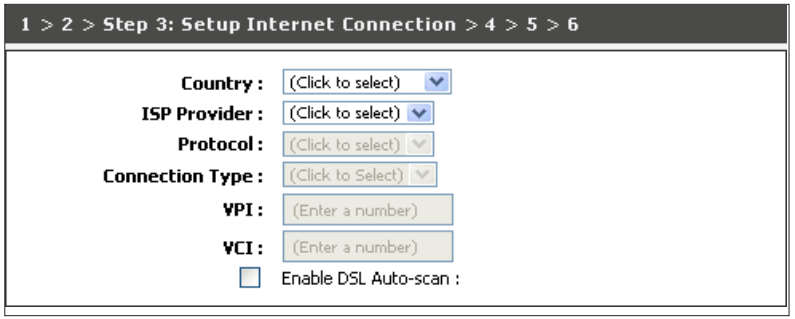


In this section you may configure, update, and maintain the correct time for the internal system clock. Set the time zone that you are in and set the NTP (Network Time Protocol) Server. Select the time zone from the drop-down menu and then click **Next** to continue.

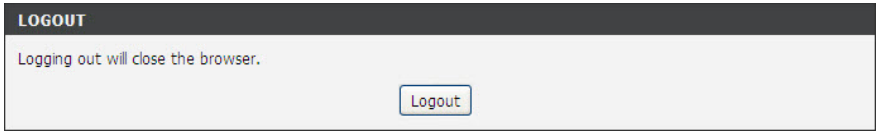


Select your Country and Internet Service provider from the drop-down menus. If your Country or ISP is not on the list, please select "**others**". Refer to your DSL account information and select the proper Protocol and Connection Type. Next, enter your ISP assigned VPI and VCI settings.

Alternatively, you may check the box labeled Enable DSL Auto-Scan. Click **Next** to continue.



To log out of the router's user interface at any time during the setup, click on the **Logout** button. A confirmation screen will appear confirming that you really want to log out.



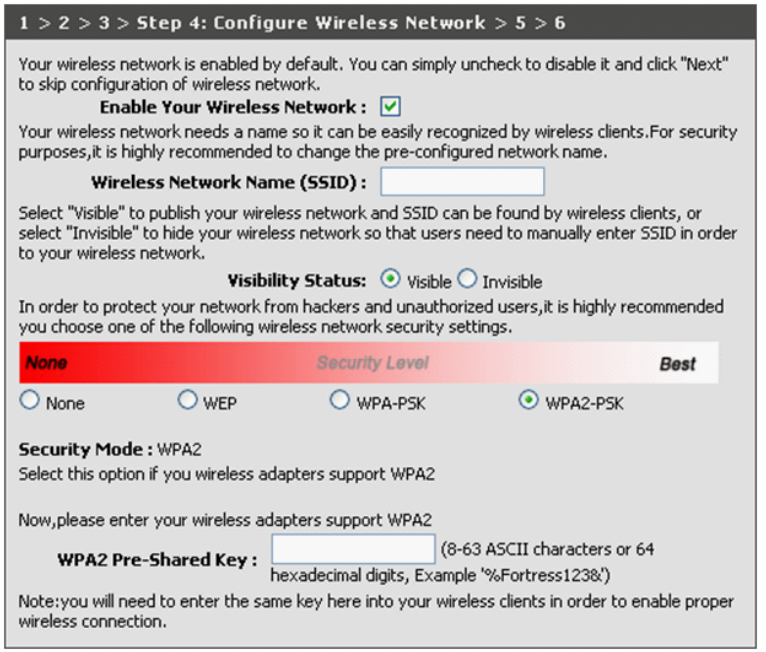
Configure Wireless Network

Enable Your Wireless Network: If you would like to make wireless available, this box must be checked. To Disable wireless, uncheck this box.

Visibility Status: Choose Invisible if you would like to hide any access point for your router so a station cannot obtain the SSID through passive scanning.

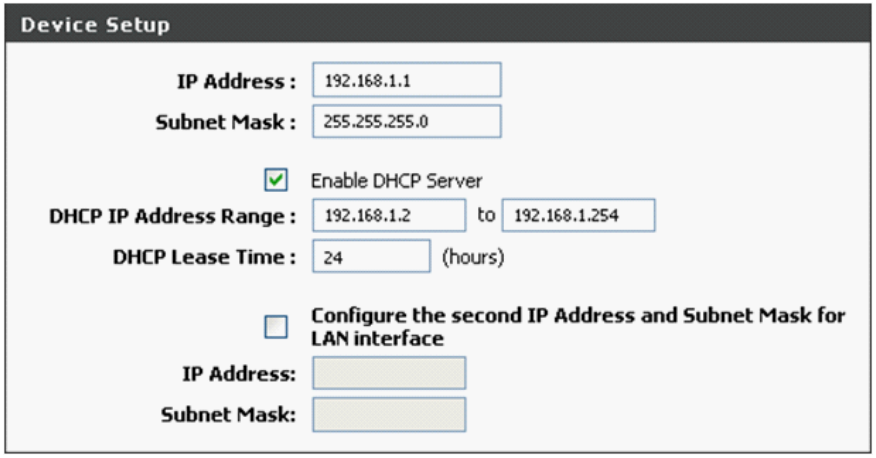
Wireless Network Name (SSID): Give your wireless network a name. For security reasons it is recommended to change the pre-configured network name.

Security Level: It is suggested to use WPA2-PSK for the highest level of wireless security.



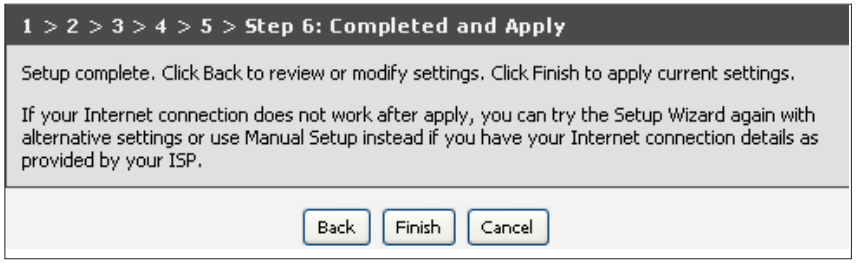
LAN Settings

In this section, you can configure the DSL Router IP Address and Subnet Mask for the LAN interface.



Apply Settings

The Setup is now complete. Click Finish to apply the current settings.

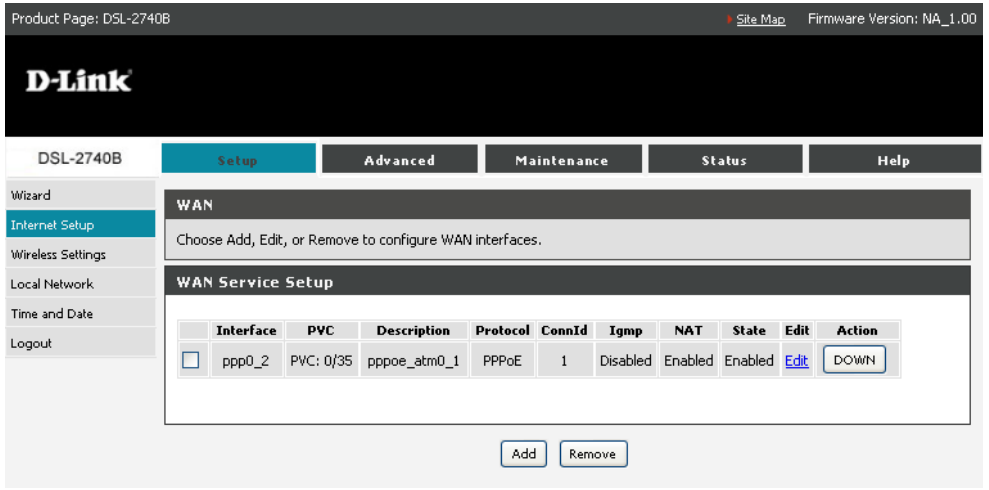


Internet Setup

Internet Setup is an advanced version of the Setup Wizard. If you want to manually configure your DSL connection, consider going through this advanced setup for a more comprehensive configuration. Configure the DSL settings as provided by your ISP.

Click on the **Add** button if you want to add a new connection for the Wide Area Network (WAN) interface and to proceed to the ATM PVC Configuration screen. The ATM PVC Configuration screen allows you to configure your Internet connection.

Find your account settings from your ISP before you proceed.

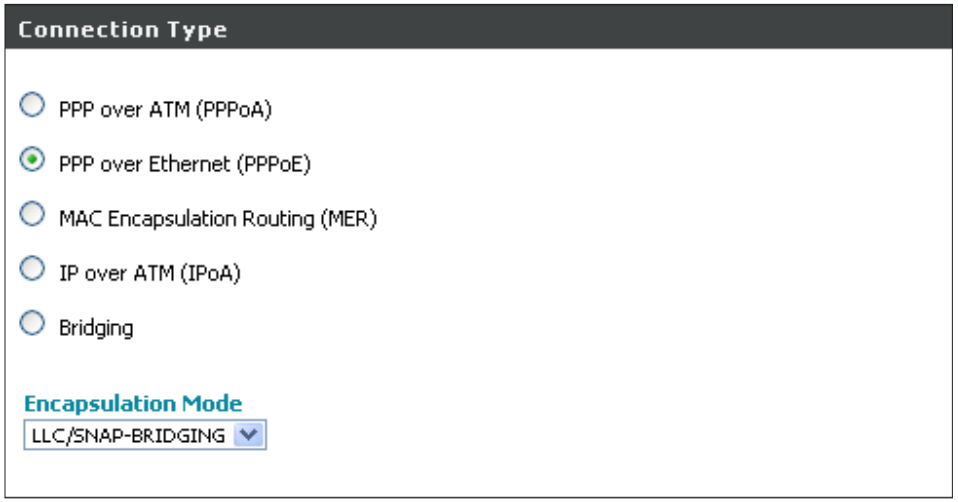


ATM PVC Configuration

VPI/VCI: These values are required for all DSL connection types and are provided by your ISP.

Service Category: Use the default setting unless otherwise instructed by your ISP.

Enable QoS: Use the default setting unless otherwise instructed by your ISP. For more information about QoS, see the Quality of Service section in this user manual.

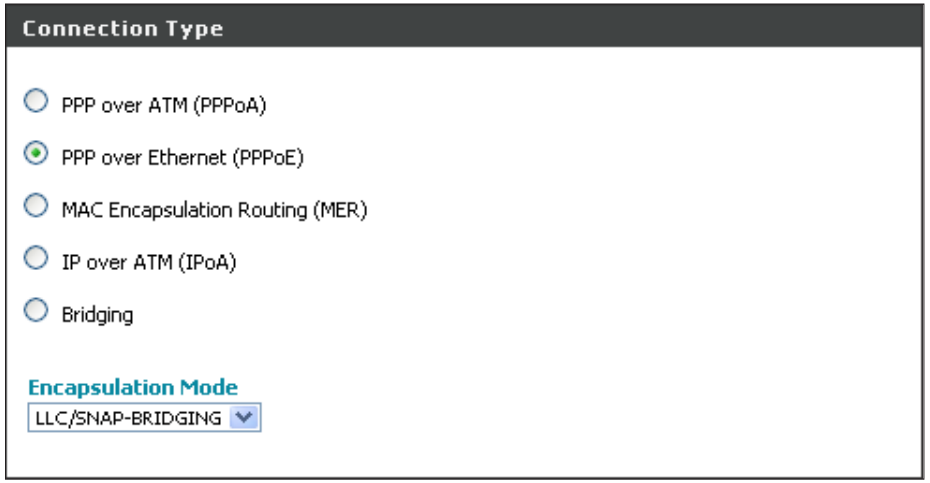


Connection Type

This field shows the types of network protocols and encapsulation modes that can be configured.

Connection Type: Select the connection type that your ISP has instructed to use.

- PPP over ATM (PPPoA)
- PPP over Ethernet (PPPoE)
- MAC Encapsulation Routing (MER)/DHCP
- IP over ATM (IPoA)
- Bridging



PPPoE, MER (also referred to as DHCP) and Bridging are the most common connection types in North America. To set up a PPPoE, MER or Bridging connection, follow the instructions on the following pages of this user manual. PPPoA and IPoA are more widely utilized in other regions. Setup for PPPoA and IPoA are similar to PPPoE and MER, respectively.

Encapsulation Mode: Use the default setting unless otherwise instructed by your ISP.

Note: *These settings are ISP dependant. For information regarding proper configuration, contact your ISP.*

PPP over Ethernet (PPPoE)

PPP Username: Enter your username as provided by your ISP.

PPP Password: Enter your password as provided by your ISP.

PPPoE Service Name: Enter any name that will help you identify your connection. This field will not affect your connection.

Authentication Method: Use the default setting unless otherwise instructed by your ISP.

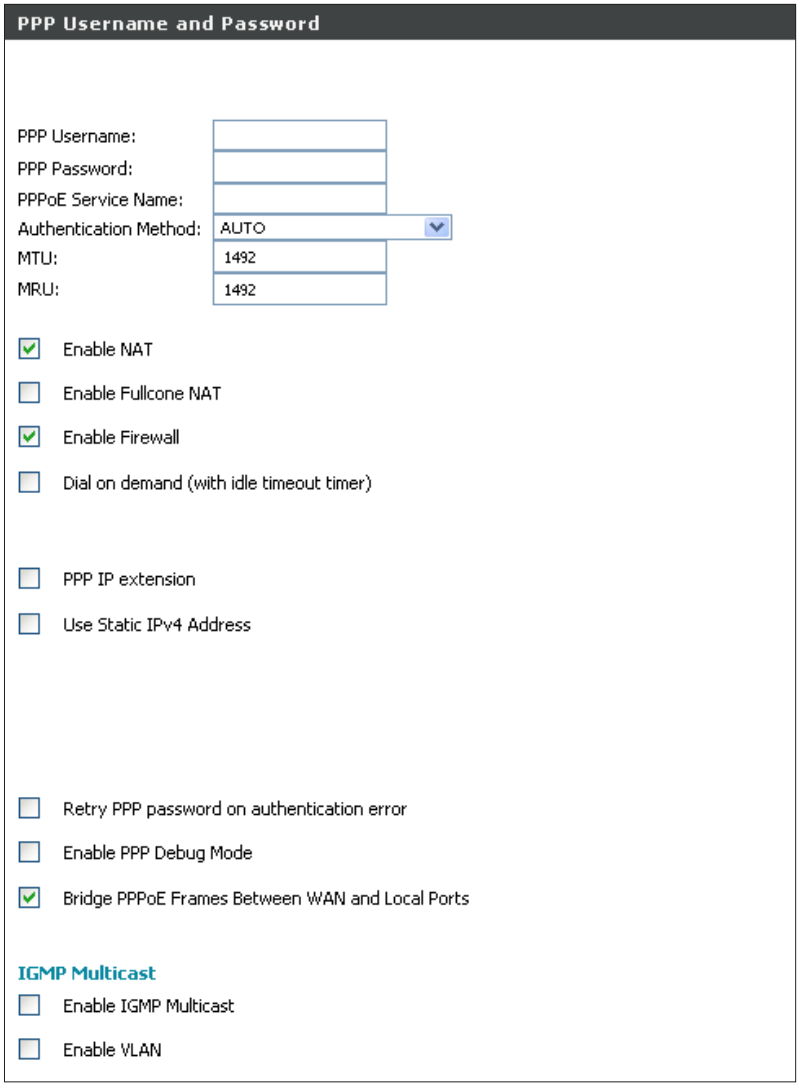
MTU: Use the default setting of 1492 unless otherwise instructed by your ISP.

MRU: Use the default setting unless otherwise instructed by your ISP.

Enable NAT: Select if you would like to share your internet connection with multiple computers. The router will share your DSL connection with wired and wirelessly connected computers.

Enable Fullcone NAT: Select this option if you would like to utilize a one-to-one Network Address Translation. It will map a single internal IP address to a single external IP address.

Enable Firewall: Select if you would like to utilize the firewall to help protect you from unwanted internet threats



Dial on demand (with idle timeout timer): Allows you to manually connect to the Internet so you are not permanently connected. Idle timeout timer is included.

PPP IP extension: Used by some ISPs. Check with your ISP to see if it is required.

Use Static IPv4 Address: Select if your ISP has provided you with a static IP address. If selected, you will be asked to enter the static IP address.

Retry PPP password on authentication error: Select if you want the router to automatically retry your PPP username and password when there is an authentication error on your DSL line.

Enable PPP Debug Mode: Select if you want to keep a log of connection negotiation transactions. This option is used for troubleshooting connection issues.

Bridge PPPoE Frames Between WAN and Local Ports: Use the default setting unless otherwise instructed by your ISP.

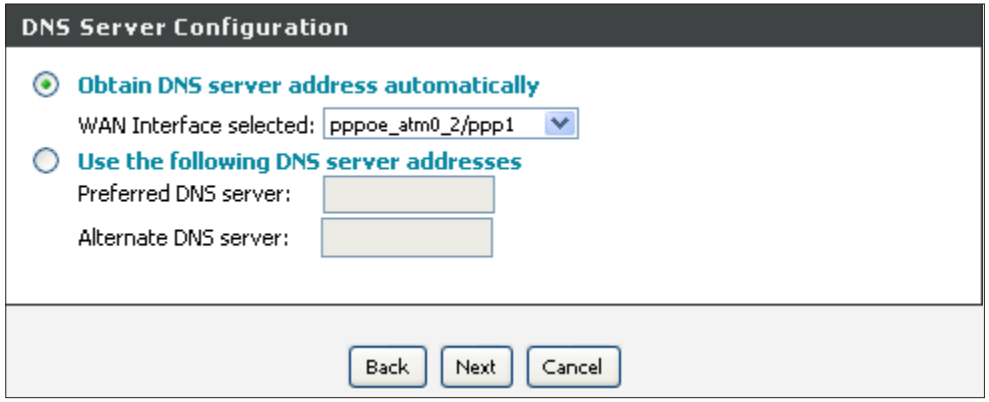
Enable IGMP Multicast: Use the default setting unless otherwise instructed by your ISP.

Enable VLAN: Use the default setting unless otherwise instructed by your ISP.

DNS Server Configuration

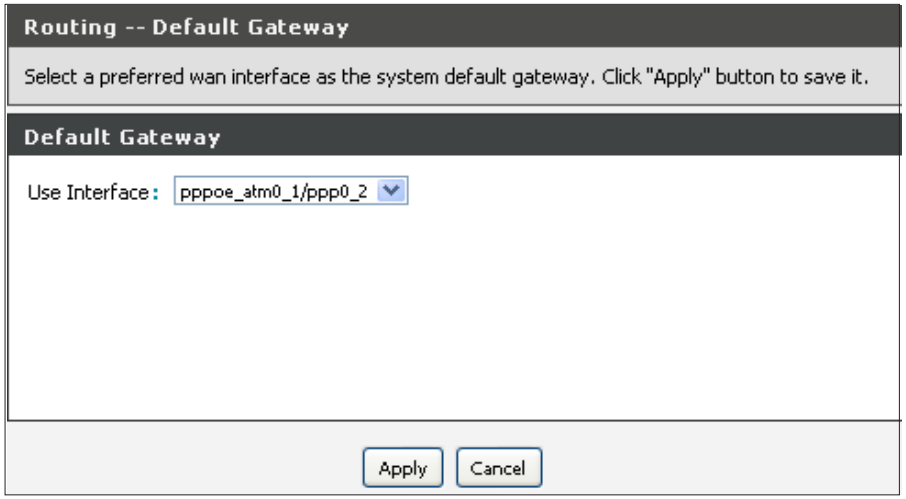
If **Obtain DNS Server address automatically** is selected, this router accepts the first received DNS assignment from the PPPoE enabled PVC during the connection establishment.

If **Use the following DNS server addresses** is selected, enter the primary and secondary (optional) DNS server IP addresses



Default Gateway

From this page, you can select a preferred WAN interface as the system default gateway.

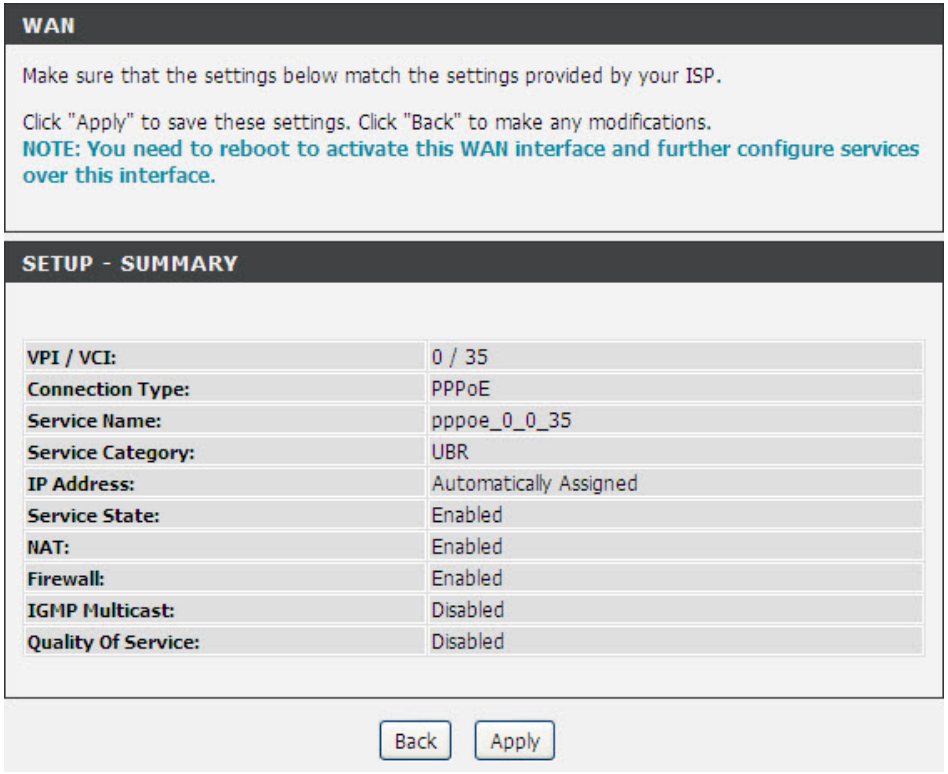


Setup Summary (PPPoE)

Confirm the settings on this page match the settings provided by your ISP. To make any changes, click **Back**.

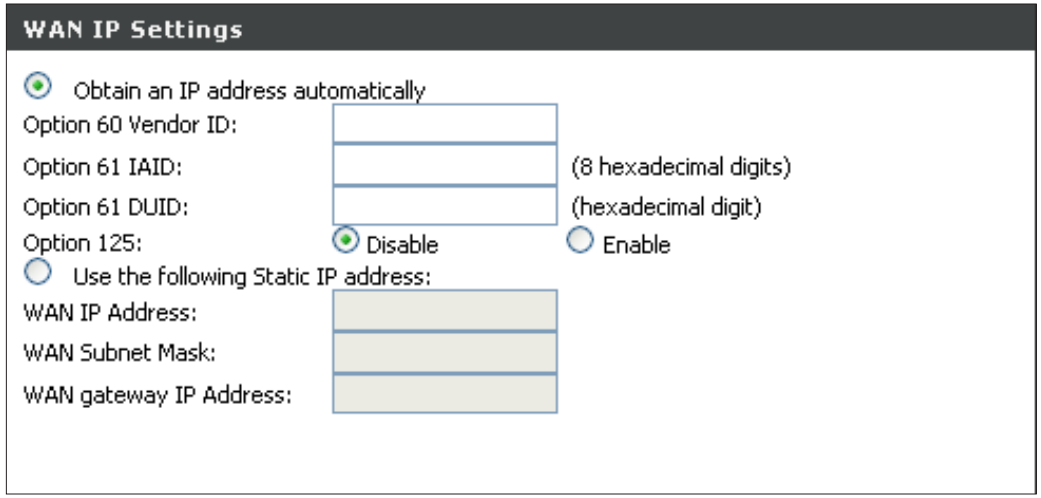
If your settings are correct, click **Apply**.

Note: *After clicking* ***Apply****, you will have to reboot the router in order to activate your connection*



MAC Encapsulation Routing or DHCP

This page allows you to configure your MER/DHCP connection. Use default settings unless otherwise instructed by your ISP. This might include using a static IP address. In such a case, select Use the following Static IP address and enter your static IP address as provided by your ISP.



Network Address Translation Settings (MER/DHCP)

Enable NAT: Select if you would like to share your internet connection with multiple computers. The router will share your DSL connection with wired and wirelessly connected computers.

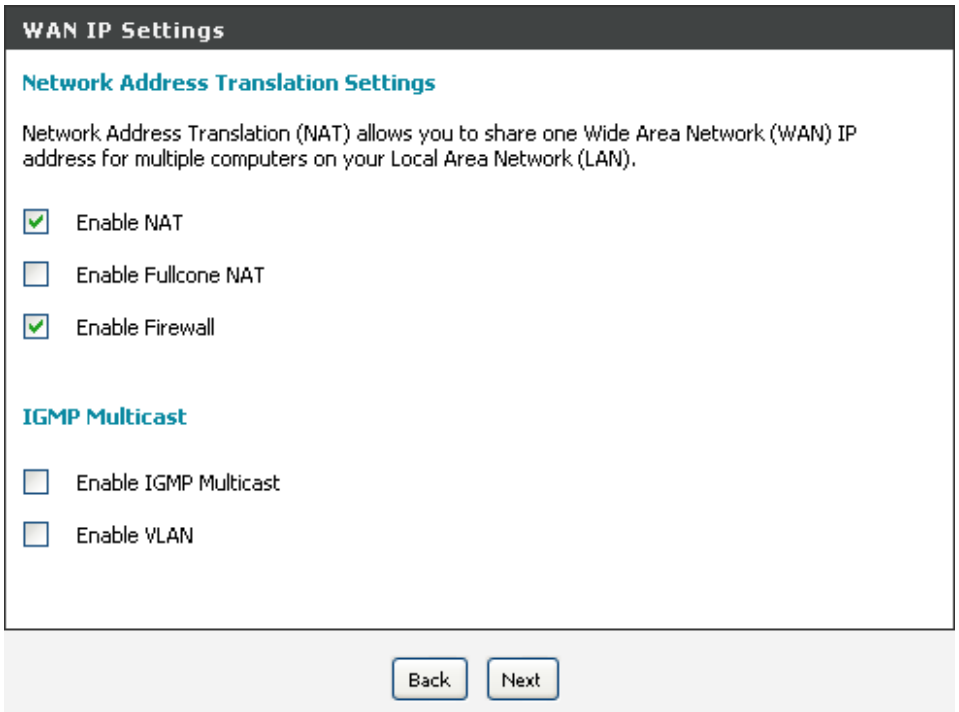
Enable Fullcone NAT: Select this option if you would like to utilize a one-to-one Network Address Translation. It will map a single internal IP address to a single external IP address.

Enable Firewall: Select if you would like to utilize the firewall to help protect you from unwanted internet threats.

Enable IGMP Multicast: Use default setting unless otherwise instructed by your ISP.

Enable VLAN Use the default setting unless otherwise instructed by your ISP.

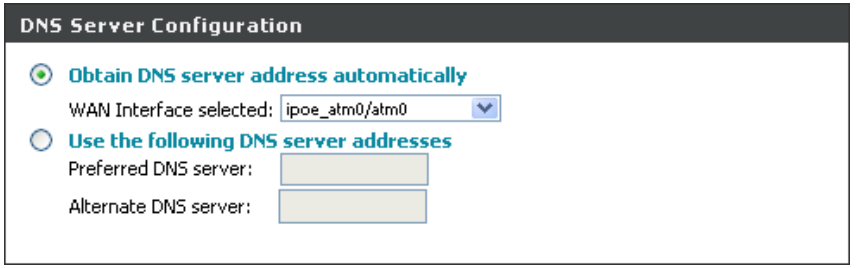
Click **Next**.



DNS Server Configuration (MER/DHCP)

If Obtain DNS Server address automatically is selected, this router accepts the first received DNS assignment from the MER/DHCP enabled PVC during the connection establishment.

If Use the following DNS server addresses is selected, enter the primary and secondary (optional) DNS server IP addresses.



Default Gateway (MER/DHCP)

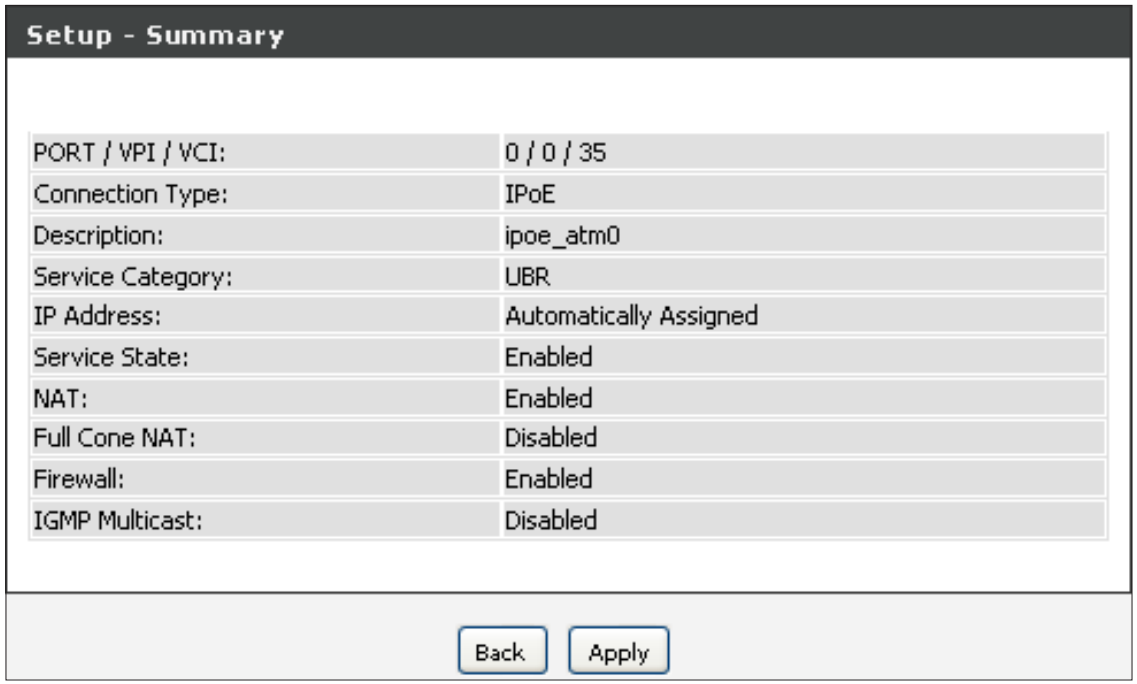
In this section, you can select a preferred WAN interface as the system default gateway.

Setup Summary (MER/DHCP)

Confirm the settings on this page match the settings provided by your ISP. To make any changes, click **Back**.

If your settings are correct, click **Apply.**

Note: *After clicking Apply, you will have to reboot the router in order to activate your connection.*

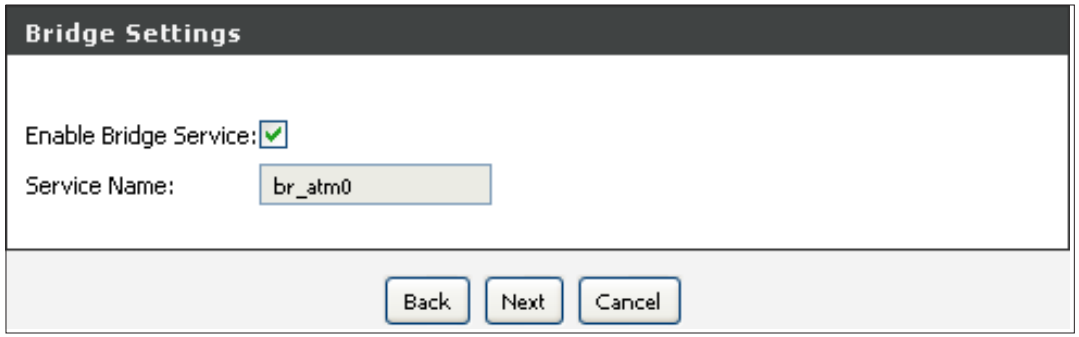


Bridging

Enable WAN Service: This option is Enabled by default. Deselecting this option will cause your DSL connection to be disabled.

Service Name: Enter any name that will help you identify your connection. This field will not affect your connection.

Click **Next**.

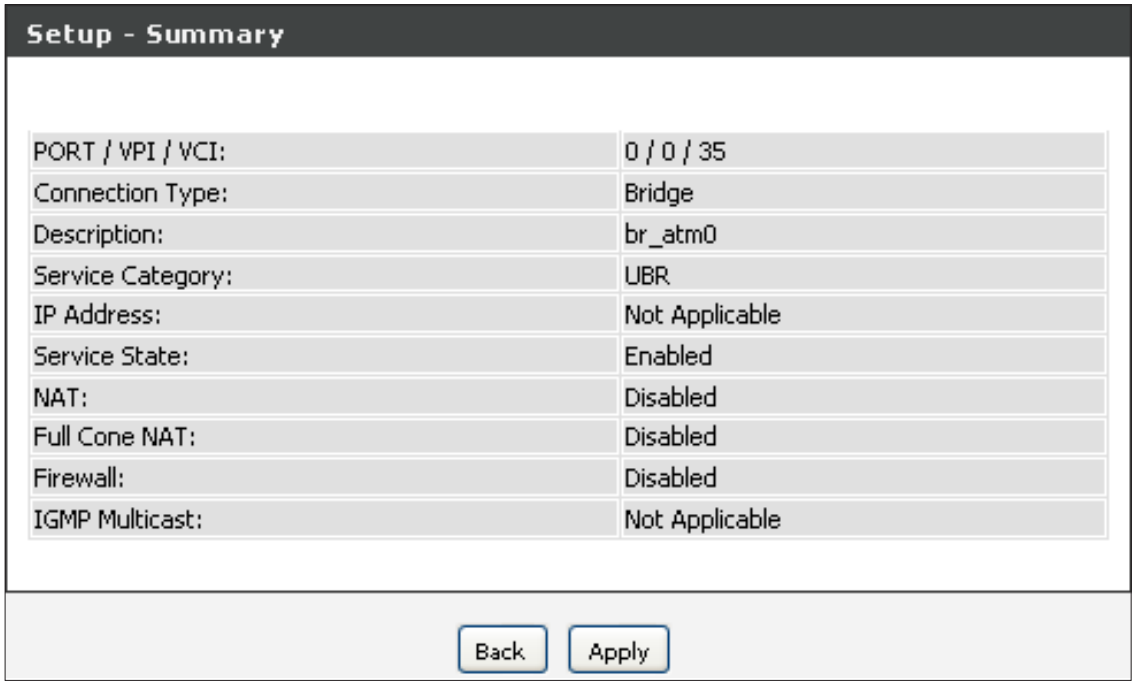


Setup Summary (Bridging)

Confirm the settings on this page match the settings provided by your ISP. To make any changes, click **Back**.

If your settings are correct, click **Apply**.

Note: *After clicking* ***Apply****, you will have to reboot the router in order to activate your connection.*

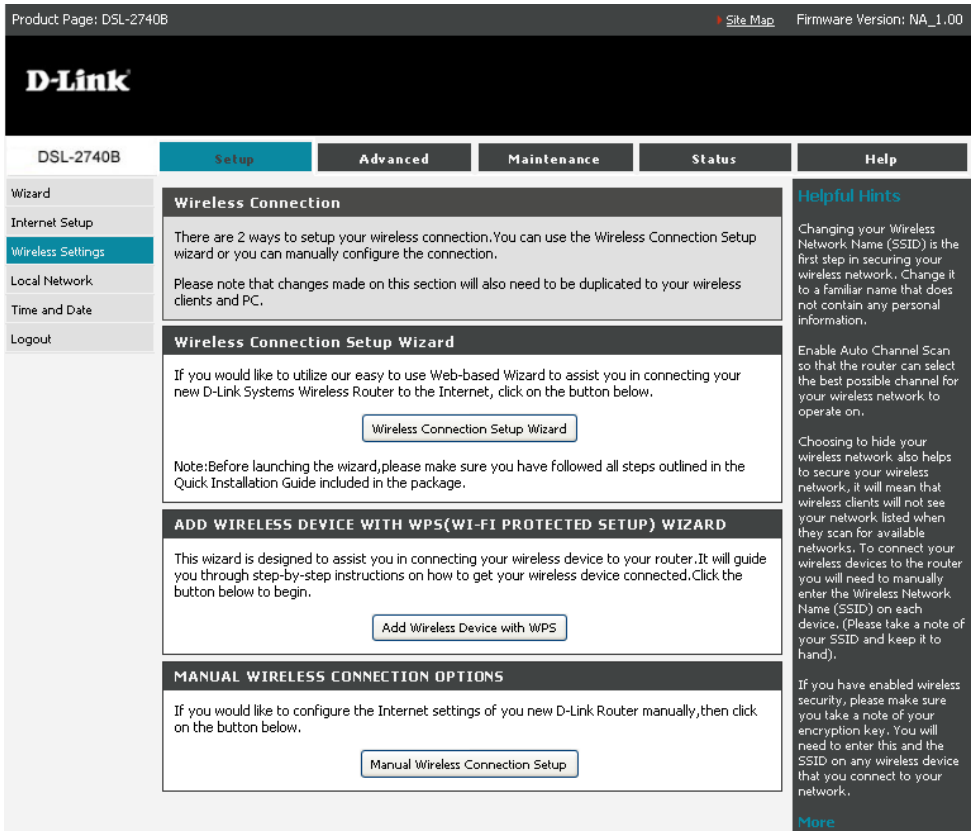


Wireless Settings

This section allows you to configure your wireless settings by using the **Wireless Connection Setup Wizard** or by doing it manually by selecting **Add Wireless Device with WPS**.

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

Click Add Wireless Device with WPS If you want to add a wireless device using Wi-Fi Protected Setup (WPS)



Wireless Connection Setup Wizard

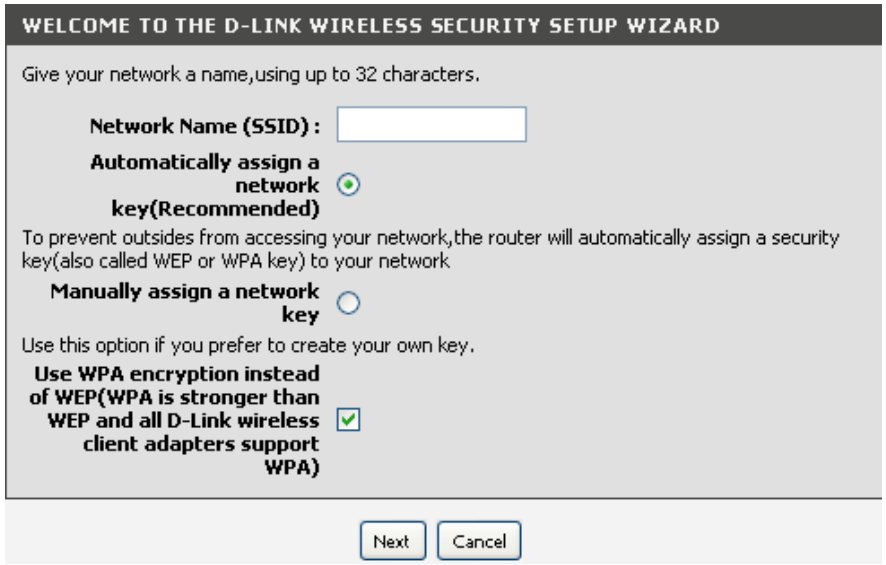
Network Name SSID: The SSID (Service Set Identification) is the unique name shared among all devices in a wireless network. The SSID must be identical for all devices in the wireless network.

Network Key: You can either have an automatically assigned network key, or choose Manually assign a network key to create one yourself.

WPA: Select this option for a higher level of wireless security.

Click **Next**

Review your wireless settings and click Save to finish the Setup Wizard.



Wi-Fi Protected Setup

Select Auto to add a wireless client using WPS. Once you select Auto and click Connect, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.

If you select Manual, you will be prompted to enter a Network Name (SSID) and Network Key. Click Next and a settings summary screen will appear. Write down the security key and enter this on your wireless clients.

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

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

Manual Wireless Setup

Enable Wireless: If you would like to make wireless available, you must check this box first.

Wireless Network Name (SSID): The SSID (Service Set Identification) is the unique name shared among all devices in a wireless network. The SSID must be identical for all devices in the wireless network.

Country: The channel will adjust according to nations to adapt to each nation's frequency provision.

Wireless Channel: Auto setting can be selected to allow the device to choose the channel with the least amount of interference.

802.11 Mode: Select one of the following:

802.11g Only – Select if all of your wireless clients are 802.11g.

Mixed 802.11g and 802.11b – Select if you are using both 802.11g and 802.11b wireless clients.

802.11b Only – Select if all of your wireless clients are 802.11b.

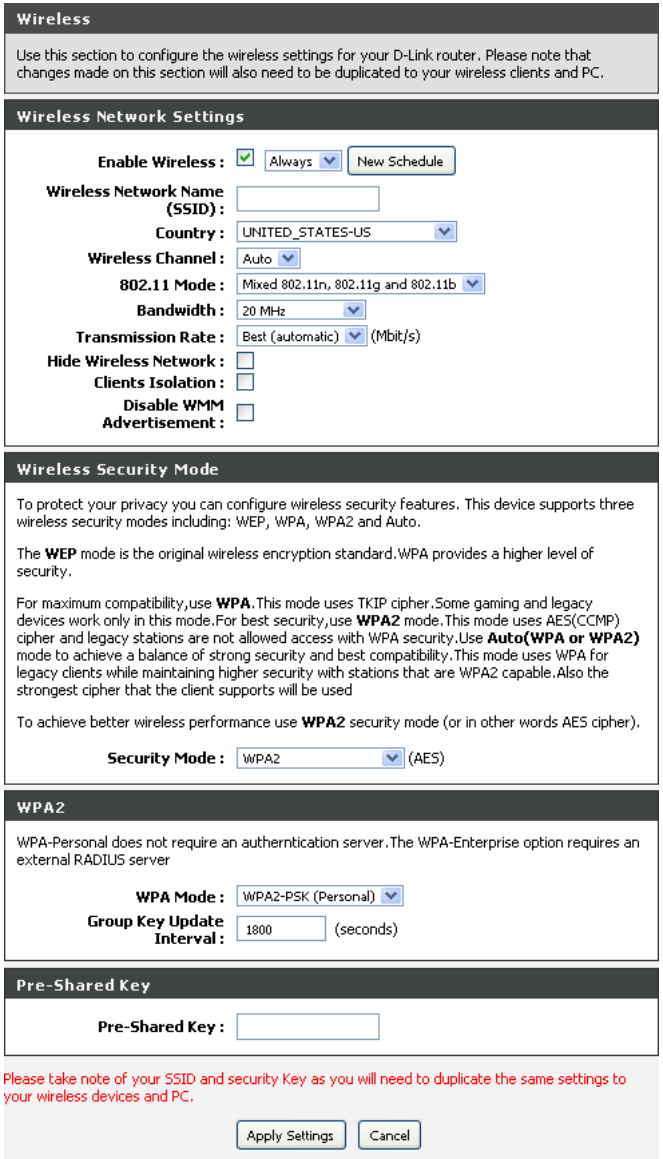
802.11n Only – Select if all of your wireless clients are 802.11n.

Mixed 802.11n, 802.11b, and 802.11g – Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Bandwidth: Select the channel width:

Auto 20/40 – Select if you are using both 802.11n and non-802.11n wireless devices.

20MHz – Select if you are not using any 802.11n wireless clients. This is the default setting.



Transmission Rate: Select the transmission rate. It is strongly suggested to select Best (Auto) for best performance

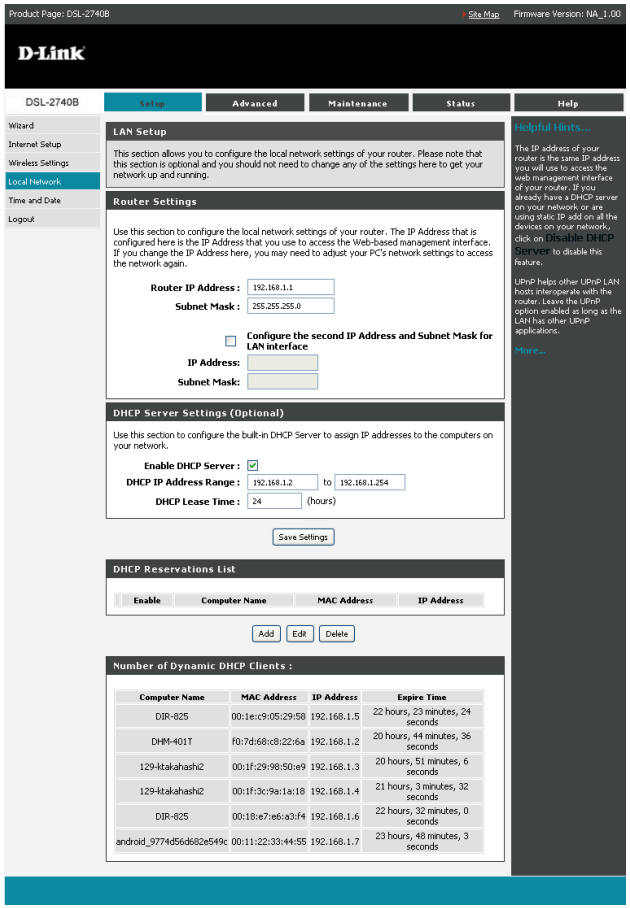
Hide Wireless Network: Check this box if you would like to hide any access point for your router, so a station cannot obtain the SSID through passive scanning.

Wireless Security Mode: This device is equipped with 802.1X and WPA/WPA2 (Wi-Fi Protected Access), the latest security standard. Before selecting security mode, consider your network size, complexity and existing authentication infrastructure in order to determine which solution is best.

Local Network

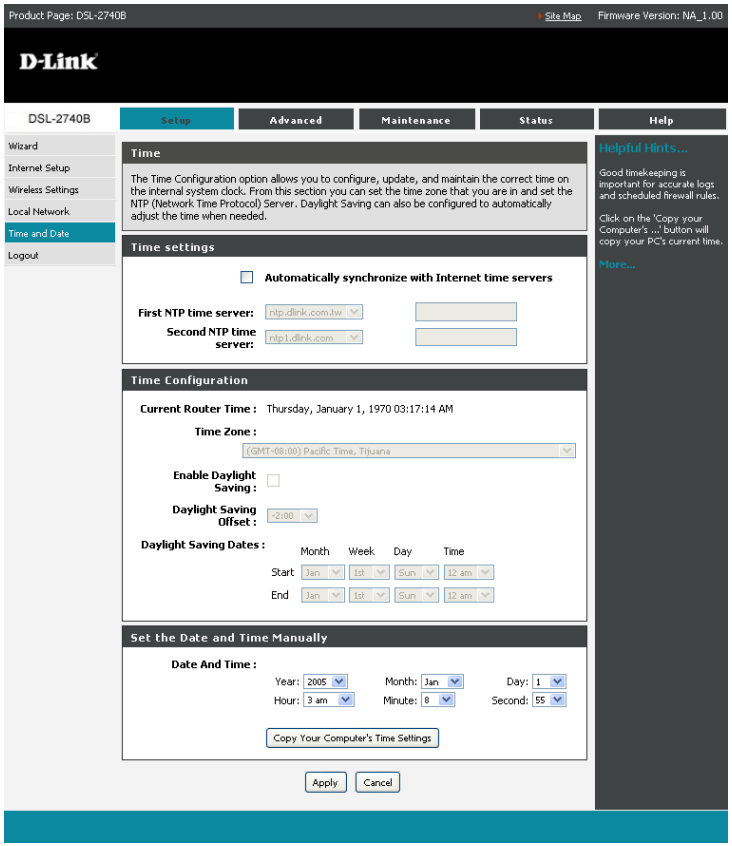
You can configure the DSL Modem IP address and Subnet Mask for the LAN interface. This section is optional and you do not need to change any of the settings here to get your network up and running.

Click the **Apply** button to save the LAN configuration data. The router will automatically reboot to apply the new configuration.



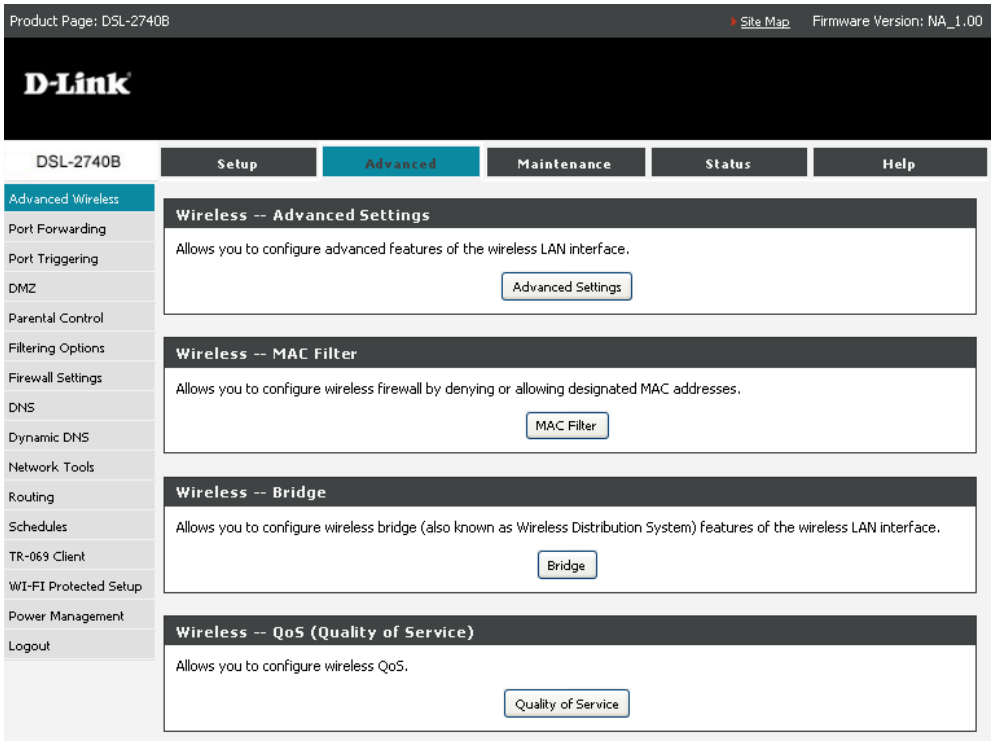
Time and Date

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. In 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.



Advanced Wireless

You may use this section to manage your wireless settings.



Advanced Settings

You can select a particular channel on which to operate, force the transmission rate to a particular speed, set the fragmentation threshold, set the RTS threshold, set the wake-up interval for clients in power-save mode, set the beacon interval for the access point, set XPress mode and set short or long preambles.

Band: Select 802.11b/g using wireless frequency band range. The radio frequency remains at 2.437 GHz.

Channel: Fill in the appropriate channel to correspond with your network settings. All devices in your wireless network must use the same channel in order to work correctly. This router supports auto channeling functionality.

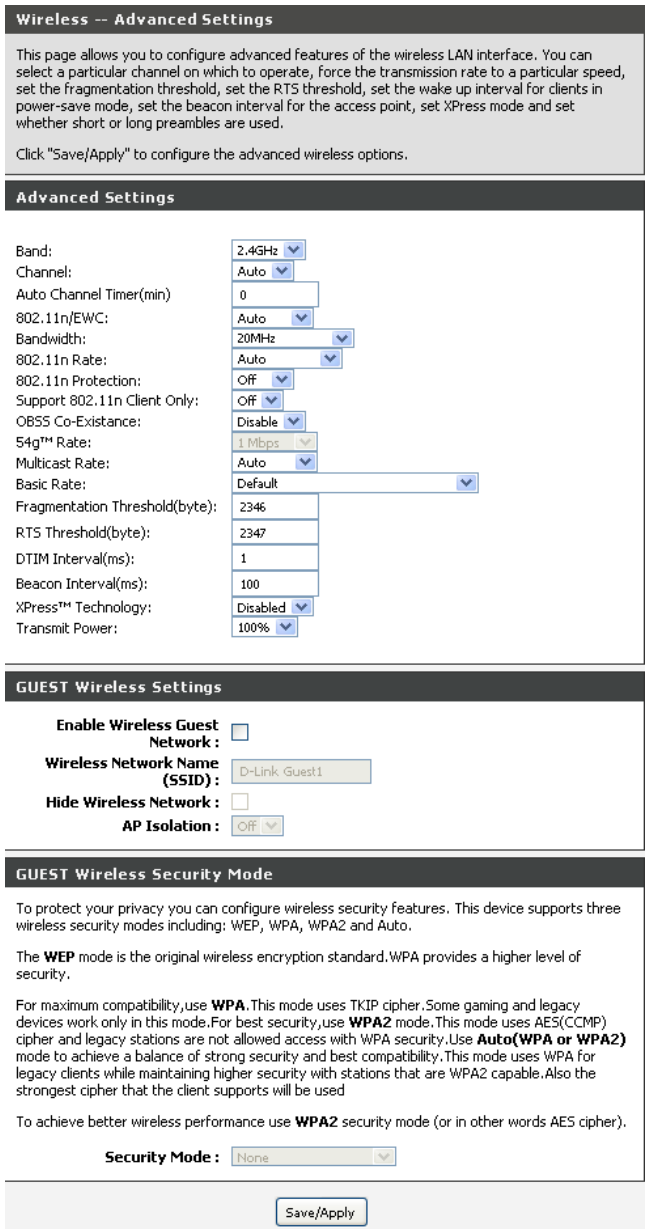
Auto Channel Timer: Specifies the auto channelling timing.

54g™ Rate: Select the transmission rate for the network. The rate of data transmission should be set depending on the speed of your wireless network. You can select from a range of transmission speeds, or you can select Auto to have the Router automatically use the fastest possible data rate and enable the Auto-Fallback feature. Auto-Fallback will negotiate the best possible connection speed between the Router and a wireless client. The default value is Auto.

Multicast Rate: Select the multicast transmission rate for the network. The rate of data transmission should be set depending on the speed of your wireless network. You can select from a range of transmission speeds, or you can select Auto to have the Router automatically use the fastest possible data rate and enable the Auto-Fallback feature. Auto-Fallback will negotiate the best possible connection speed between the Router and a wireless client. The default value is Auto.

Basic Rate: Select the basic transmission rate ability for the access point.

Guest Wireless: Allows you to create a temporary zone that can be used by guests to access the internet. This zone will be separate from your main wireless network.



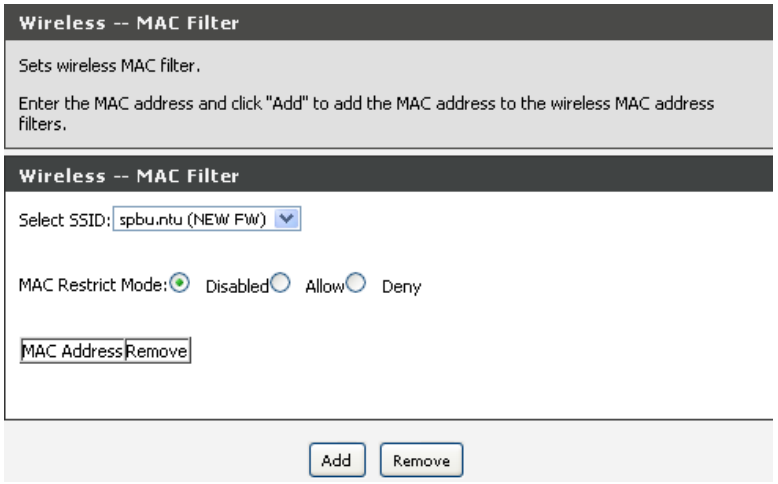
MAC Filter

The web page allows you to create a list of MAC addresses that are banned or allowed association with the wireless access point.

MAC Restrict Mode: The function can be turned on/off, select **Disabled** to disable this function. Vice versa, to enable the function. After enabling the function, you can filter wireless users according to their MAC address, either allowing or denying access. Select **Allow** to make any wireless MAC address in the Wireless Access Control List can be linked to. And select **Deny** to ban any wireless MAC address in the Wireless Access Control List.

Add a MAC Access Control: To add a new MAC address to your wireless MAC address filters, click **Add** to show the next page. Type the MAC Address in the entry field provided.

Remove a MAC Access Control: Select the checkbox in the right column of the list for the MAC address to be removed and click **Remove**.



Click **Save/Apply** to add the MAC address to the list.

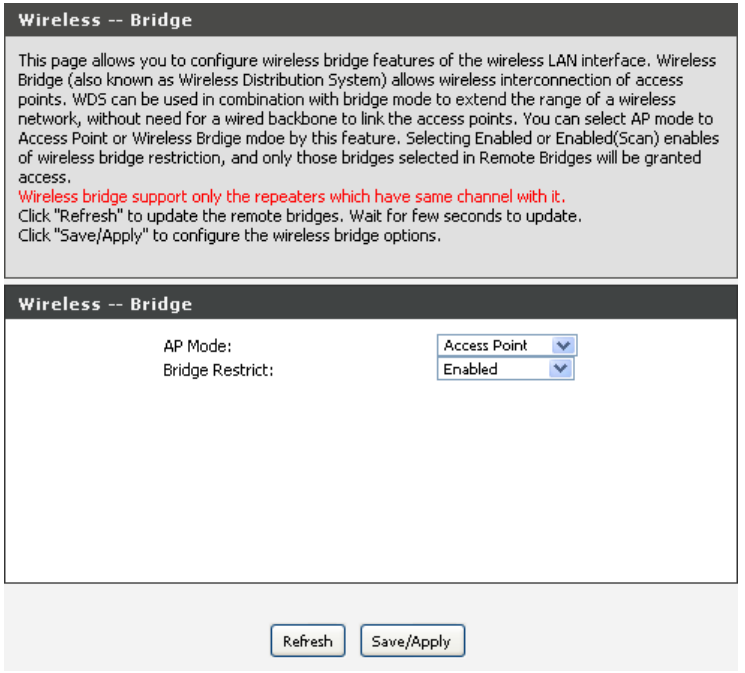
Wireless Bridge

The Wireless Distribution System (WDS) allows you to extend the range of your wireless network by introducing one or more WDS-enabled devices into your wireless network. You can only establish WDS links with WDS-enabled devices.

AP Mode: Select Access Point's functionality to be Access Point or pure Wireless Bridge. You can select Wireless Bridge (also known as Wireless Distribution System) to disables access point functionality. Selecting Access Point enables access point functionality and Wireless bridge functionality will still be available and wireless stations will be able to associate to the AP.

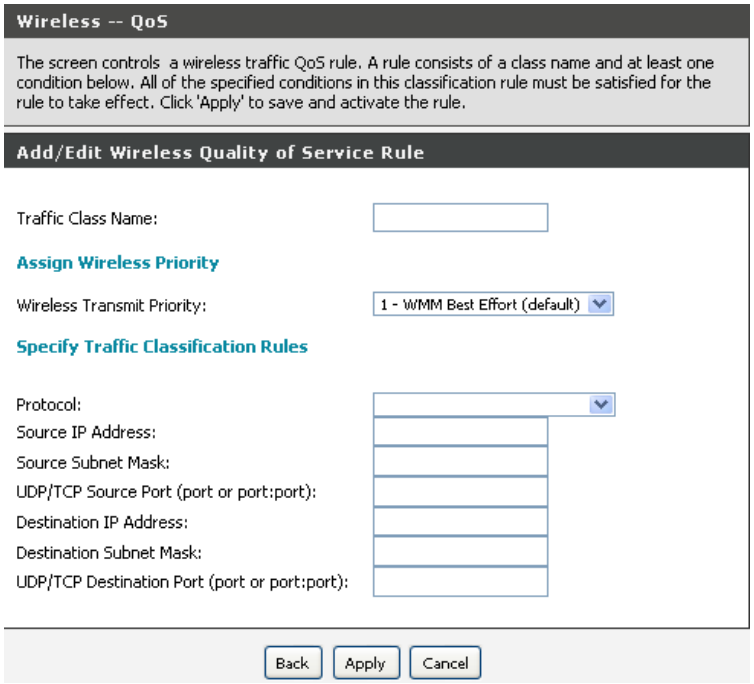
Bridge Restrict: Select Disabled to turn off wireless bridge restrictions. Any wireless bridge will be granted access. Selecting Enabled or Enabled (Scan) enables wireless bridge restriction. If enabled, only the specified bridges are granted access.

Click **Save/Apply** to configure the wireless bridge options and put the modifications into effect.



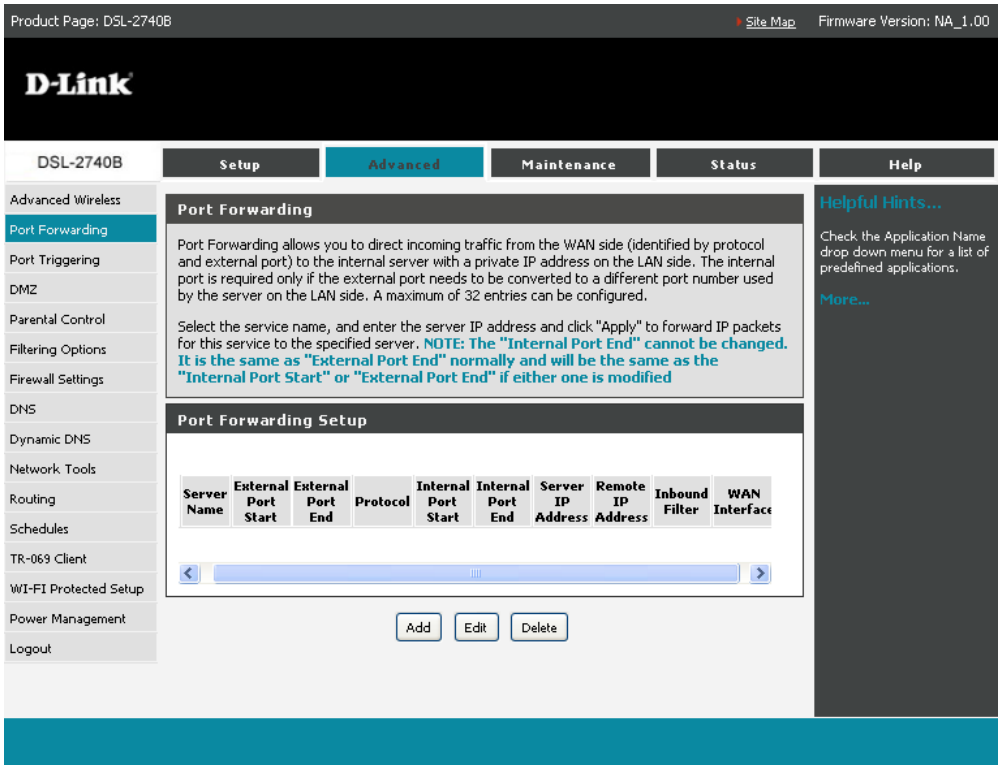
Wireless QoS

This page allows you to control the wireless traffic QoS rule which consists of a class name and at least one condition.

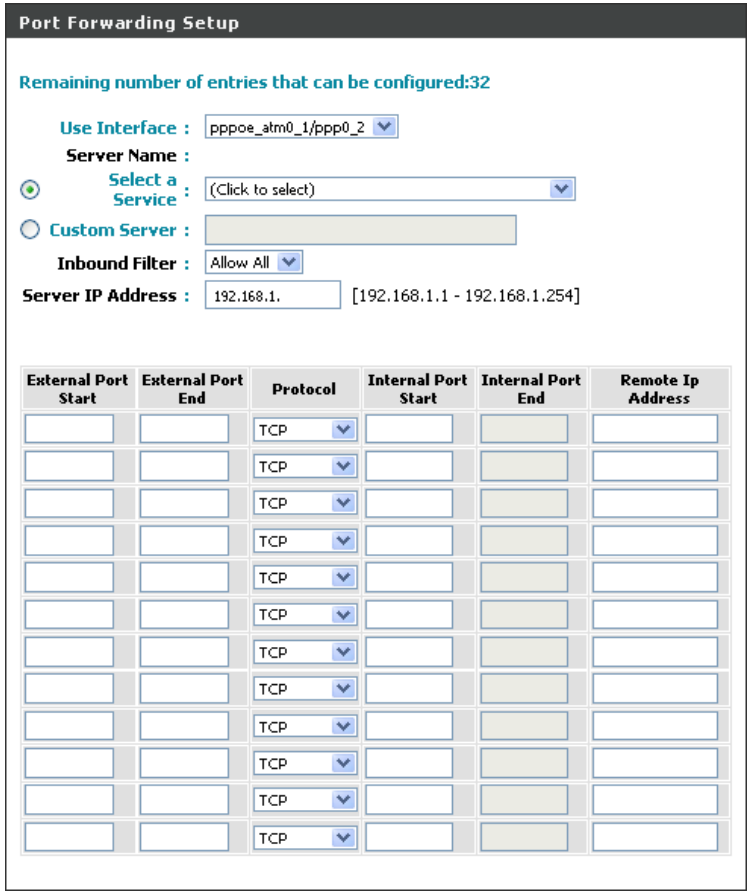


Port Forwarding

Port forwarding allows you to direct incoming traffic from the WAN side to the internal server with a private IP address on the LAN side.

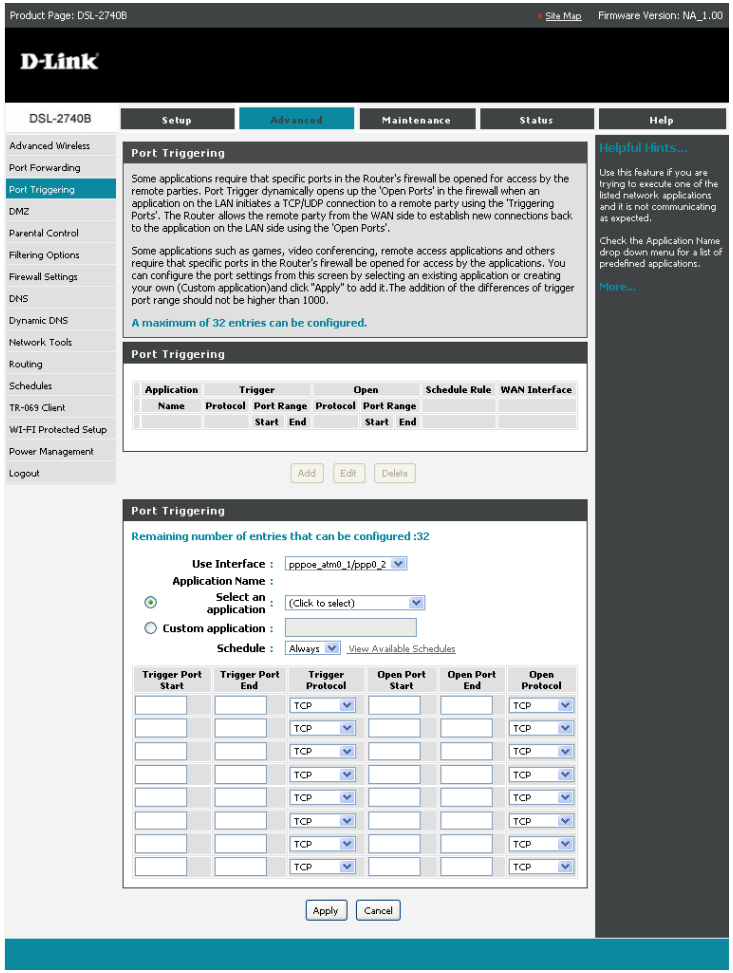


Select the **Service Name** and enter the IP server Address, then click **Apply.**



Port Triggering

If you configure port triggering for a certain application, you must determine a so-called trigger port and the protocol (TCP or UDP) that this port uses. You then assign the public ports that are to be opened for the application to this trigger port. You can select known Internet services or manually assign ports or port blocks.

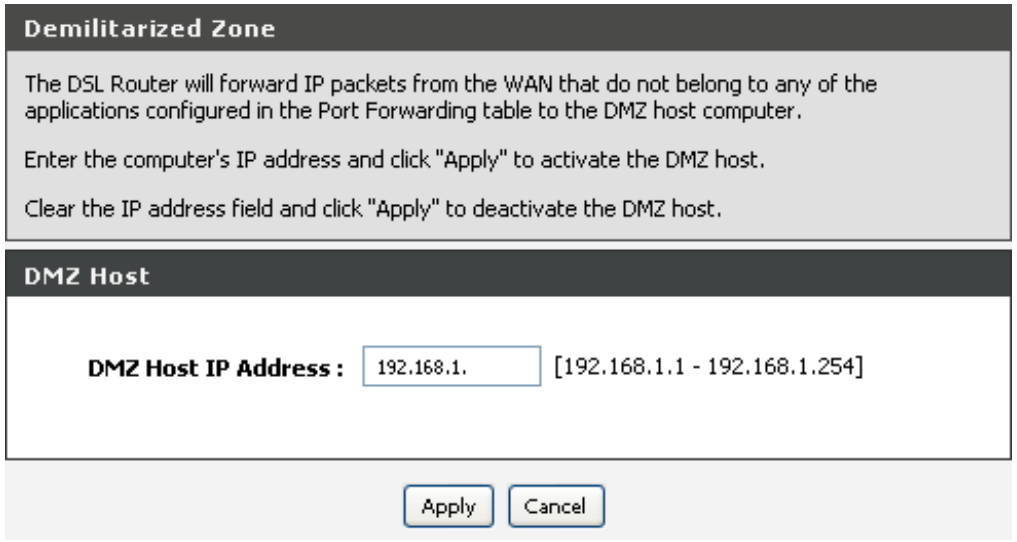


DMZ Host

The demilitarized military zone (DMZ) host feature allows one local network device to be exposed to the Internet. This function is applicable for:

• Users who want to use a special-purpose Internet service, such as an on-line game or video conferencing program, that is not in the port forwarding list and for which no port range information is available.

• Users who are not concerned with security and wish to expose one computer to all services without restriction.



Note: *A DMZ host is not protected by the firewall and may be vulnerable to attack. This may also put other computers in the home network at risk. Hence, when designating a DMZ host, you must consider the security implications and take the appropriate precautions.*

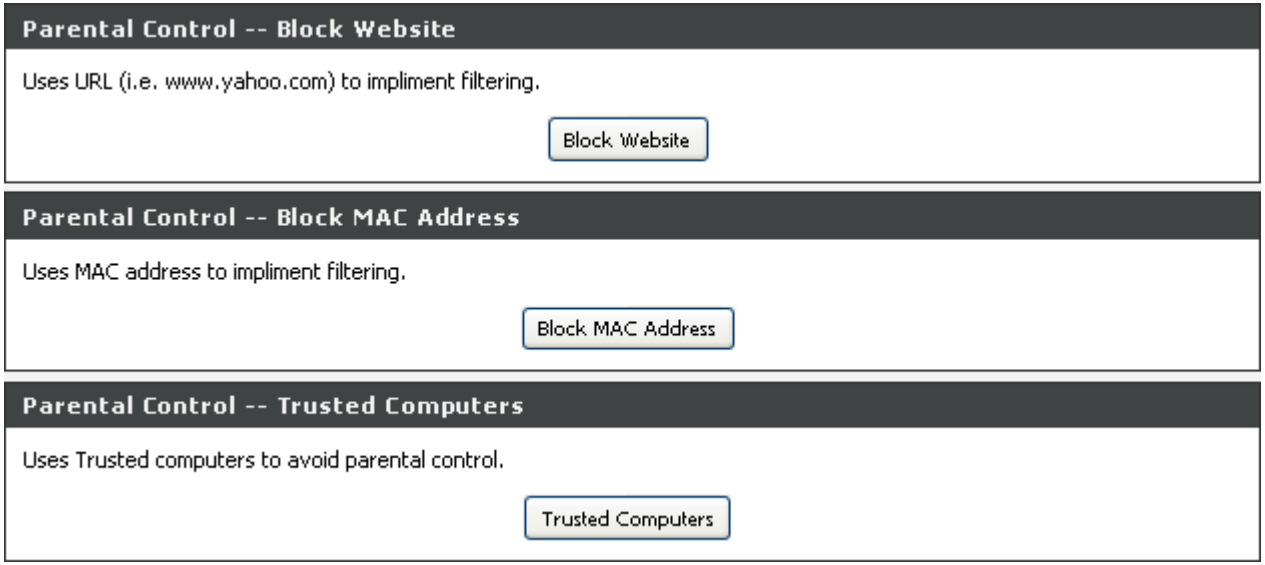
You can set up a client in your local network as a DMZ host. Your device then forwards all incoming data traffic from the Internet to this client. You can, for example, operate your own Web server on one of the clients in your local network and make it accessible to Internet users. As the exposed host, the local client is directly visible to the Internet and therefore particularly vulnerable to attacks (for example, hacker attacks). Enable this function only when necessary (for example, to operate a Web server) and when other functions (for example, port forwarding) are inadequate. In this case, you should take appropriate measures for the clients concerned.

Note: *Only one PC per public IP address can be setup as an exposed host.*

Parental Control

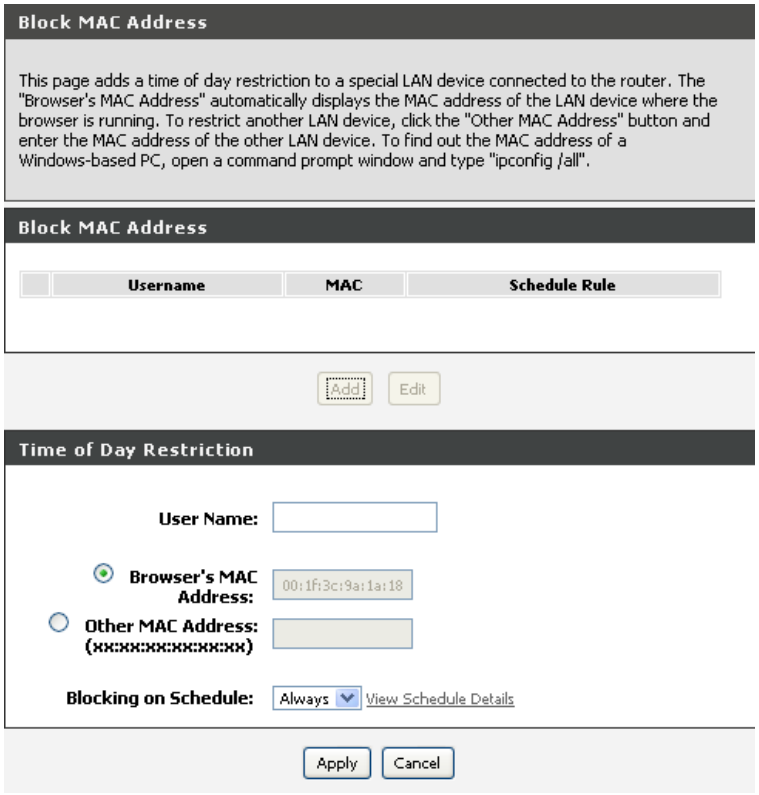
Click on **Advanced** > **Parental Control** and the following page will appear.

Click **Block MAC Address** to continue and be directed to the next page**.**



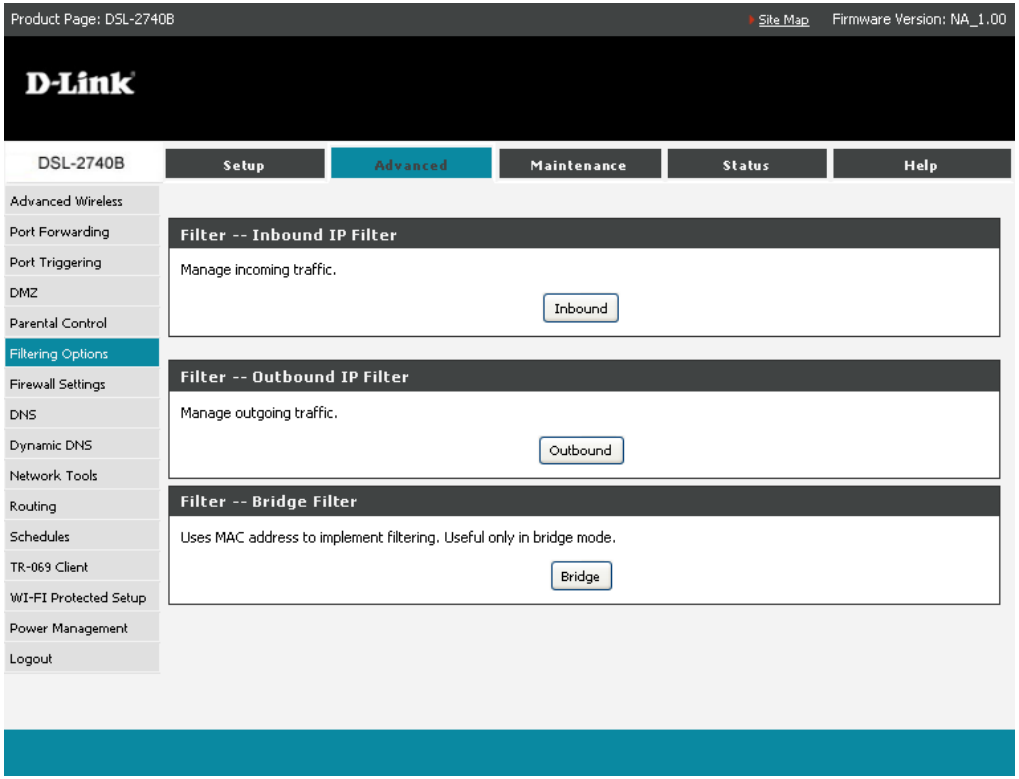
Block MAC Address

In this page, you can add a time of day restriction to a particular LAN device connected to the Router. The Browser's MAC Address automatically displays the MAC address of the LAN device where the browser is running. To restrict other LAN device, click Other MAC Address and enter the MAC address of the another LAN device. To obtain the MAC address of a Windows based PC, enter ipconfig /all in the DoS window.



Filtering Options

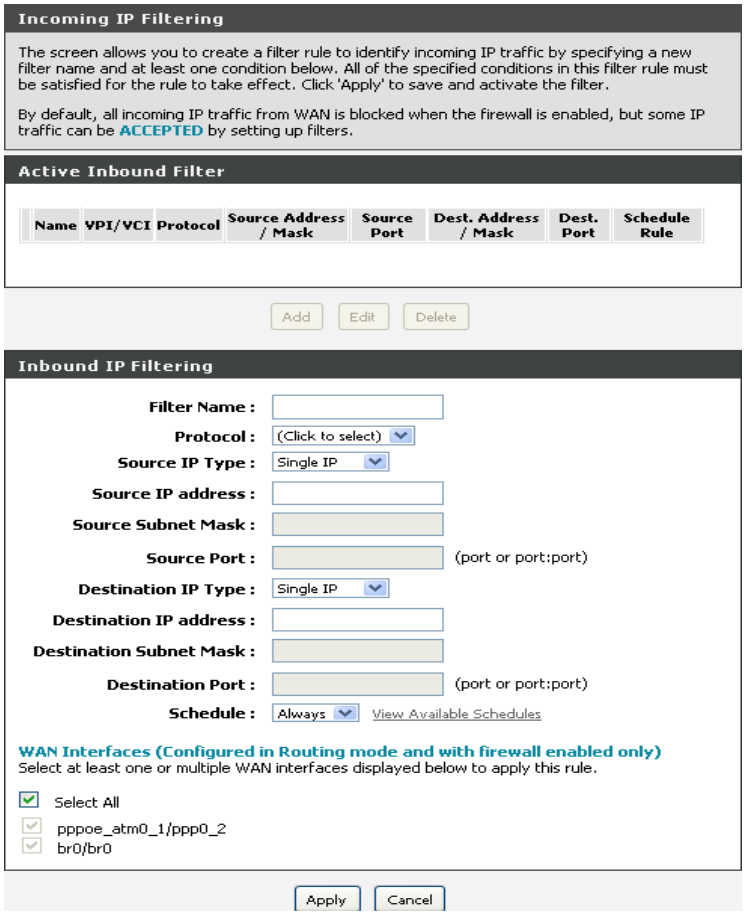
This screen allows you to choose the Filtering Options you would like to access. You may select: **Inbound IP Filtering, Outbound IP Filtering** or **Bridge Filtering** to be directed to the page.



Incoming IP Filtering Setup

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

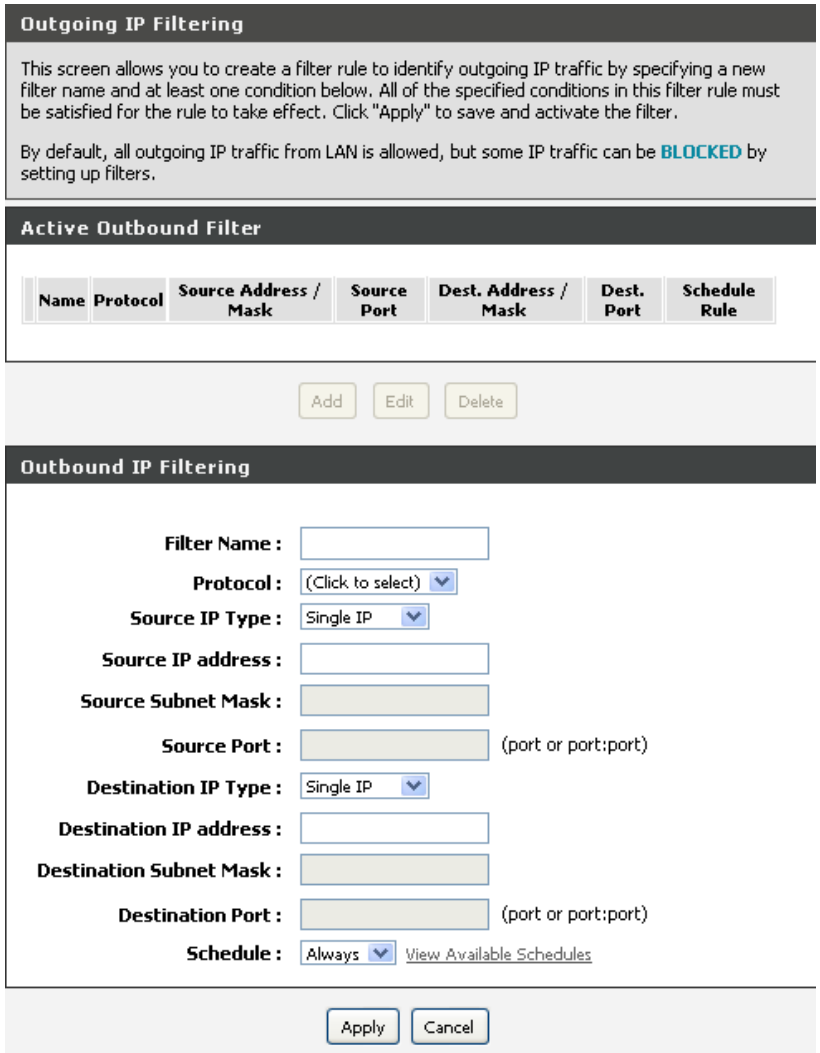
The Add IP Filter screen will appear when you click **Add**. Enter a filter name, protocol, source address information (from the WAN side) and destination address information (to the LAN side). Select the WAN interface and when ready, click **Apply** to add the filter.



Outgoing IP Filtering Setup

This feature allows you to create a filter rule to identify outgoing IP traffic by specifying a new filter name and at least one condition. All of the specified conditions in the filter rule must be satisfied for the rule to take effect.

This next screen will appear when you click **Add**. Enter the **Filter Name**, the **Source IP Address**, and destination information (from the WAN side). Then click **Apply** to save.



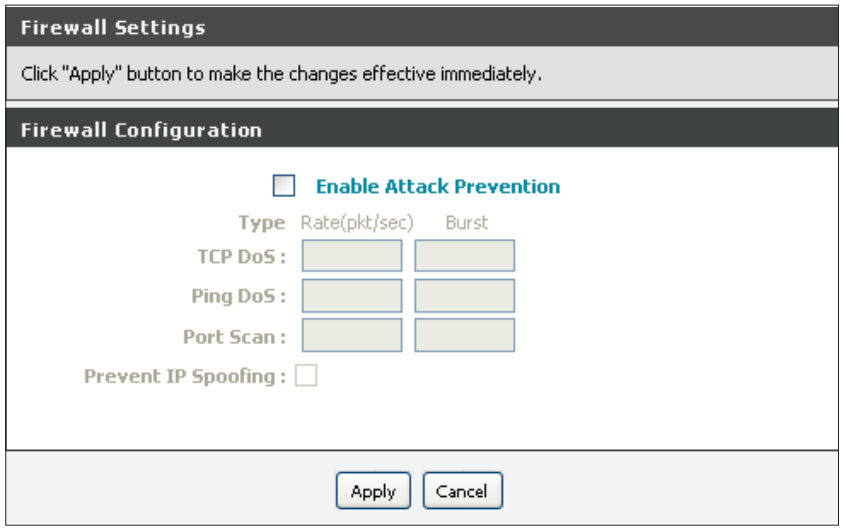
Bridge Filtering Setup

Bride Filtering is only effective on ATM PVC's configured in Bridge mode. MAC filtering can forward or block traffic by MAC address. You can change the policy or add settings to the MAC filtering table using the MAC Filtering Setup screen.

If you want to add an entry to the MAC filtering table, Select **Add** from the MAC Filtering Setup screen. The Add MAC Filter screen should then appear. Select a Protocol Type, enter the Destination and Source MAC address, the necessary Frame Direction, and WAN interface (bridge mode only). Click **Apply** to save.

Firewall

A firewall protects your network from the outside world. Check the box marked Enable Attack Prevention to prevent cyber attacks.



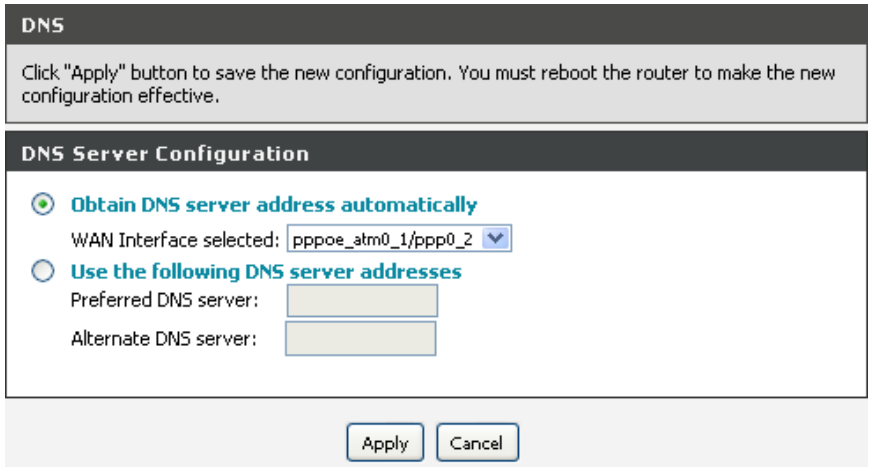
DNS

If **Obtained DNS server address automatically** is selected, this router accepts the first received DNS assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s) during the connection establishment.

If the checkbox is not selected, enter the primary and secondary (optional) DNS server IP addresses. The interface is as follows.

Click **Save** to save the new configuration.

Note: *You must reboot the router to make the new configuration take effect.*



Dynamic DNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc…) using a domain name that you have purchased (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 in your domain name to connect to your server no matter what your IP address is.

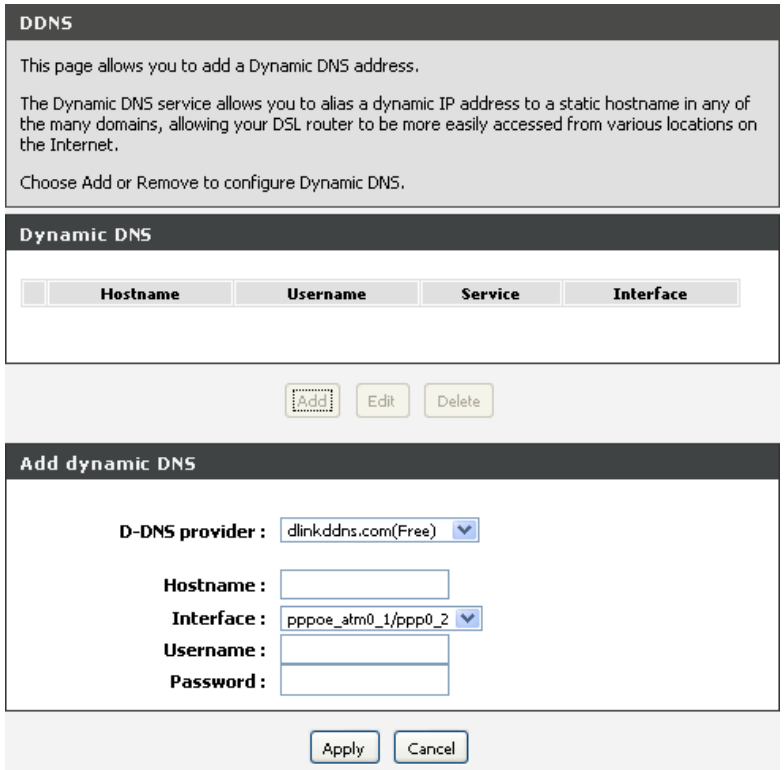
D-DNS Provider: Choose your DDNS provider from the drop down menu.

Hostname: Enter the Host Name that you registered with your DDNS service provider.

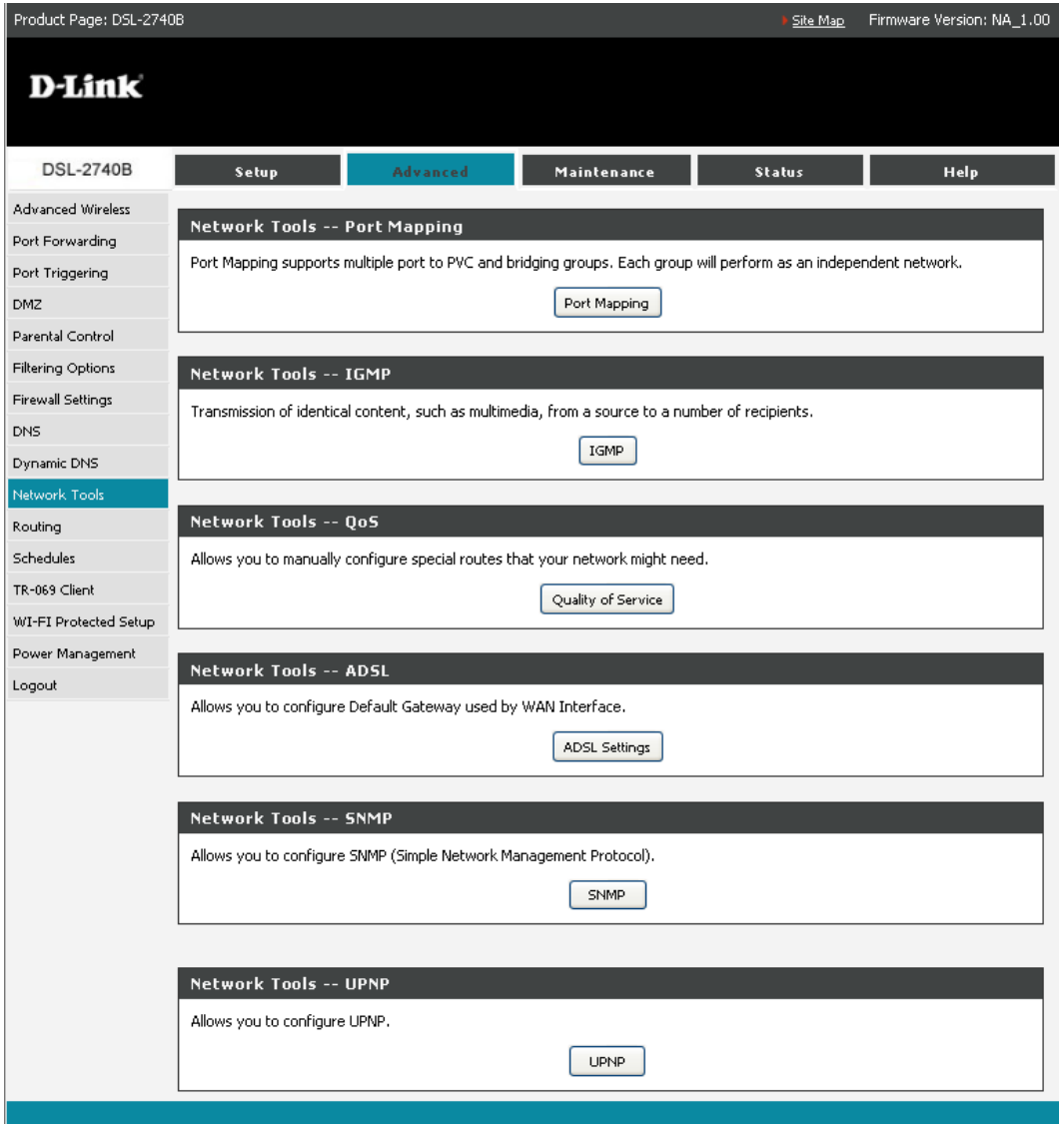
Interface: Select your interface from the drop down menu.

Username Name: Enter the Username for your DDNS account.

Password: Enter the Password for your DDNS account.

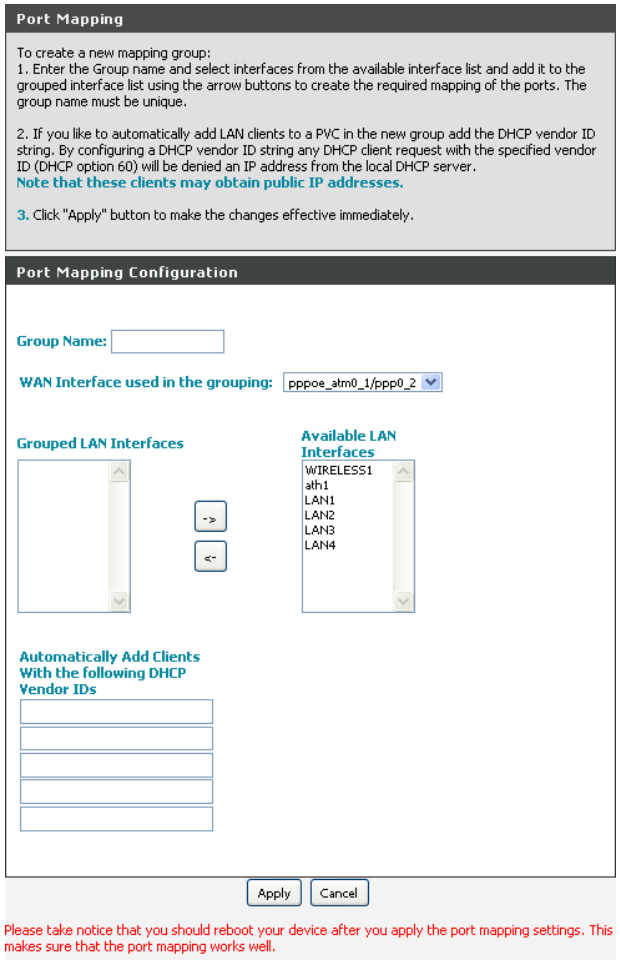


Network Tools



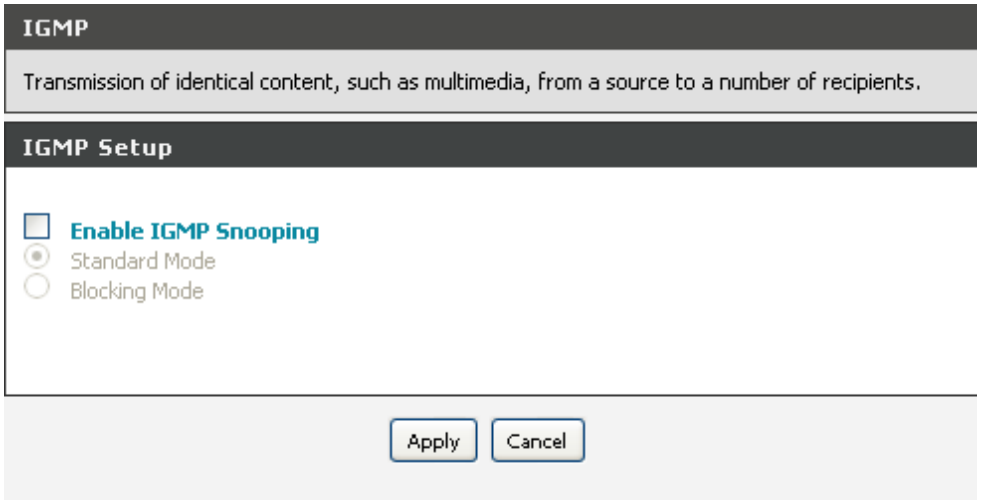
Port Mapping

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



IGMP

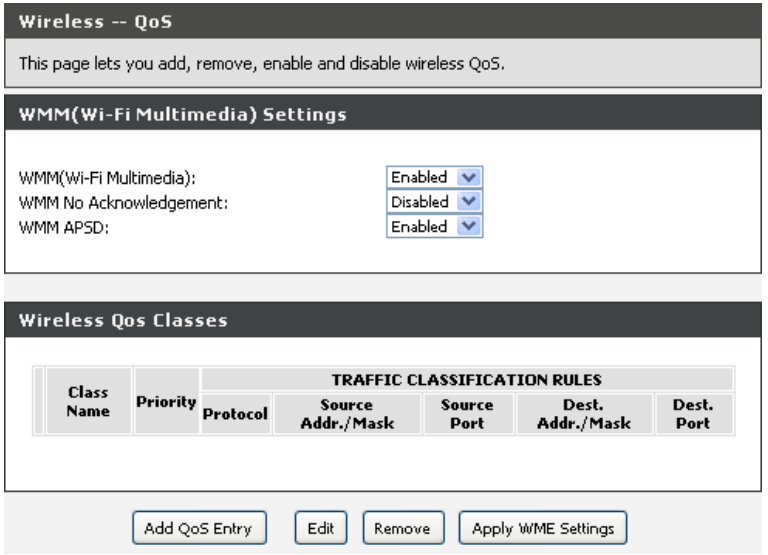
If you choose to **Enable IGMP Snooping** the device can make intelligent multicast forwarding toward those hosts which request to join a specific multicast group within the broadcast domain.



Quality of Service

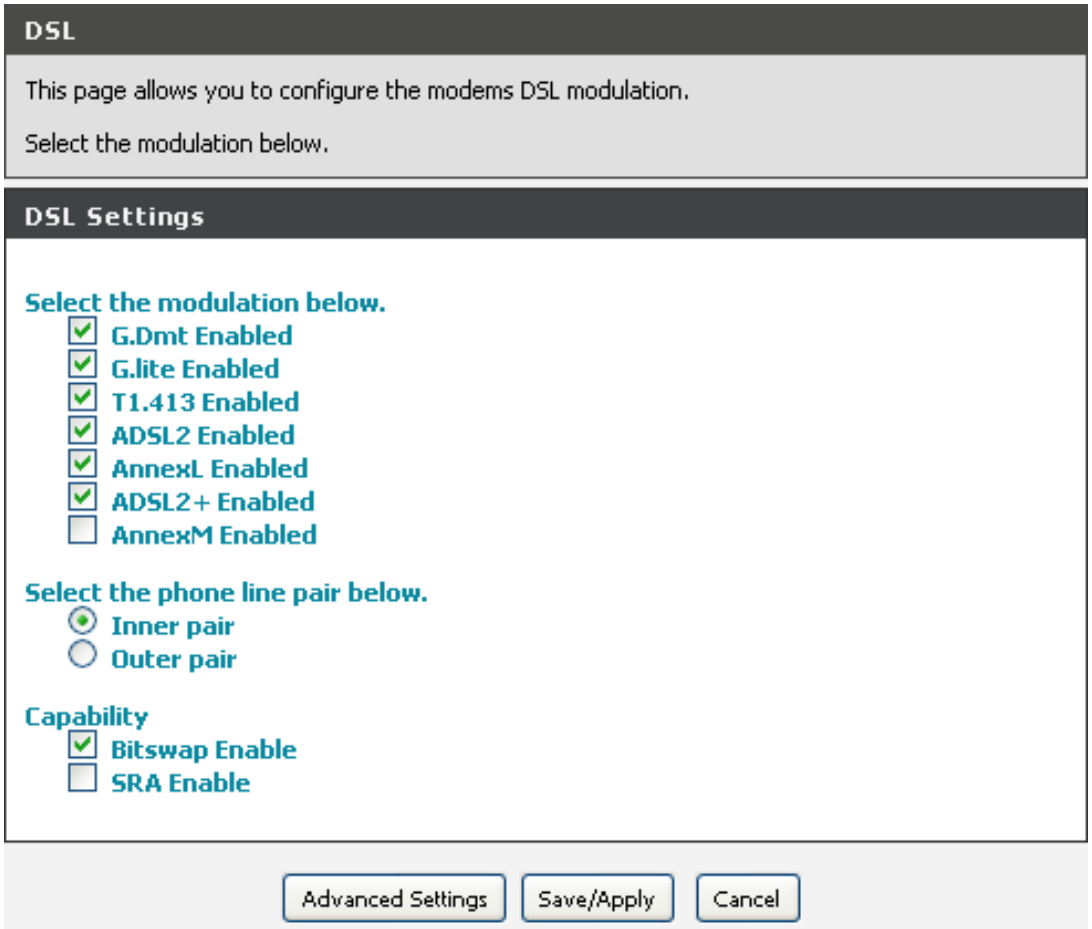
QoS (Quality of Service) is a method for identifying, classifying, and assigning priorities to traffic that passes through the router. This ensures that time sensitive data (e.g. video streaming) is given priority over other non-essential data.

This screen allows you to add a network traffic class rule. A rule consists of a traffic class name and at least one condition. All configured conditions must first be met before the rule takes effect. Click **Apply** to save any changes.



ADSL Setting

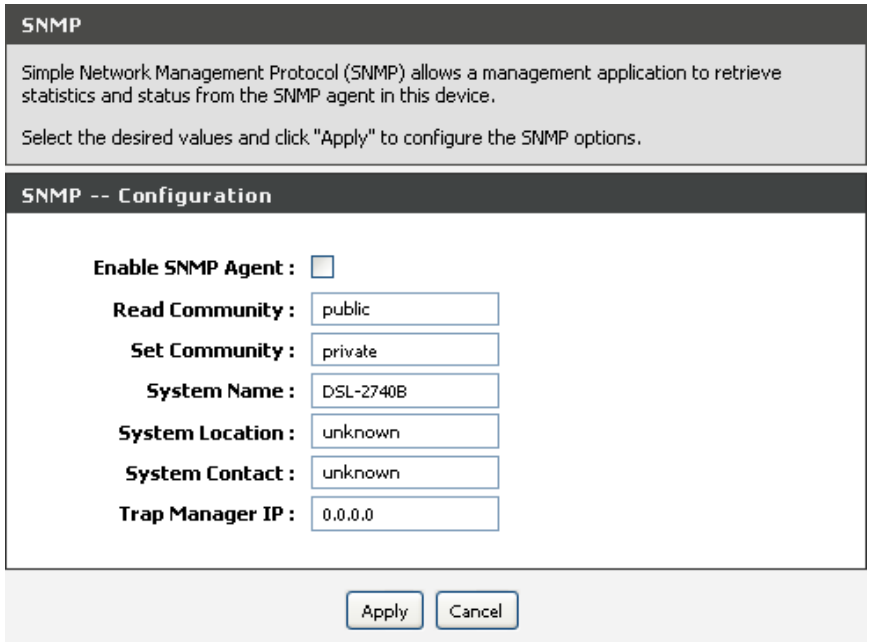
In this page, you can configure the modem's ADSL modulation. Select from the settings below and click **Apply**.



SNMP

Simple Network Management Protocol (SNMP) allows a management application to retrieve statistics and status from the SNMP agent in this device.

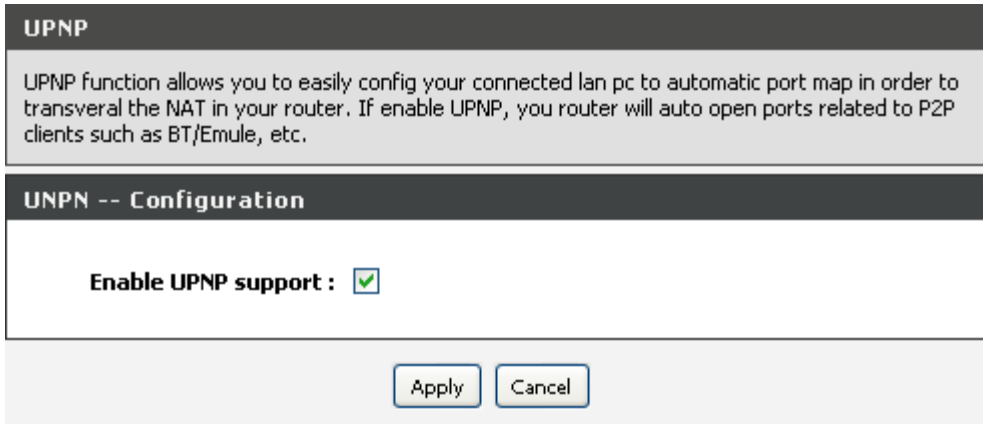
Check the box marked Enable SNMP Agent to use this feature.



UPnP

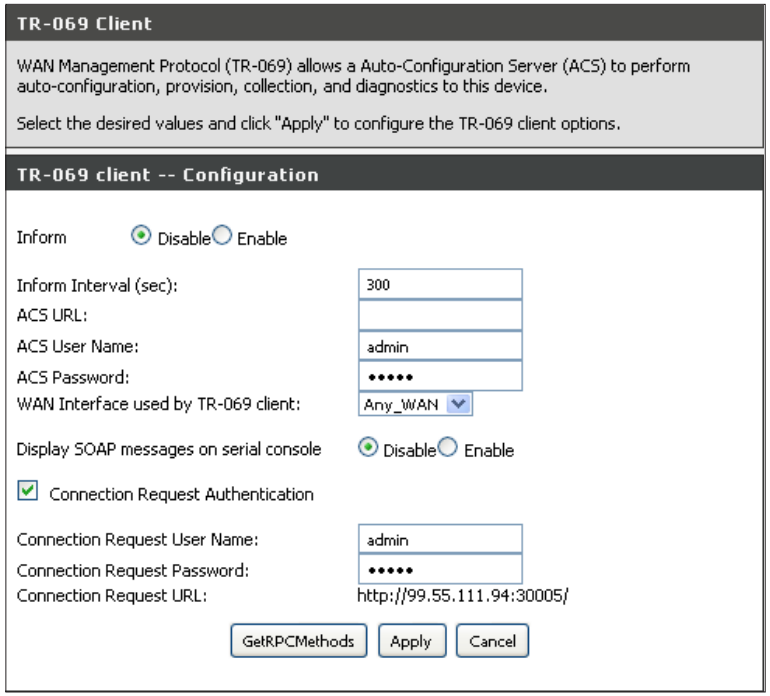
Universal Plug and Play (UPnP) provides compatibility with networking equipment, software and peripherals.

Check the box marked Enable UPNP support to use this feature.



TR-069

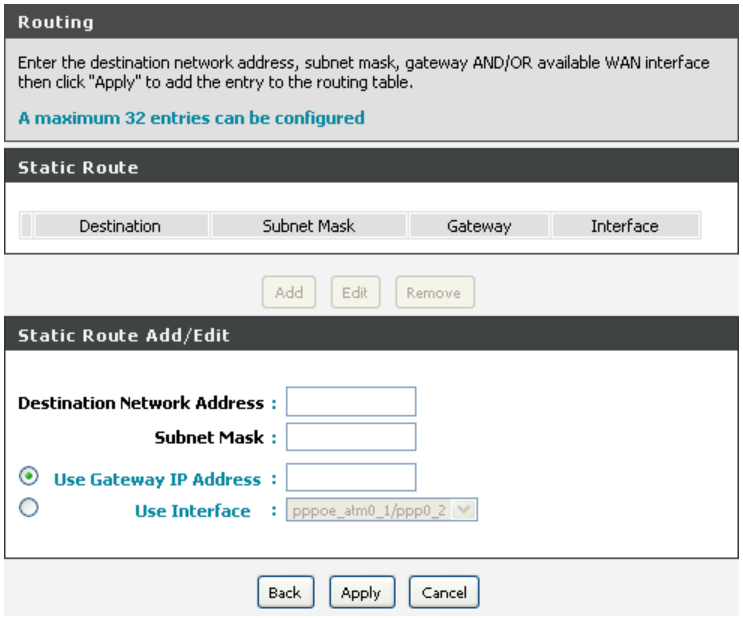
TR-69 allows a Auto-Configuration Server (ACS) to perform auto-configuration, provision, collection, and diagnostics to this device.



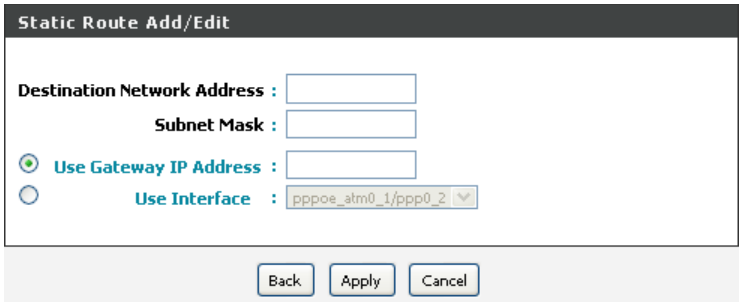
Routing

Static Route

The Static Route page can be used to add a routing table (a maximum of 32 entries can be configured). To proceed, click **Add**.



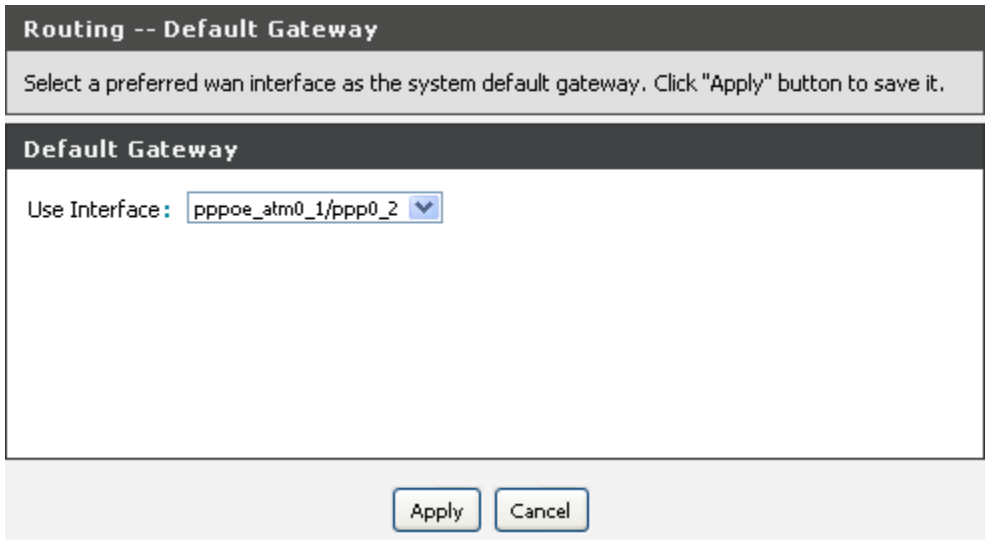
For the **Static Route Add** page, enter the destination network address, subnet mask, gateway and select an available WAN interface. When complete, click **Apply**.



Default Gateway

In this page, you can modify the default gateway settings. If you select **Enable Automatic Assigned Default Gateway**, this router can accept the first received default gateway assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s). If the check box is not selected, you must enter the static default gateway and/or a WAN interface. Then, click **Save/Apply.**

Note: If the Automatic Assigned Default Gateway check box is changed from deselected to selected, you must reboot the router to obtain the automatic assigned default gateway.

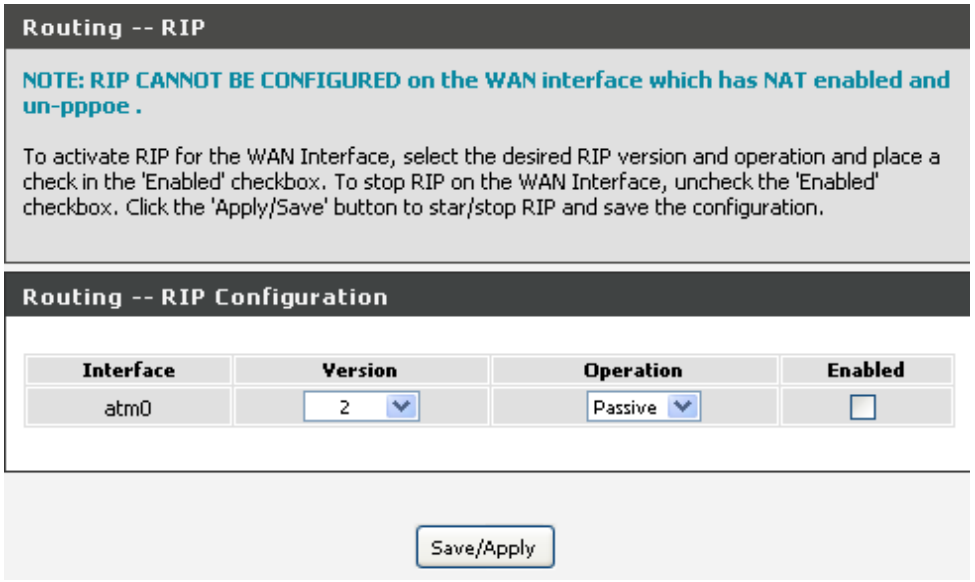


RIP

To activate RIP for the device, select the **Enabled** checkbox for Global RIP Mode.

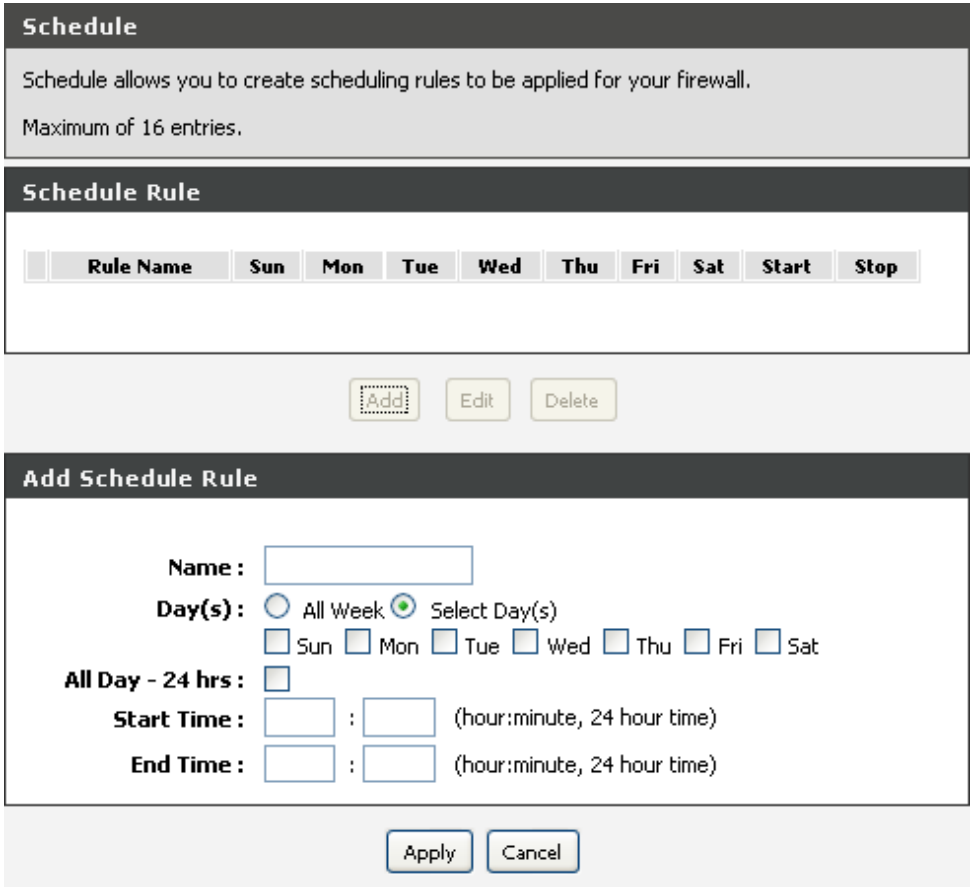
To configure an individual interface, select the desired RIP version and operation, followed by placing a check in the **Enabled** checkbox for the interface.

Click the "Apply" button to save the configuration, and to start or stop RIP based on the Global RIP Mode selected.



Schedules

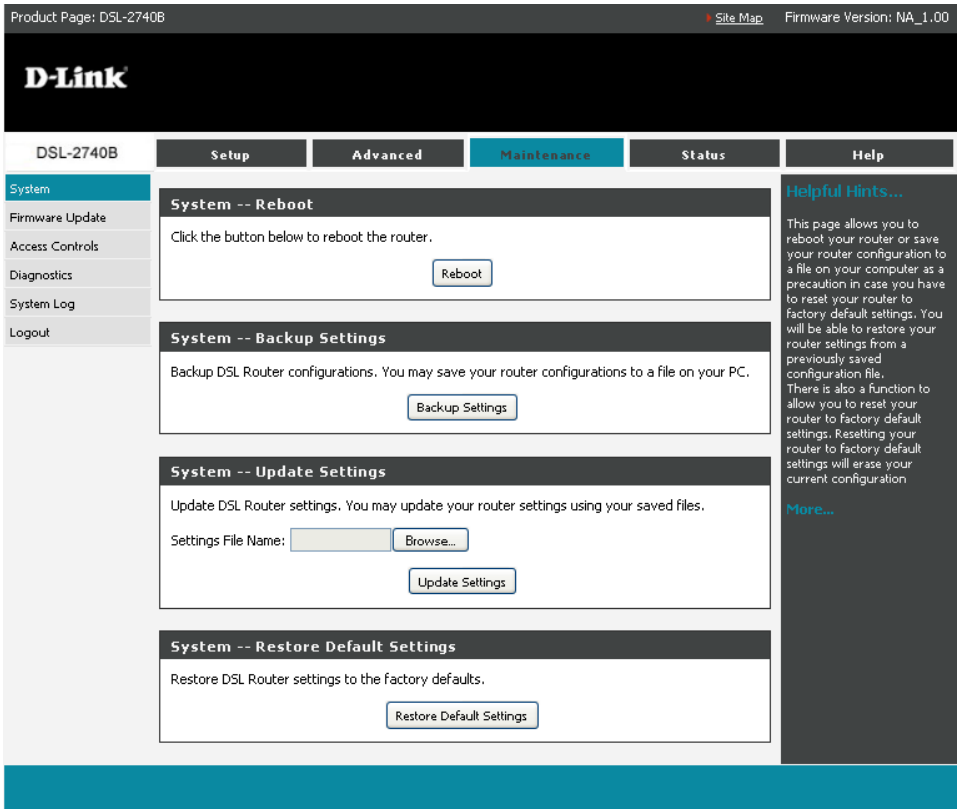
This section allows you to create scheduling rules to be applied to your firewall. Give each schedule a name and time that is meaningful you.



Maintenance

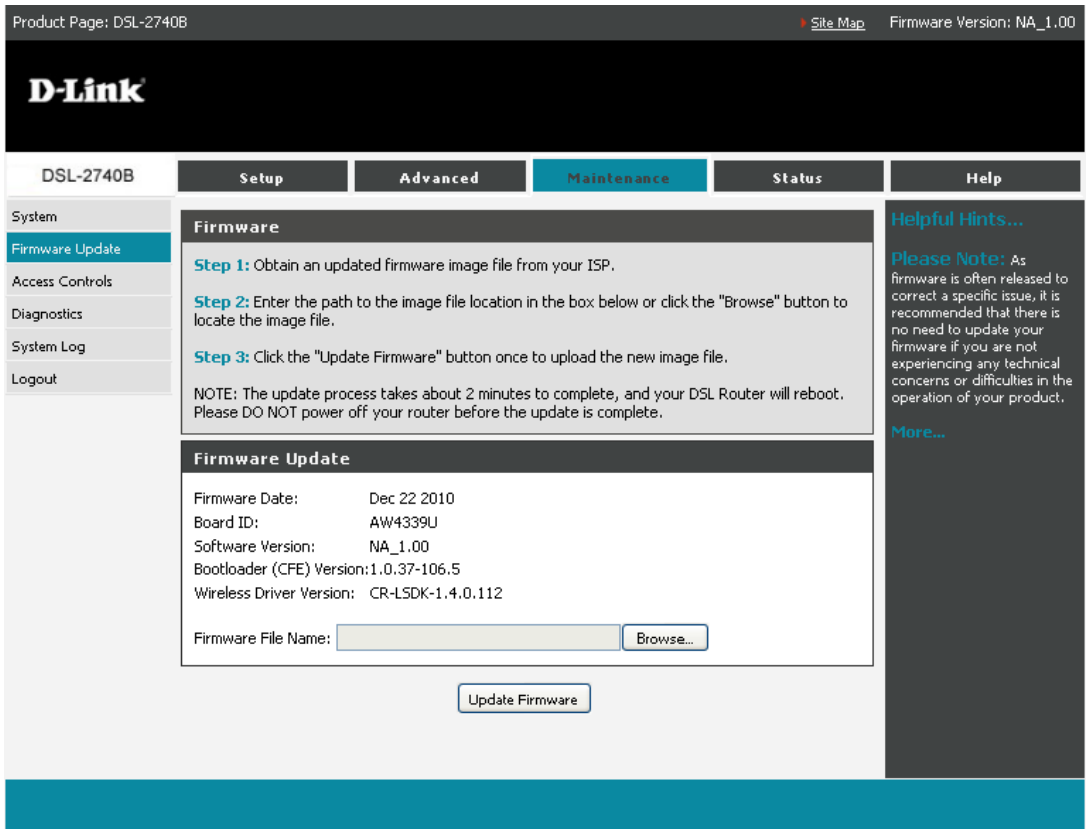
This page allows you to reboot your router or save your router configuration to a file in your computer as a precaution or in case you have to reset your computer to factory default settings. You will able to restore your router settings from a previously saved configuration file.

System



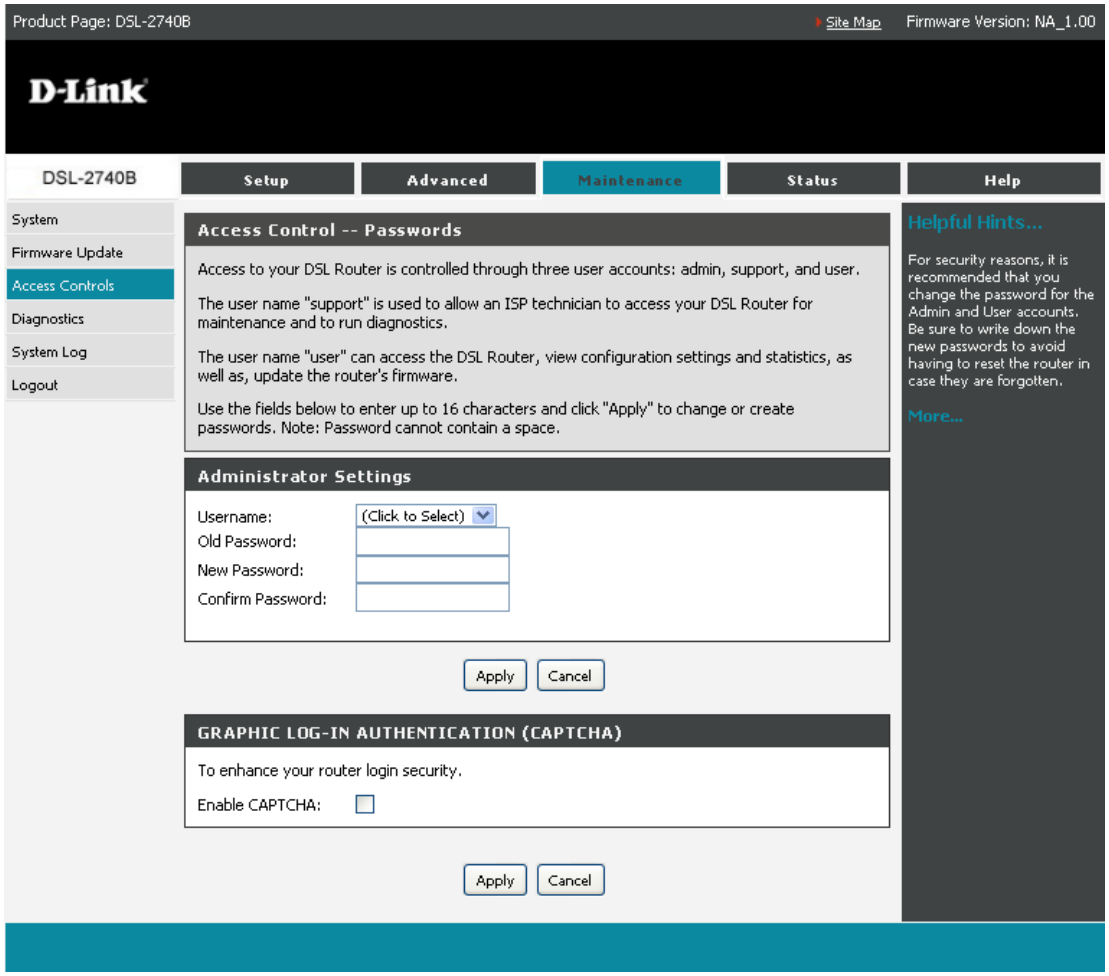
Firmware Update

This page displays your device's firmware version and information that will be helpful for D-Link technicians should you need technical support. You may also upload new firmware to your router through this page.



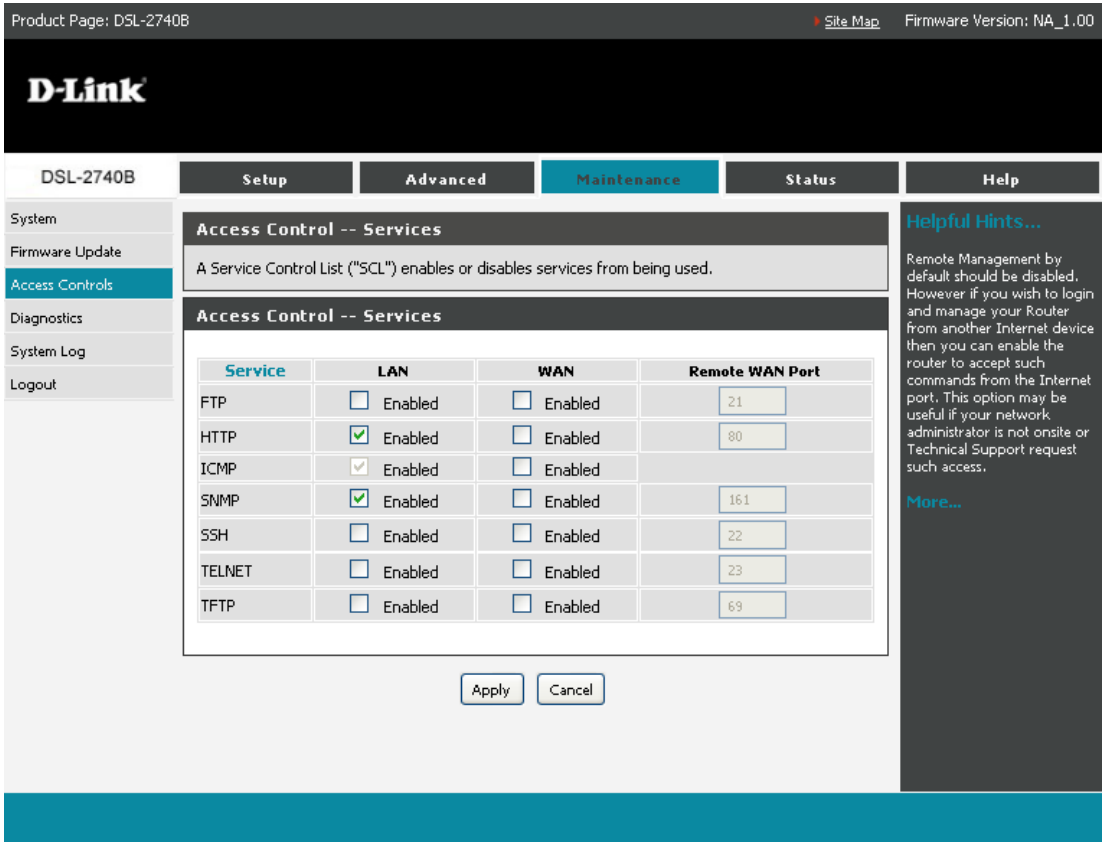
Access Control
Account Password

In this section, you can modify your router's password which is needed to access the Web management Interface. It is recommended that you change the factory default password for security purposes. To change your password, choose between 1 and 16 characters.



Services

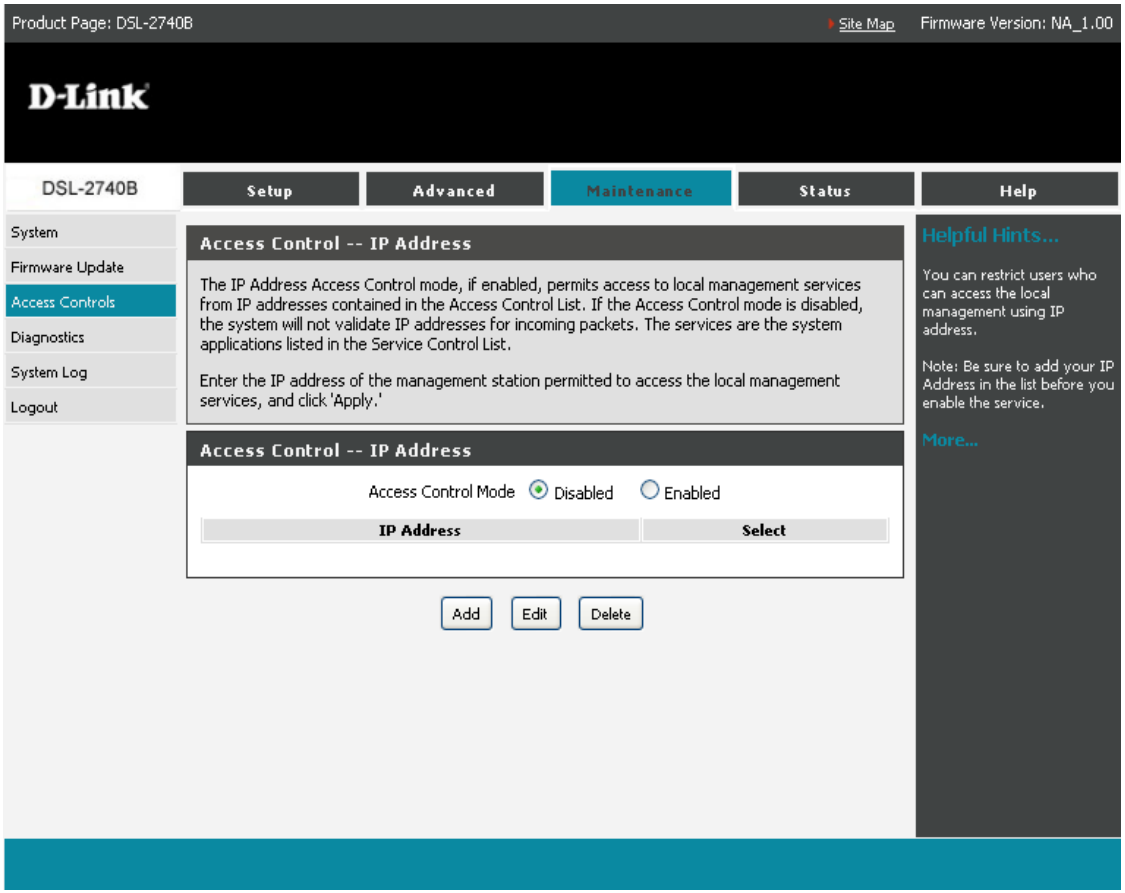
In this page, you will be able to enable or disable services from being used.



IP Address

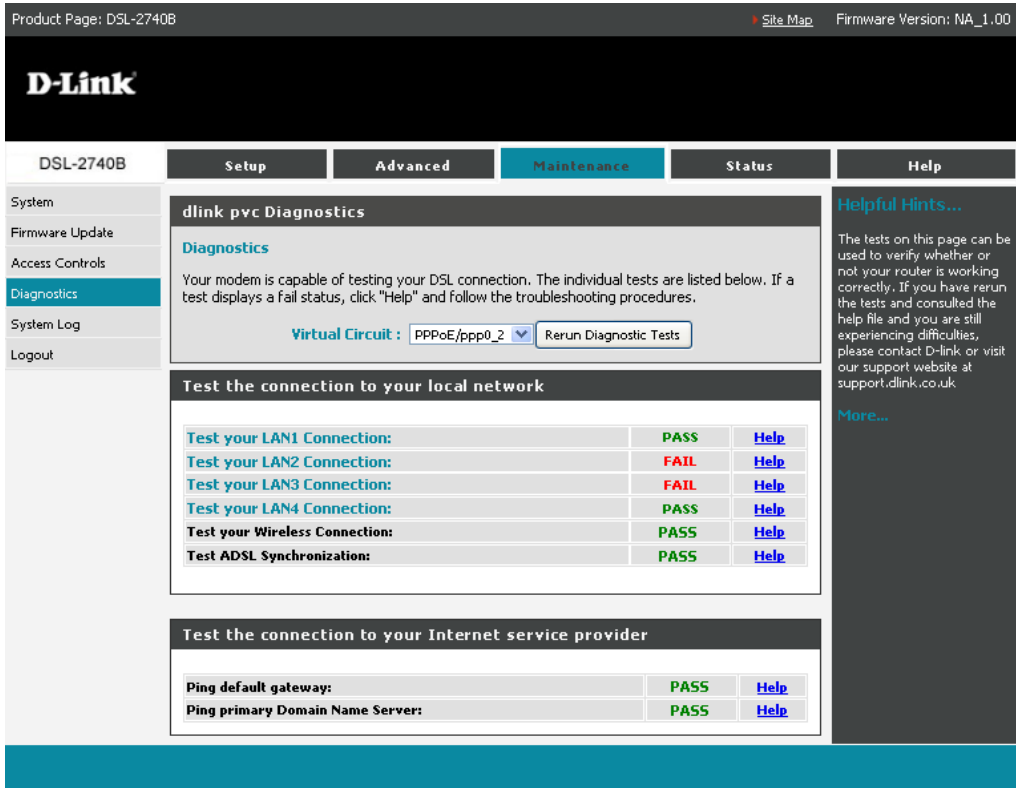
This page allows you to restrict users from accessing the local management using IP address. Check **Enable Access Control Mode** to access local management services from IP addresses contained in the Access Control List. If Access Control Mode is disabled, the system will not validate IP addresses for incoming packets.

Note: *Add your IP address to the list before you enable the service.*



Diagnostics

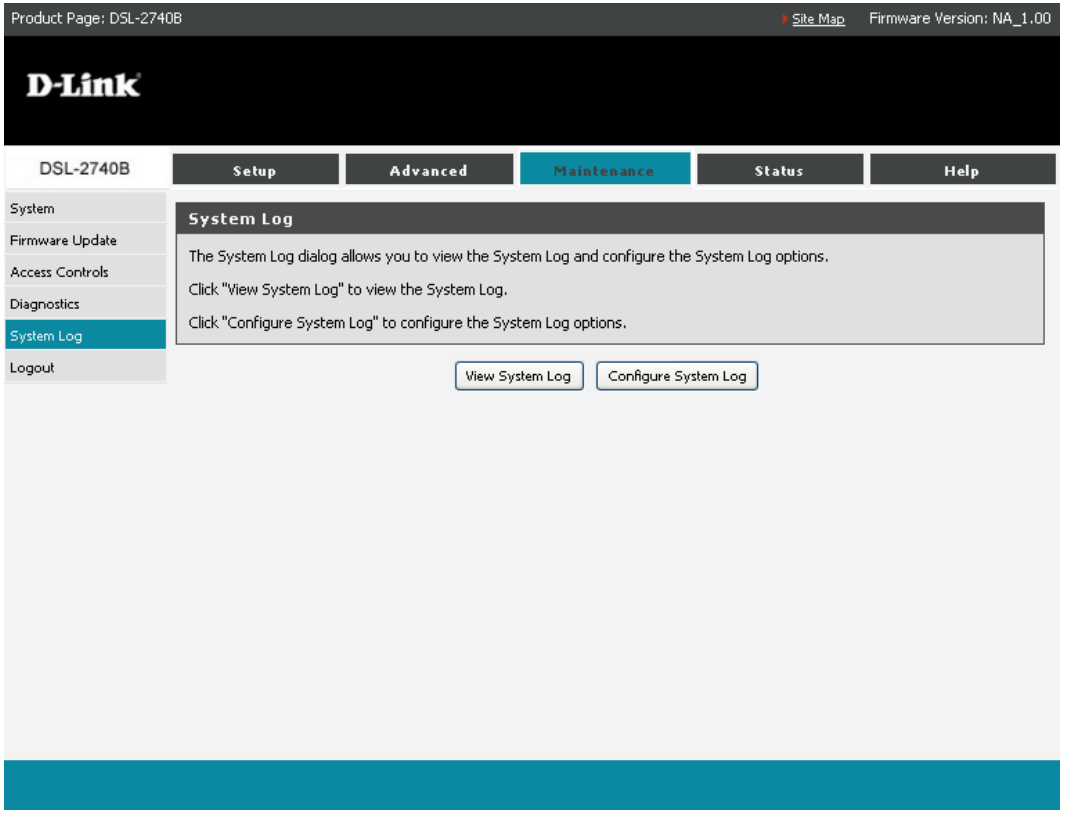
This page displays your router's self diagnostic and connection test results. The internet connectivity status will only show PASS if you have correctly configured your Internet connection and if your router is currently online.



System Log

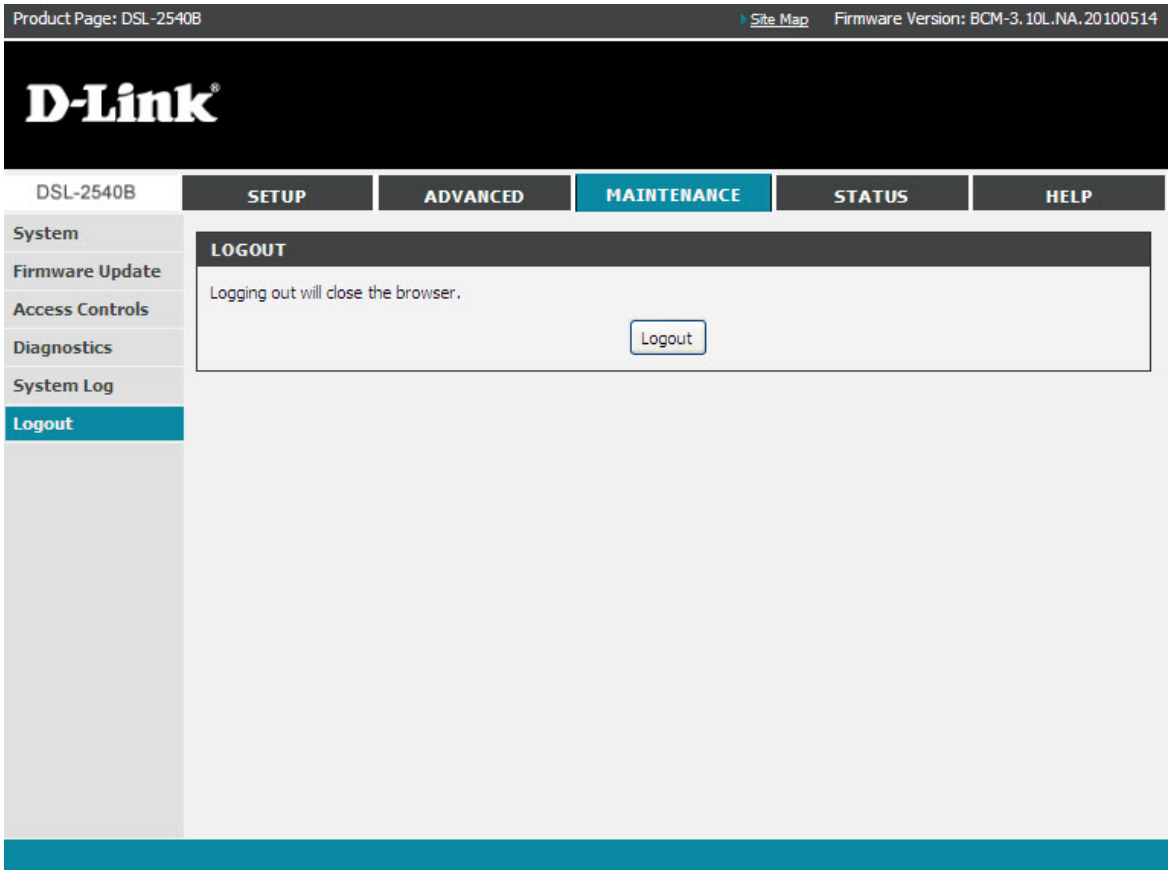
The System Log screen allows you to view the system log and configure the system log options.

To view the system log, click on the **View System Log** button.



Logout

Select **Logout** to exit the web user interface.

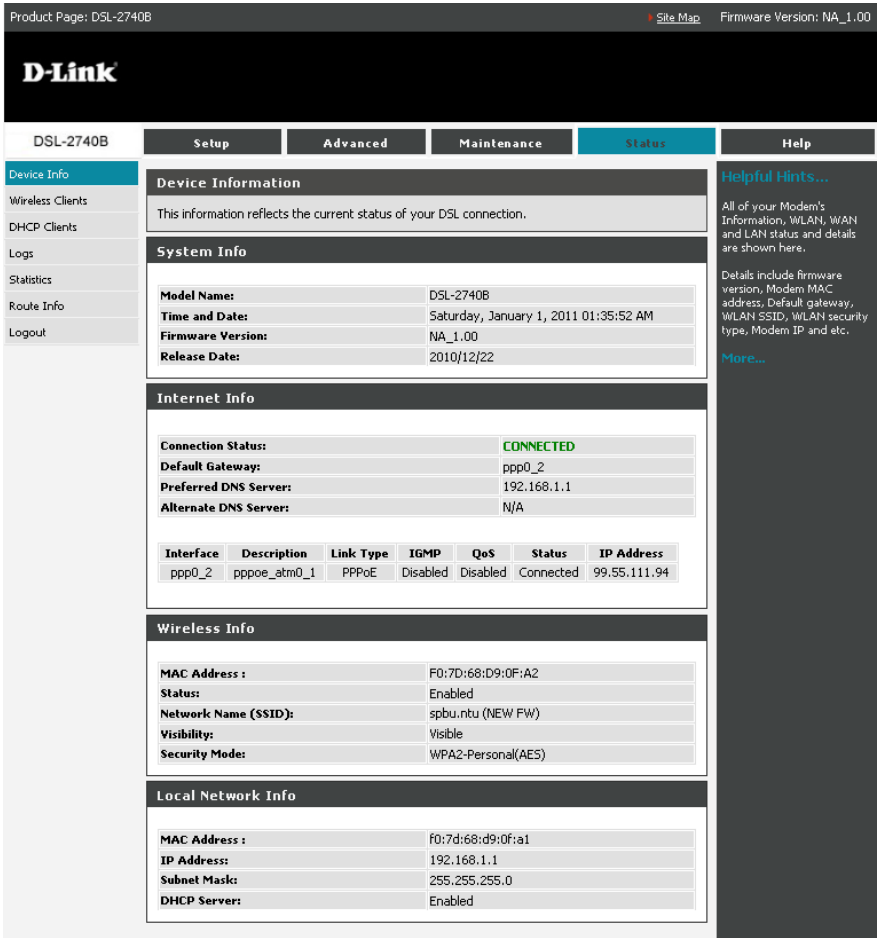


Status

The status section allows you to view general and status information for your router's connection.

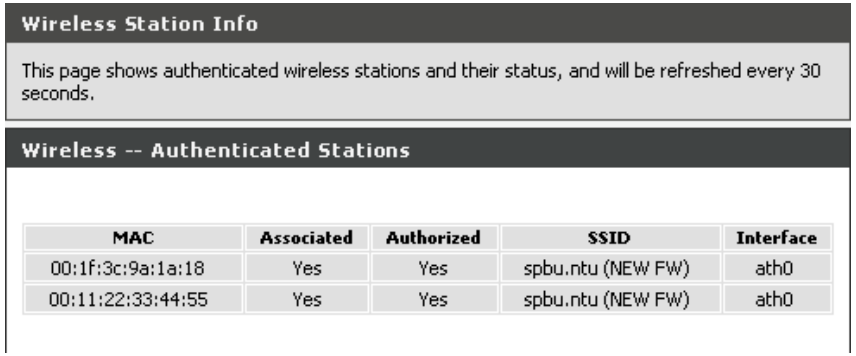
Device Info

The Device Info page shows details of the router such as the version of the software, LAN IP address, etc. It also displays the current status of your DSL connection.



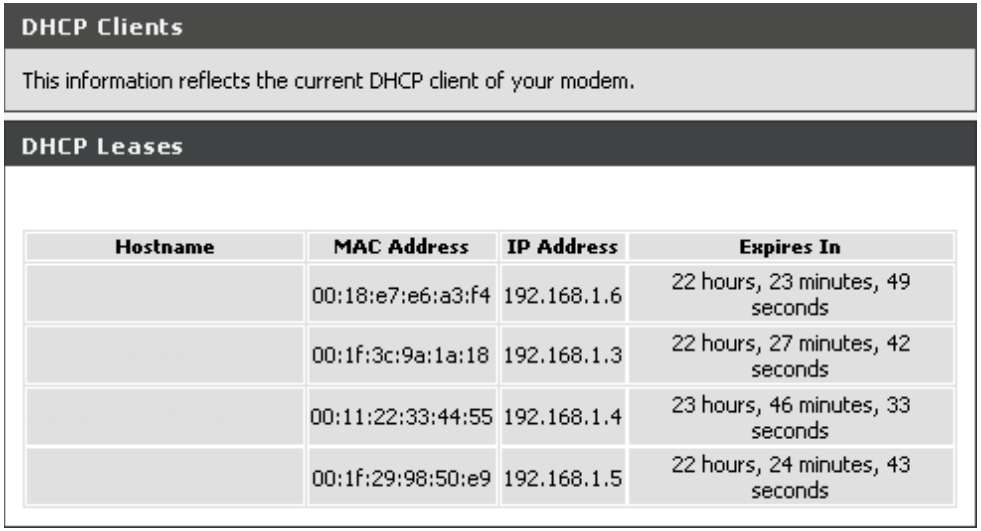
Wireless Clients

The wireless client table displays a list of currently connected wireless clients. The table also displays the connection time and MAC address of the connected wireless clients.



DHCP Clients

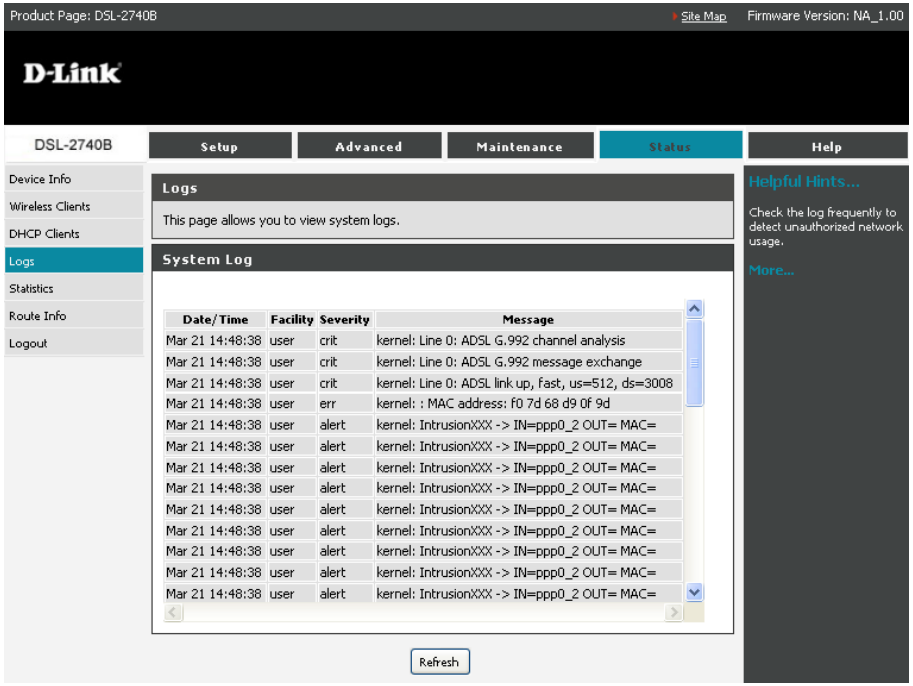
Access the DHCP Leases screen by clicking **DHCP** under **Status**. This shows the computers identified by the Hostname and the MAC address that have acquired IP addresses by the DHCP server. The table will also show the time the DHCP lease will expire.



Logs

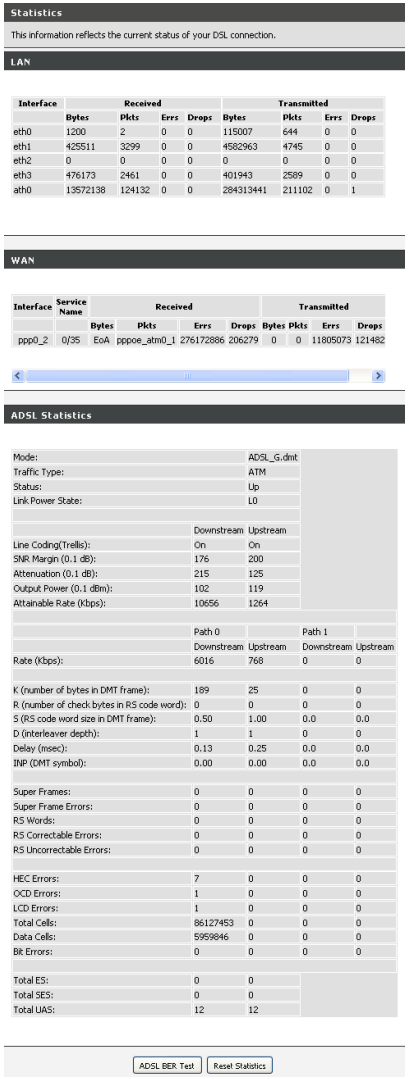
The System Log screen shows the date/time of the log, the facility that was logged, the severity level and the log message. Click on **Refresh** to view any new information that has been logged.

If the log is enabled, the system will log selected events including Emergency, Alert, Critical, Error, Warning, Notice, Informational, and Debugging. All events above or equal to the selected log level will be logged and displayed.



Statistics

This page will display a summary of the number of packets that have passed between the WAN and the LAN since the LAN and the WAN were initialized.



Statistics

This information reflects the current status of your DSL connection.

LAN

Interface	Received				Transmitted			
	Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
eth0	1200	2	0	0	115007	644	0	0
eth1	425511	3299	0	0	4582963	4745	0	0
eth2	0	0	0	0	0	0	0	0
eth3	476173	2461	0	0	401943	2589	0	0
ath0	13572138	124132	0	0	284313441	211102	0	1

WAN

Interface	Service Name	Received				Transmitted			
		Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
ppp0_2	0/35	EoA	pppoe_atm0_1	276172886	206279	0	0	11805073	121482

ADSL Statistics

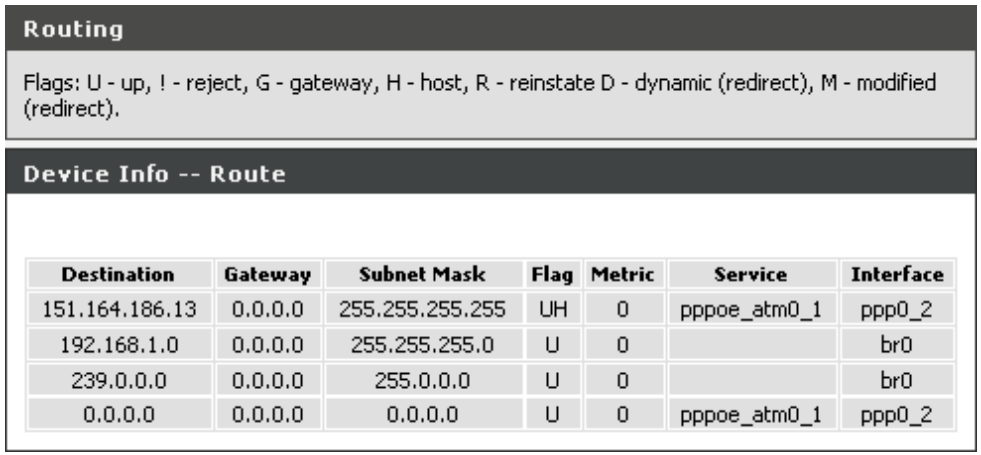
Mode:		ADSL_G.dmt
Traffic Type:		ATM
Status:		Up
Link Power State:		L0
	Downstream	Upstream
Line Coding(Trellis):	On	On
SNR Margin (0.1 dB):	176	200
Attenuation (0.1 dB):	215	125
Output Power (0.1 dBm):	102	119
Attainable Rate (Kbps):	10656	1264

	Path 0		Path 1	
	Downstream	Upstream	Downstream	Upstream
Rate (Kbps):	6016	768	0	0
K (number of bytes in DMT frame):	189	25	0	0
R (number of check bytes in RS code word):	0	0	0	0
S (RS code word size in DMT frame):	0.50	1.00	0.0	0.0
D (interleaver depth):	1	1	0	0
Delay (msec):	0.13	0.25	0.0	0.0
INP (DMT symbol):	0.00	0.00	0.0	0.0
Super Frames:	0	0	0	0
Super Frame Errors:	0	0	0	0
RS Words:	0	0	0	0
RS Correctable Errors:	0	0	0	0
RS Uncorrectable Errors:	0	0	0	0
HEC Errors:	7	0	0	0
OCD Errors:	1	0	0	0
LCD Errors:	1	0	0	0
Total Cells:	86127453	0	0	0
Data Cells:	5959846	0	0	0
Bit Errors:	0	0	0	0
Total ES:	0	0		
Total SES:	0	0		
Total UAS:	12	12		

ADSL BER Test | Reset Statistics

Route Info

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



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 3.0 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 the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.

- Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.

- Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** 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 your 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. For information about logging into the router see page 12.

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.

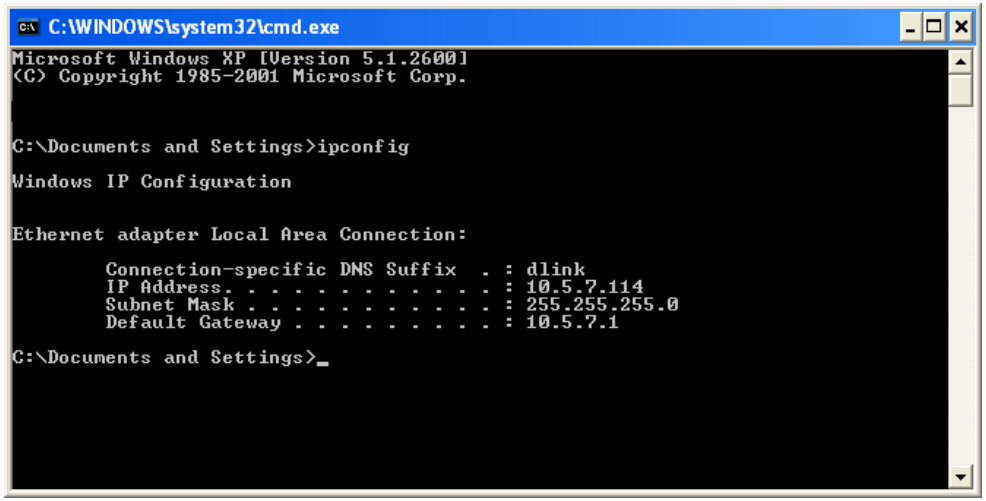
Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK**.

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 **My Network Places** > **Properties**.

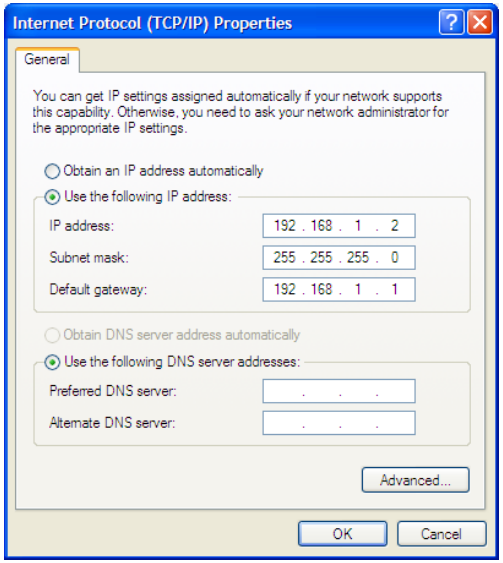
Step 2
Right-click on the **Local Area Connection** which represents your D-Link network adapter and select **Properties**.

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

Step 4
Click **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 192.168.1.1, make your IP address 192.168.1.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 (192.168.1.1).

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 **OK** twice to save your settings.

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DSL-2740B)
- Hardware Revision (located on the label on the bottom of the router (e.g. rev F1))
- Serial Number (s/n number located on the label on the bottom of the router).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:
(877) 453-5465

Internet Support:
http://support.dlink.com

For customers within Canada:

Phone Support:
(800) 361-5265

Internet Support:
http://support.dlink.ca

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link product described below ("Hardware") will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below ("Warranty Period"), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and

conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to **D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708**. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered: The Limited Warranty provided herein by D-Link does not cover: Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

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Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning: This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC 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 communication. 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.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Registration

Register your product online at support.dlink.com/register

Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

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