



# User Manual

## Xtreme N<sup>®</sup> Gigabit Router

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# Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

## Manual Revisions

Revision	Date	Description
2.0	March 3, 2010	• New Revision

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# Package Contents

<b>D-Link DIR-614 Xtreme N™ Router with 3 Detachable Antennas</b>	
<b>Power Adapter</b>	
<b>CAT 5 Ethernet Cable</b>	
<b>CD-ROM</b>	

**Note:** Using a power supply with a different voltage rating than the one included with the DIR-614 will cause damage and void the warranty.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• An Ethernet-based Cable or DSL modem</li><li>• IEEE 802.11n or 802.11g wireless clients</li><li>• 10/100/1000 Ethernet</li></ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"><li>• Windows®, Macintosh, or Linux-based operating system</li><li>• An installed Ethernet adapter</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer 6.0 or higher</li><li>• Mozilla 1.7.12 or higher</li><li>• Firefox 1.5 or higher</li><li>• Safari 1.0 or higher (with Java 1.3.1 or higher)</li></ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>
<b>CD Installation Wizard Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"><li>• Windows 7, Vista®, or XP with Service Pack 2</li><li>• An installed Ethernet adapter</li><li>• CD-ROM drive</li></ul>

# Introduction

## **TOTAL PERFORMANCE**

Combines award winning router features and 802.11n wireless technology to provide the best wireless performance.

## **TOTAL SECURITY**

The most complete set of security features including Active Firewall and WPA2™ to protect your network against outside intruders.

## **TOTAL COVERAGE**

Provides greater wireless signal rates even at farther distances for best-in-class Whole Home Coverage.

## **ULTIMATE PERFORMANCE**

The D-Link Xtreme N™ Router (DIR-614) is a 802.11n compliant device that delivers real world performance of up to 650% faster than an 802.11g wireless connection (also faster than a 100Mbps wired Ethernet connection). Create a secure wireless network to share photos, files, music, video, printers, and network storage throughout your home. Connect the Xtreme N™ Router to a cable or DSL modem and share your high-speed Internet access with everyone on the network. In addition, this Router includes a Quality of Service (QoS) engine that keeps digital phone calls (VoIP) and online gaming smooth and responsive, providing a better Internet experience.

## **EXTENDED WHOLE HOME COVERAGE**

Powered by Xtreme N™ technology, this high performance router provides superior Whole Home Coverage while reducing dead spots. The Xtreme N™ Router is designed for use in bigger homes and for users who demand higher performance networking. Add a Xtreme N™ notebook or desktop adapter and stay connected to your network from virtually anywhere in your home.

## **TOTAL NETWORK SECURITY**

The Xtreme N™ Router supports all of the latest wireless security features to prevent unauthorized access, be it from over the wireless network or from the Internet. Support for WPA standards ensure that you'll be able to use the best possible encryption method, regardless of your client devices. In addition, this Xtreme N™ Router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

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

## Features

- **Faster Wireless Networking** - The DIR-614 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. The performance of this 802.11n wireless router gives you the freedom of wireless networking at speeds 650% faster than 802.11g.
- **Compatible with 802.11g Devices** - The DIR-614 is still fully compatible with the IEEE 802.11g standard, so it can connect with existing 802.11g PCI, USB and Cardbus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
  - **Content Filtering** - Easily applied content filtering based on MAC Address, URL, and/or Domain Name.
  - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
  - **Secure Multiple/Concurrent Sessions** - The DIR-614 can pass through VPN sessions. It supports multiple and concurrent IPsec and PPTP sessions, so users behind the DIR-614 can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-614 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

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



## LEDs



<b>1</b>	Power LED	A solid light indicates a proper connection to the power supply.
<b>2</b>	Internet LED	A solid light indicates connection on the Internet port. This LED blinks during data transmission. A solid blue light indicates that there is an Internet connection, an orange light indicates that there is none.
<b>3</b>	WLAN LED	A solid light indicates that the wireless segment is ready. This LED blinks during wireless data transmission.
<b>4</b>	Local Network's LED	A solid light indicates a connection to an Ethernet-enabled computer on ports 1-4. This LED blinks during data transmission.
<b>5</b>	WCN LED	Insert a USB flash drive with WCN information. The LED will blink 3 times if it successfully transfers the wireless settings.

# Installation

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

## Before you Begin

Please configure the router with the computer that was last connected directly to your modem. Also, you can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).

If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

# Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind 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 is not in use.

# Getting Started

The DIR-614 includes a Quick Router Setup Wizard CD. Follow the simple steps below to run the Setup Wizard to guide you quickly through the installation process.

Insert the **Quick Router Setup Wizard CD** in the CD-ROM drive. The step-by-step instructions that follow are shown in Windows® XP. The steps and screens are similar for the other Windows operating systems.

If the CD Autorun function does not automatically start on your computer, go to **Start > Run**. In the run box type "**D:\autorun.exe**" (where **D:** represents the drive letter of your CD-ROM drive).

When the autorun screen appears, click **Install**.

**Note:** *It is recommended to write down the SSID and Security Key, followed by the login password on the provided CD holder.*

# 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

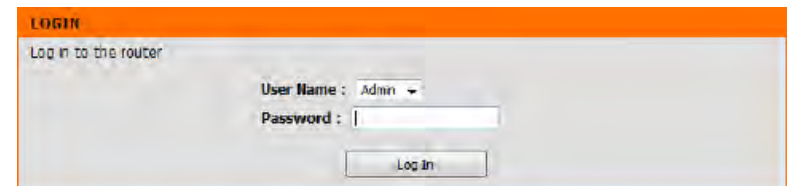
To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).

You may also connect using the NetBIOS name in the address bar (**http://dlinkrouter**).



Select **Admin** from the drop-down menu and then enter your password. The password is left blank by default.

If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.



# Setup Wizard

You may click **Setup Wizard** to quickly configure your router.

If you want to enter your settings without running the wizard, click **Manual Configuration** and skip to page 15.

Click **Launch Internet Connection Setup Wizard** to begin.

If you want to configure your wireless settings, click **Launch Wireless Security Setup Wizard** and skip to page 74.

## INTERNET CONNECTION

There are two ways to set up your Internet connection: you can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.

## INTERNET CONNECTION WIZARD

If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.

[Internet Connection Setup Wizard](#)

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

## MANUAL INTERNET CONNECTION OPTIONS

If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.

[Manual Internet Connection Setup](#)

## WIRELESS SETTINGS

The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.

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

## WIRELESS NETWORK SETUP WIZARD

This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.

[Wireless Connection Setup Wizard](#)

**Note:** Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.

## ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD

This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.

[Add Wireless Device with WPS](#)

## MANUAL WIRELESS NETWORK SETUP

If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.

[Manual Wireless Connection Setup](#)

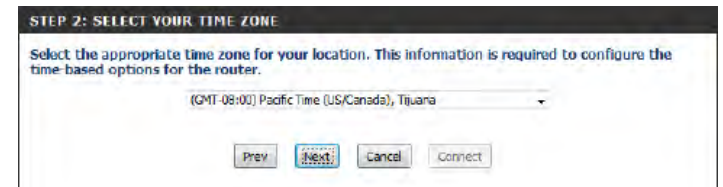
Click **Next** to continue.



Create a new password and then click **Next** to continue.



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



Select the type of Internet connection you use and then click **Next** to continue.



If you selected Dynamic, you may need to enter the MAC address of the computer that was last connected directly to your modem. If you are currently using that computer, click **Clone Your PC's MAC Address** and then click **Next** to continue.

The Host Name is optional but may be required by some ISPs. The default host name is the device name of the Router and may be changed.

**DHCP CONNECTION (DYNAMIC IP ADDRESS)**

To set up this connection, please make sure that you are connected to the D-Link Router with the PC that was originally connected to your broadband connection. If you are, then click the Clone MAC button to copy your computer's MAC Address to the D-Link Router.

MAC Address : 00:16:17:45:11:af (Optional)

Host Name : \_\_\_\_\_

Note: You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.

**DNS SETTINGS**

Primary DNS Address : 0.0.0.0  
 Secondary DNS Address : 0.0.0.0

If you selected PPPoE, enter your PPPoE username and password. Click **Next** to continue.

Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

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

**SET USERNAME AND PASSWORD CONNECTION (PPPOE)**

To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.

Address Mode :  Dynamic IP  Static IP

IP Address : 0.0.0.0

User Name : d-link@sbglobal.net

Password : \*\*\*\*\*

Verify Password : \*\*\*\*\*

Service Name : \_\_\_\_\_ (Optional)

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

**DNS SETTINGS**

Primary DNS Address : 0.0.0.0  
 Secondary DNS Address : 0.0.0.0

If you selected PPTP, enter your PPTP username and password. Click **Next** to continue.

**SET USERNAME AND PASSWORD CONNECTION (PPTP)**

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.

Address Mode :  Dynamic IP  Static IP

PPTP IP Address : 0.0.0.0

PPTP Subnet Mask : 0.0.0.0

PPTP Gateway IP Address : 0.0.0.0

PPTP Server IP Address (may be same as gateway) : \_\_\_\_\_

User Name : \_\_\_\_\_

Password : \_\_\_\_\_

Verify Password : \_\_\_\_\_

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

**DNS SETTINGS**

Primary DNS Address : 0.0.0.0  
 Secondary DNS Address : 0.0.0.0



If you selected L2TP, enter your L2TP username and password. Click **Next** to continue.

**SET USERNAME AND PASSWORD CONNECTION (L2TP)**

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP address. If you do not have this information, please contact your ISP.

Address Mode :  Dynamic IP  Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel Connect

If you selected Static, enter your network settings supplied by your Internet provider. Click **Next** to continue.

**SET STATIC IP ADDRESS CONNECTION**

To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.

IP Address :

Subnet Mask :

Gateway Address :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel Connect

Click **Connect** to save your settings. Once the router is finished rebooting, click **Continue**. Please allow 1-2 minutes to connect.

Close your browser window and reopen it to test your Internet connection. It may take a few tries to initially connect to the Internet.

**SETUP COMPLETE!**

The Setup Wizard has completed. Click the Connect button to save your settings and restart the router.

Prev Next Cancel Connect

# Manual Configuration

## Dynamic (Cable)

**My Internet Connection:** Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for cable modem services such as Comcast and Cox.

**EnableAdvanced DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

**Disclaimer:** D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

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

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

**Primary/SecondaryDNS Server:** Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from your ISP.

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

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

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is : Dynamic IP (DHCP)

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**ADVANCED DNS SERVICE**

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

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**DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :**

Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.

Host Name :

Use Unicasting :  (compatibility for some DHCP Servers)

Primary DNS Address : 0.0.0.0

Secondary DNS Address : 0.0.0.0

MTU : 1500 (bytes) MTU default = 1500

MAC Address : 00:16:17:45:11:aF

# Internet Setup

## PPPoE (DSL)

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

MyInternetConnection: Select **PPPoE (Username/Password)** from the drop-down menu.

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

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

User Name: Enter your PPPoE user name.

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

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

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

Maximum Idle Time: Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).

DNS Addresses: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

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

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

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is :

---

**ADVANCED DNS SERVICE**

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

---

**PPPOE :**

Enter the information provided by your Internet Service Provider (ISP).

Address Mode :  Dynamic IP  Static IP

IP Address :

User Name :

Password :

Verify Password :

Service Name :  (optional)

Reconnect Mode :  Always on  On demand  Manual

Maximum Idle Time :  (minutes, 0=infinite)

Primary DNS Address :  (optional)

Secondary DNS Address :  (optional)

MTU :  (bytes) MTU default = 1492

MAC Address :

## PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol ) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

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

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

**PPTP Subnet Mask:** Enter the Primary and Secondary DNS Server Addresses (Static PPTP only).

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

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

**Username:** Enter your PPTP username.

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

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

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

**DNS Servers:** The DNS server information will be supplied by your ISP (Internet Service Provider.)

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

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

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

**My Internet Connection is :** PPTP (Username / Password) ▼

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**ADVANCED DNS SERVICE**

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

**Enable Advanced DNS Service :**

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**PPTP :**

Enter the information provided by your Internet Service Provider (ISP).

**Address Mode**     Dynamic IP     Static IP

**PPTP IP Address :**

**PPTP Subnet Mask :**

**PPTP Gateway IP Address :**

**PPTP Server IP Address :**

**Username :**

**Password :**

**Verify Password :**

**Reconnect Mode :**     Always on     On demand     Manual

**Maximum Idle Time :** 5 (minutes, 0=infinite)

**Primary DNS Address :**

**Secondary DNS Address :**

**MTU :** 1400 (bytes) MTU default = 1400

**MAC Address :**

## L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

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

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

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

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

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

**Username:** Enter your L2TP username.

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

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

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

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

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

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

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

**My Internet Connection is:** L2TP (Username / Password) ▼

---

**ADVANCED DNS SERVICE**

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

**Enable Advanced DNS Service:**

---

**L2TP :**

Enter the information provided by your Internet Service Provider (ISP).

**Address Mode:**  Dynamic IP  Static IP

**L2TP IP Address:**

**L2TP Subnet Mask:**

**L2TP Gateway IP Address:**

**L2TP Server IP Address:**

**Username:**

**Password:**

**Verify Password:**

**Reconnect Mode:**  Always  On demand  Manual

**Maximum Idle Time:**  (minutes, 0=infinite)

**Primary DNS Address:**

**Secondary DNS Address:**

**MTU:**  (bytes) MTU default = 1400

**MAC Address:**

## Static (assigned by ISP)

Select Static IP Address if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

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

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

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

**DNS Servers:** The DNS server information will be supplied by your ISP (Internet Service Provider.)

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

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

**WAN**

Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.

**Note:** If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

**My Internet Connection is :** Static IP

**ADVANCED DNS SERVICE**

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

**Enable Advanced DNS Service :**

**STATIC IP ADDRESS INTERNET CONNECTION TYPE :**

Enter the static address information provided by your Internet Service Provider (ISP).

**IP Address :**

**Subnet Mask :**

**Default Gateway :**

**Primary DNS Server :**

**Secondary DNS Server :**

**MTU :**  (bytes) MTU default = 1500

**MAC Address :**

# Wireless Settings

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

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

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

**EnableAutoChannelScan:** The **Auto Channel Scan** setting can be selected to allow the DIR-614 to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-614. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

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

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

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

**Visibility Status:** Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-614. If Invisible is selected, the SSID of the DIR-614 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-614

**WIRELESS NETWORK SETTINGS**

Enable Wireless :  Always

Wireless Network Name : dink (Also called the SSID)

802.11 Mode : Mixed 802.11n, 802.11g and 802.11b

Enable Auto Channel Scan :

Wireless Channel : 2.457 GHz - CH 6

Transmission Rate : Best (automatic)

Channel Width : 20 MHz

Visibility Status :  Visible  Invisible

---

**WIRELESS SECURITY MODE**

To protect your privacy you can configure wireless security features. This device supports three wireless security modes, including WEP, WPA-Personal, and WPA-Enterprise. 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.

Security Mode : None

# Network Settings

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

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

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

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

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

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

The screenshot shows two sections of a web-based configuration utility. The top section is titled "NETWORK SETTINGS" and contains a paragraph of instructions: "Use this section to configure the internal network settings of your router and also to configure the built-in DHCP Server to assign IP addresses to the computers on your network. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again." Below this text are two buttons: "Save Settings" and "Don't Save Settings".

The bottom section is titled "ROUTER SETTINGS" and contains a similar paragraph of instructions: "Use this section to configure the internal network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again." Below this text are five labeled input fields:

- Router IP Address :** 192.168.0.1
- Subnet Mask :** 255.255.255.0
- Device Name :** dlinkrouter
- Local Domain Name :** (empty field)
- Enable DNS Relay :**



## DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-614 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-614. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

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

**DHCPIPAddressRange:** Enter the starting and ending IP addresses for the DHCP server's IP assignment.

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

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

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

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

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

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

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

**Primary/SecondaryWINS IP Address:** Enter your Primary (and Secondary) WINS IP address(es).

## DHCP Reservation

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

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

**Enable:** Check this box to enable the reservation.

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

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

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

**CopyYourPC'sMAC Address:** If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

**Save:** Click **Save** to save your entry. You must click **Save Settings** at the top to activate your reservations.

**NumberofDynamic DHCP Clients:** In this section you can see what LAN devices are currently leasing IP addresses.

**Revoke:** Click **Revoke** to cancel the lease for a specific LAN device and free an entry in the lease table. Do this only if the device no longer needs the leased IP address, because, for example, it has been removed from the network.

**Note:** The Revoke option will not disconnect a PC with a current network session from the network; you would need to use MAC Address Filter to do that. Revoke will only free up a DHCP Address for the very next requester. If the previous owner is still available, those two devices may both receive an IP Address Conflict error, or the second device may still not receive an IP Address; in that case, you may still need to extend the "DHCP IP Address Range" to address the issue, it is located in the DHCP Server section.

**Reserve:** The Reserve option converts this dynamic IP allocation into a DHCP Reservation and adds the corresponding entry to the DHCP Reservations List.

**ADD DHCP RESERVATION**

Enable :

Computer Name :  << Computer Name ▾

IP Address :

MAC Address :

Copy Your PC's MAC Address

Save Clear

**DHCP RESERVATIONS LIST :**

Enable	Host Name	MAC Address	IP Address

**NUMBER OF DYNAMIC DHCP CLIENTS : 1**

Hardware Address	Assigned IP	Hostname	Expires
00:16:17:45:11:af	192.168.0.100	pm1-PC	Tue Dec 1 16:51:49 2009

Revoke Reserve

# USB Settings

Use this section to configure your USB port. There are two configurations to choose from: Network USB and WCN Configuration.

**Note:** *If using the Network USB option, users will need to install the Network USB Utility into the computers to share the USB device through the router.*

USB Settings: Choose between these two configuration: Network USB and WCN Configuration.

Network USB: Please set the Network USB Detection interval time.



**Note:** *Please see the SharePort Manual on the CD for more information.*

## Virtual Server

The DIR-614 can be configured as a virtual server so that remote users accessing Web or FTP services via the public IP address can be automatically redirected to local servers in the LAN (Local Area Network).

The DIR-614 firewall feature filters out unrecognized packets to protect your LAN network so all computers networked with the DIR-614 are invisible to the outside world. If you wish, you can make some of the LAN computers accessible from the Internet by enabling Virtual Server. Depending on the requested service, the DIR-614 redirects the external service request to the appropriate server within the LAN network.

The DIR-614 is also capable of port-redirection meaning incoming traffic to a particular port may be redirected to a different port on the server computer.

Each virtual service that is created will be listed at the bottom of the screen in the Virtual Servers List. There are pre-defined virtual services already in the table. You may use them by enabling them and assigning the server IP to use that particular virtual service.

For a list of ports for common applications, please visit [http://support.dlink.com/faq/view.asp?prod\\_id=1191](http://support.dlink.com/faq/view.asp?prod_id=1191).

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

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

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

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

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

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

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

Product Page: DIR-655 Hardware Version: B1 Firmware Version: 2.00NA

**D-Link**

DIR-655 // SETUP ADVANCED TOOLS STATUS SUPPORT

**VIRTUAL SERVER**

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

**24 — VIRTUAL SERVERS LIST**

	Name	Application Name	IP Address	Computer Name	Port	Protocol	Schedule
<input checked="" type="checkbox"/>	FTP	<< Application Name	192.168.0.100	<< Computer Name	21	TCP	Always
<input type="checkbox"/>		<< Application Name		<< Computer Name	0	TCP	Always
<input type="checkbox"/>		<< Application Name		<< Computer Name	0		Inbound Filter
<input type="checkbox"/>		<< Application Name		<< Computer Name	0	TCP	Always
<input type="checkbox"/>		<< Application Name		<< Computer Name			Inbound Filter

**Helpful Hints...**

Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.

Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools > Schedules** screen and create a new schedule.

# Port Forwarding

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

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

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

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

Example: 24,1009,3000-4000

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

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

The screenshot shows the D-Link DIR-655 web interface. At the top, it displays 'Product Page: DIR-655', 'Hardware Version: B1', and 'Firmware Version: 2.001VA'. The main navigation bar includes 'D-Link', 'DIR-655', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various settings: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QOS ENGINE, NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ROUTING, ADVANCED WIRELESS, WISH, WIRELESS PROTECTED SETUP, ADVANCED NETWORK, GUEST ZONE, and IPV6. The main content area is titled 'PORT FORWARDING RULES' and contains a descriptive text: 'This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 680)'. Below this text are 'Save Settings' and 'Don't Save Settings' buttons. A table titled '24 --- PORT FORWARDING RULES' is visible, with columns for Name, IP Address, Ports to Open, and Schedule. The table contains three rows, each with a checkbox, a name field, an IP address field (0.0.0.0), a computer name dropdown, a port field, a protocol dropdown (TCP/UDP), and a schedule dropdown (Always). To the right of the table is a 'Helpful Hint...' section with instructions on how to use the application name dropdown and the IP address field.

# Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-614. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-614 provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

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

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

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

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

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

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

Product Page: DIR-655 Hardware Version: B1 Firmware Version: 2.00VA

**D-Link**

DIR-655 // SETUP ADVANCED TOOLS STATUS SUPPORT

**APPLICATION RULES**

This option is used to open single or multiple ports on your router when the router senses data sent to the Internet on a "trigger" port or port range. Special Applications rules apply to all computers on your internal network.

Save Settings Don't Save Settings

**24 — APPLICATION RULES**

	Name	Application	Trigger Port	Traffic Type	Schedule
<input type="checkbox"/>		<< Application Name	0	TCP	Always
<input type="checkbox"/>		<< Application Name	0	TCP	Always
<input type="checkbox"/>		<< Application Name	0	TCP	Always

Helpful Hints... Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected. Check the Application Name drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field. Select a schedule for when the service will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools > Schedules screen and create a new schedule. More...

# QoS Engine

The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically.

- Enable StreamEngine:** This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.
- DynamicFragmentation:** This option should be enabled when you have a slow Internet uplink. It helps to reduce the impact that large low priority network packets can have on more urgent ones.
- AutomaticUplinkSpeed:** This option is enabled by default when the QoS Engine option is enabled. This option will allow your router to automatically determine the uplink speed of your Internet connection.
- MeasuredUplinkSpeed:** This displays the detected uplink speed.
- Manual Uplink Speed:** The speed at which data can be transferred from the router to your ISP. This is determined by your ISP. ISP's often speed as a download/upload pair. For example, 1.5Mbits/284Kbits. Using this example, you would enter 284. Alternatively you can test your uplink speed with a service such as [www.dslreports.com](http://www.dslreports.com).
- Connection Type:** By default, the router automatically determines whether the underlying connection is an xDSL/Frame-relay network or some other connection type (such as cable modem or Ethernet), and it displays the result as Detected xDSL or Frame Relay Network. If you have an unusual network connection in which you are actually connected via xDSL but for which you configure either "Static" or "DHCP" in the Internet settings, setting this option to xDSL or Other Frame Relay Network ensures that the router will recognize that it needs to shape traffic slightly differently in order to give the best performance. Choosing xDSL or Other Frame Relay Network causes the measured uplink speed to be reported slightly lower than before on such connections, but gives much better results.

**Detected xDSL:** When Connection Type is set to automatic, the automatically detected connection type is displayed here.





# Network Filters

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

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

**MAC Address:** Enter the MAC address you would like to filter.  
To find the MAC address on a computer, please refer to the Networking Basics section in this manual.

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

Product Page: DIR-655 Hardware Version: B1 Firmware Version: 2.00VA

**D-Link**

DIR-655 // SETUP ADVANCED TOOLS STATUS SUPPORT

**MAC ADDRESS FILTER**

The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.

Save Settings Don't Save Settings

**2.4 -- MAC FILTERING RULES**

Configure MAC Filtering below:

Turn MAC Filtering OFF

MAC Address		DHCP Client List	
	--->	Computer Name	Clear
	--->	Computer Name	Clear
	--->	Computer Name	Clear
	--->	Computer Name	Clear
	--->	Computer Name	Clear
	--->	Computer Name	Clear
	--->	Computer Name	Clear

**Helpful Hints...**

Create a list of MAC addresses that you would either like to allow or deny access to your network.

Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu, then click the arrow to add that device's MAC address to the list.

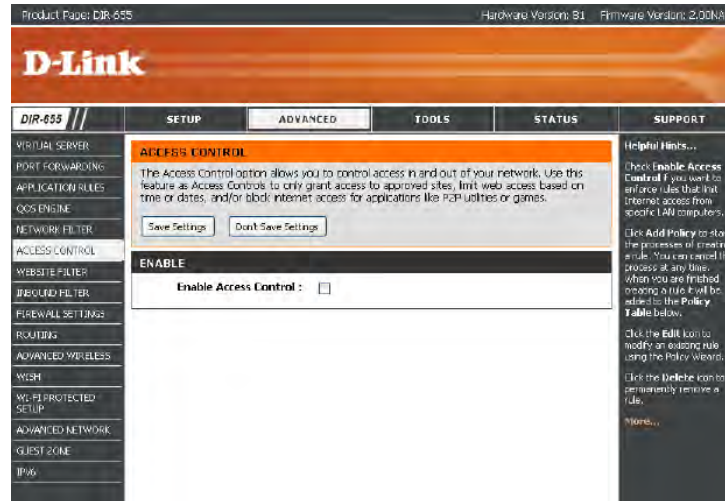
Click the Clear button to remove the MAC address from the MAC Filtering list.

Home

# Access Control

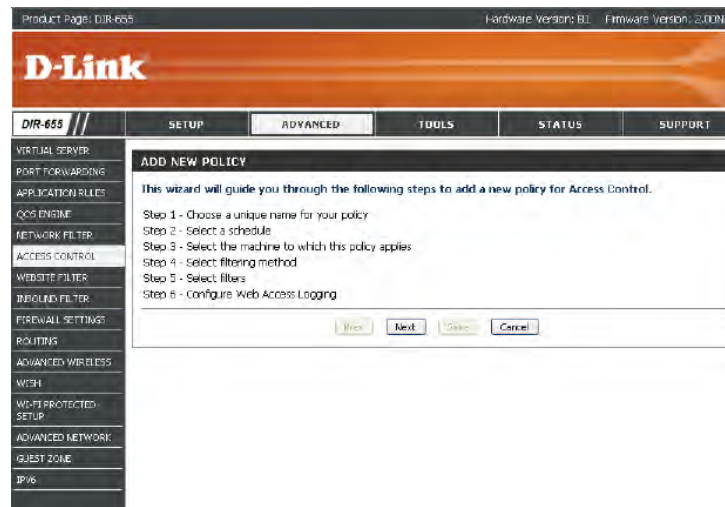
The Access Control section allows you to control access in and out of your network. Use this feature as Parental Controls to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

**Add Policy:** Click the **Add Policy** button to start the Access Control Wizard.

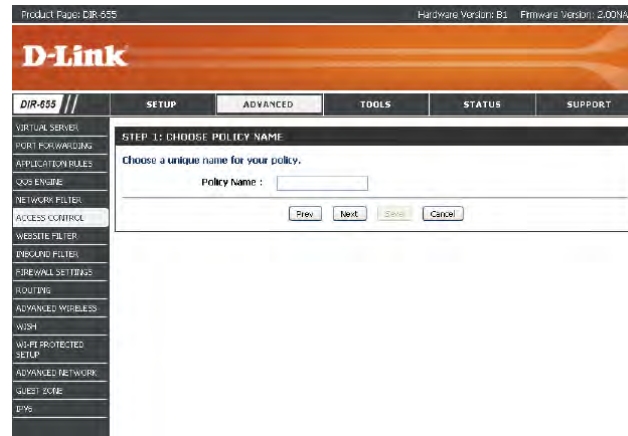


## Access Control Wizard

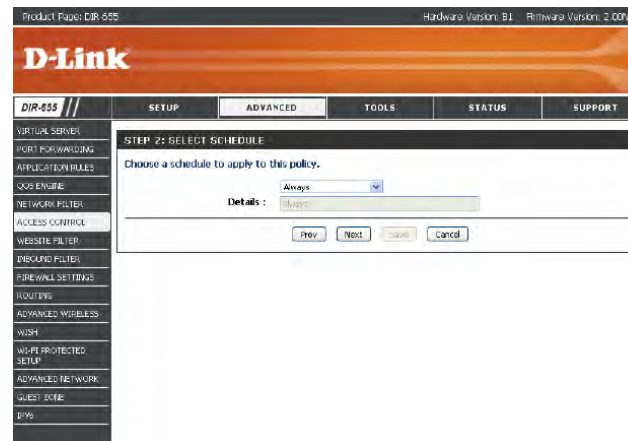
Click **Next** to continue with the wizard.



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

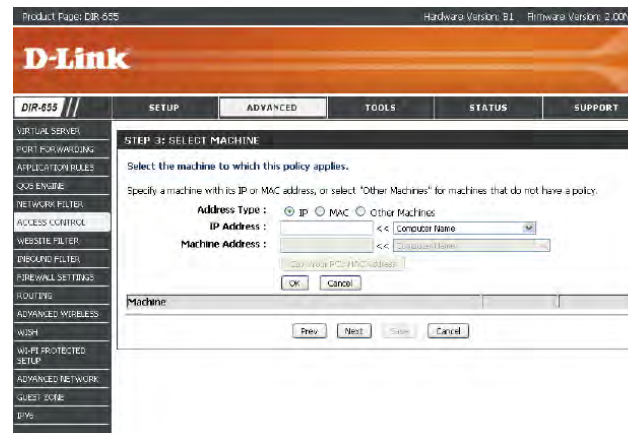


Select a schedule (I.E. Always) from the drop-down menu and then click **Next** to continue.

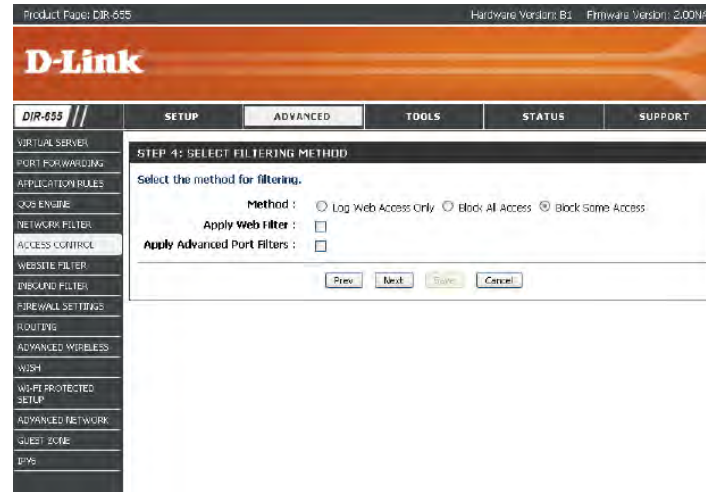


Enter the following information and then click **Next** to continue.

- **Address Type** - Select IP address, MAC address, or Other Machines.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to.



Select the filtering method and then click **Next** to continue.



Enter the rule:

**Enable** - Check to enable the rule.

**Name** - Enter a name for your rule.

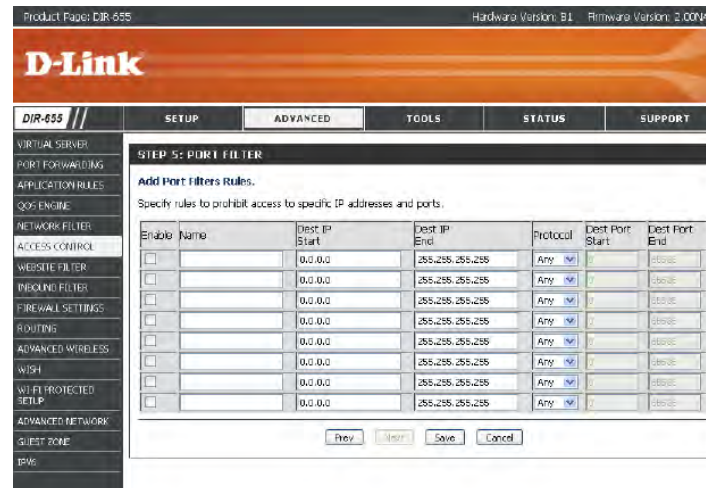
**Dest IP Start** - Enter the starting IP address.

**Dest IP End** - Enter the ending IP address.

**Protocol** - Select the protocol.

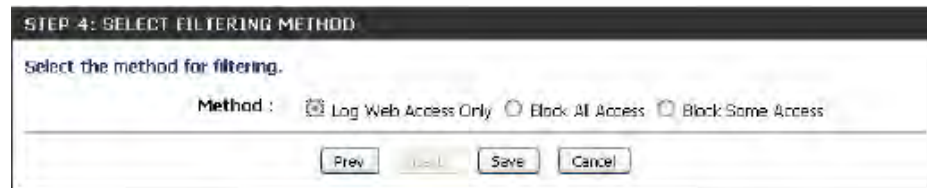
**Dest Port Start** - Enter the starting port number.

**Dest Port End** - Enter the ending port number.



To enable web logging, click **Enable**.

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



# Website Filters

Website Filters are used to deny LAN computers from accessing specific web sites by the URL or domain. A URL is a specially formatted text string that defines a location on the Internet. If any part of the URL contains the blocked word, the site will not be accessible and the web page will not display. To use this feature, enter the text string to be blocked and click **Save Settings**. The text to be blocked will appear in the list. To delete the text, click **Clear the List Below**.

Website URL/Domain: Enter the keywords or URLs that you want to block (or allow).  
Any URL with the keyword in it will be blocked.

The screenshot displays the D-Link DIR-655 web interface. At the top, it shows 'Product Page: DIR-655', 'Hardware Version: B1', and 'Firmware Version: 2.00NA'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'DIR-655', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED' tab is selected, and the 'WEBSITE FILTER' option is highlighted in the left-hand navigation menu. The main content area is titled 'WEBSITE FILTER' and contains the following text: 'The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. To use this feature, you must also select the "Apply Web Filter" checkbox in the Access Control section.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. Underneath, there is a section titled '4.0 - WEBSITE FILTERING RULES' with the instruction 'Configure Website Filter below:'. A radio button is selected for 'DENY computers access to ONLY these sites'. A 'Clear the list below...' button is also present. The bottom part of the interface features a table with the header 'Website URL/Domain' and several empty input fields for adding rules. On the right side, there is a 'Helpful Hints...' section with instructions on how to use the feature and a 'More...' link.

# Inbound Filters

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

**Name:** Enter a name for the inbound filter rule.

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

**Enable:** Check to enable rule.

**Source IP Start:** Enter the starting IP address. Enter 0.0.0.0 if you do not want to specify an IP range.

**Source IP End:** Enter the ending IP address. Enter 255.255.255.255 if you do not want to specify and IP range.

**Save:** Click the **Save** button to apply your settings. You must click **Save Settings** at the top to save the settings.

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

**Product Page:** DIR-614      **Hardware Version:** B1      **Firmware Version:** 2.00VA

**D-Link**

**DIR-614** //      **SETUP**      **ADVANCED**      **TOOLS**      **STATUS**      **SUPPORT**

**INBOUND FILTER**

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 for limiting access to a server on your network to a system or group of systems. Filter rules can be used with Virtual Server, Port Forwarding, or Remote Administration features.

**ADD INBOUND FILTER RULE**

**Name :**

**Action :**

Remote IP Range :	Enable	Remote IP Start	Remote IP End
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255

**Helpful Hints...**

Give each rule a Name that is meaningful to you.

Each rule can either **Allow** or **Deny** access from the WAN.

Up to eight ranges of WAN IP addresses can be controlled by each rule. The checkbox by each IP range can be used to disable ranges already defined.

The starting and ending IP addresses are WAN-side address.

Click the **Add** or **Update** button to store a finished rule in the Rules List below.

Click the **Edit** icon in the Rules List to change a rule.

Click the **Delete** icon in the Rules List to remove a rule.

# Firewall Settings

A firewall protects your network from the outside world. The D-Link DIR-614 offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. DMZ is short for Demilitarized Zone. This option will expose the chosen computer completely to the outside world.

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

**NAT Endpoint Filtering:** Select one of the following for TCP and UDP ports:  
**Endpoint Independent** - Any incoming traffic sent to an open port will be forwarded to the application that opened the port. The port will close if idle for 5 minutes.

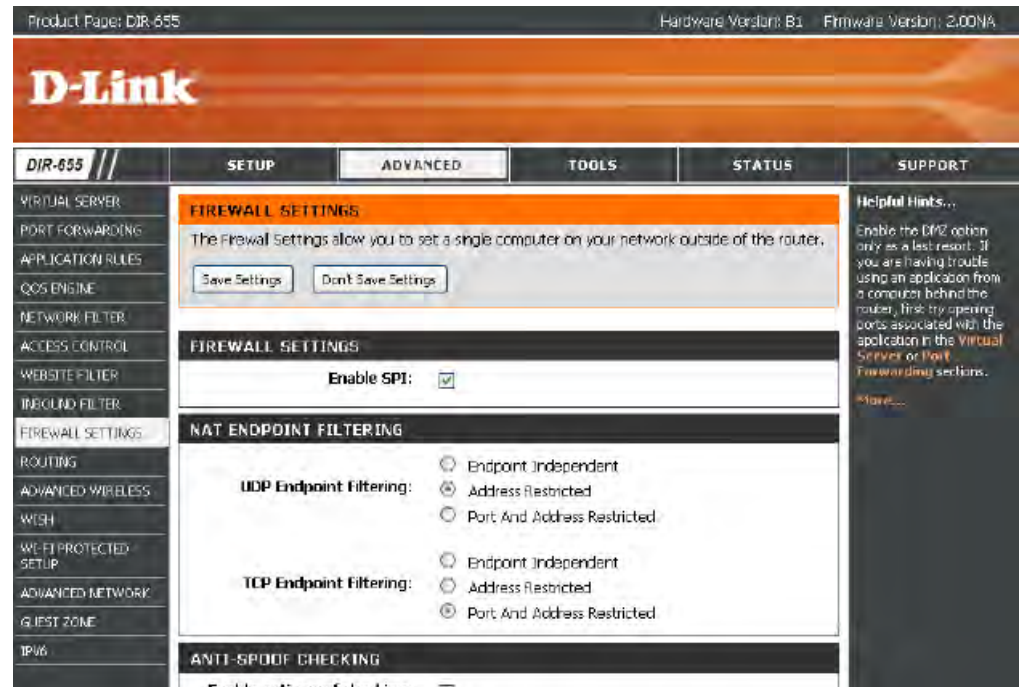
**Address Restricted** - Incoming traffic must match the IP address of the outgoing connection.

**Address + Port Restriction** - Incoming traffic must match the IP address and port of the outgoing connection.

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

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

**IP Address:** Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains its IP address automatically using DHCP, be sure to make a static reservation on the **Basic > DHCP** page so that the IP address of the DMZ machine does not change.



# Application Level Gateway Configuration

Here you can enable or disable ALG's. Some protocols and applications require special handling of the IP payload to make them work with network address translation (NAT). Each ALG provides special handling for a specific protocol or application. A number of ALGs for common applications are enabled by default.

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

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

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

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



# Routing

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

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

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

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

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

**Interface:** Select the interface that the IP packet must use to transit out of the router when this route is used.

Product Page: DIR-655 Hardware Version: B1 Firmware Version: 2.00NA

**D-Link**

DIR-655 // SETUP ADVANCED TOOLS STATUS SUPPORT

**ROUTING :**

This Routing page allows you to specify custom routes that determine how data is moved around your network.

Save Settings Don't Save Settings

**32 --ROUTE LIST**

	Name	Destination IP	Metric	Interface
<input type="checkbox"/>	Netmask 0.0.0.0	Gateway 0.0.0.0	1	WAN
<input type="checkbox"/>	Netmask 0.0.0.0	Gateway 0.0.0.0	1	WAN
<input type="checkbox"/>	Netmask 0.0.0.0	Gateway 0.0.0.0	1	WAN

**Helpful Hints...**

Each route has a checkbox next to it; check this box if you want the route to be enabled.

The name field allows you to specify a name for identification of this route, e.g. "Network 2".

The destination IP address is the address of the host or network you wish to reach.

The netmask field identifies the portion of the destination IP in use.

The gateway IP address is the IP address of the router, if any, used to reach the specified destination.

More...

# Advanced Wireless Settings

**Transmit Power:** Set the transmit power of the antennas.

**Beacon Period:** Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a value. 100 is the default setting and is recommended.

**RTS Threshold:** This value should remain at its default setting of 2342. If inconsistent data flow is a problem, only a minor modification should be made.

**Fragmentation Threshold:** The fragmentation threshold, which is specified in bytes, determines whether packets will be fragmented. Packets exceeding the 2346 byte setting will be fragmented before transmission. 2346 is the default setting.

**DTIM Interval:** (Delivery Traffic Indication Message) 3 is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

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

**Short GI:** Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may create higher data loss.

The screenshot displays the D-Link DIR-655 Advanced Wireless Settings page. The page header includes the product name 'DIR-655', hardware version 'B1', and firmware version '2.00NA'. The main navigation menu includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED WIRELESS' section is highlighted, and the 'ADVANCED WIRELESS SETTINGS' sub-section is active. The settings are as follows:

Setting	Value	Range
Transmit Power	High	
Beacon Period	100	(20..1000)
RTS Threshold	2342	(0..2347)
Fragmentation	2346	(256..2346)
DTIM Interval	3	(1..255)
WLAN Partition	<input type="checkbox"/>	
WMM Enable	<input checked="" type="checkbox"/>	
Short GI	<input checked="" type="checkbox"/>	

Helpful Hints...  
It is recommended that you leave these parameters at their default values. Adjusting them could limit the performance of your wireless network.  
Use 802.11d only for countries where it is required.  
Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.  
[More...](#)

# WISH Settings

WISH is short for Wireless Intelligent Stream Handling, a technology developed to enhance your experience of using a wireless network by prioritizing the traffic of different applications.

**Enable WISH:** Enable this option if you want to allow WISH to prioritize your traffic.

**HTTP:** Allows the router to recognize HTTP transfers for many common audio and video streams and prioritize them above other traffic. Such streams are frequently used by digital media players.

**Windows Media Center:** Enables the router to recognize certain audio and video streams generated by a Windows Media Center PC and to prioritize these above other traffic. Such streams are used by systems known as Windows Media Extenders, such as the Xbox 360.

**Automatic:** When enabled, this option causes the router to automatically attempt to prioritize traffic streams that it doesn't otherwise recognize, based on the behaviour that the streams exhibit. This acts to deprioritize streams that exhibit bulk transfer characteristics, such as file transfers, while leaving interactive traffic, such as gaming or VoIP, running at a normal priority.

**WISH Rules:** A WISH Rule identifies a specific message flow and assigns a priority to that flow. For most applications, the priority classifiers ensure the right priorities and specific WISH Rules are not required.

WISH supports overlaps between rules. If more than one rule matches for a specific message flow, the rule with the highest priority will be used.

The screenshot shows the D-Link DIR-655 router's configuration interface. The 'WISH' section is active, with 'Enable WISH' checked. Under 'PRIORITY CLASSIFIERS', 'HTTP' and 'Windows Media Center' are also checked. The 'WISH RULES' section shows a table with columns for Name, Priority, and Protocol. The table contains two rules, both with a priority of 0 and a protocol of TCP. The first rule has a host 1 IP range of 0.0.0.0 to 255.255.255.255 and a host 1 port range of 0 to 65535. The second rule has the same IP range and a host 2 port range of 0 to 65535.

Name	Priority	Protocol
Host 1 IP Range 0.0.0.0 to 255.255.255.255	0	Host 1 Port Range 0 to 65535
Host 2 IP Range 0.0.0.0 to 255.255.255.255	0	Host 2 Port Range 0 to 65535

## Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the “Initial setup” as well as the “Add New Device” processes. The Wi-Fi Alliance (WFA) has certified it across different products as well as manufactures. The process is just as easy, as depressing a button for the Push-Button Method or correctly entering the 8-digit code for the Pin-Code Method. The time reduction in setup and ease of use are quite beneficial, while the highest wireless Security setting of WPA2 is automatically used.

**Enable:** Enable the Wi-Fi Protected Setup feature.

**Lock Wireless Security Settings:** Locking the wireless security settings prevents the settings from being changed by the Wi-Fi Protected Setup feature of the router. Devices can still be added to the network using Wi-Fi Protected Setup. However, the settings of the network will not change once this option is checked.

**PIN Settings:** A PIN is a unique number that can be used to add the router to an existing network or to create a new network. The default PIN may be printed on the bottom of the router. For extra security, a new PIN can be generated. You can restore the default PIN at any time. Only the Administrator (“admin” account) can change or reset the PIN.

**Current PIN:** Shows the current value of the router’s PIN.

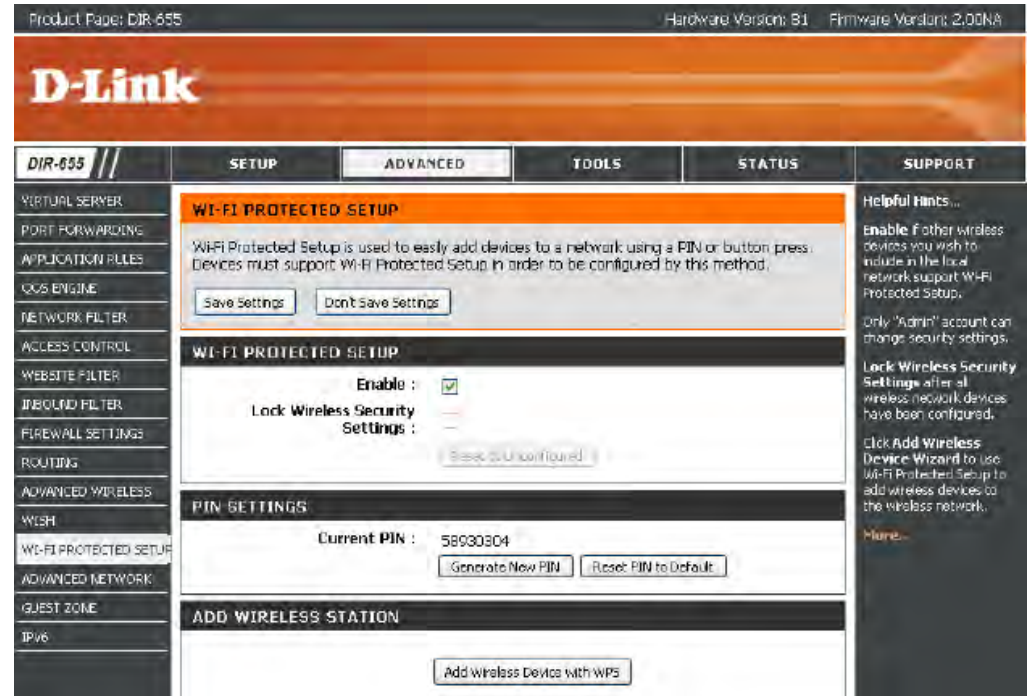
**Reset PIN to Default:** Restore the default PIN of the router.

**Generate New PIN:** Create a random number that is a valid PIN. This becomes the router’s PIN. You can then copy this PIN to the user interface of the registrar. This Wizard helps you add wireless devices to the wireless network.

**Add Wireless Station:** The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network.

There are several ways to add a wireless device to your network. A “registrar” controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.

**Add Wireless Device Wizard:** Start the wizard.



# Advanced Network Settings

**UPnP Settings:** To use the Universal Plug and Play (UPnP™) feature click on **Enabled**. UPnP provides compatibility with networking equipment, software and peripherals.

**Internet Ping:** Unchecking the box will not allow the DIR-614 to respond to pings. Blocking the Ping may provide some extra security from hackers. Check the box to allow the Internet port to be “pinged”.

**Internet Port Speed:** You may set the port speed of the Internet port to 10Mbps, 100Mbps, 1000Mbps, or Auto 10/100/1000Mbps. Some older cable or DSL modems may require you to set the port speed to 10Mbps.

**Multicast streams:** Check the box to allow multicast traffic to pass through the router from the Internet.

Product Page: DIR-655 Hardware Version: B1 Firmware Version: 2.00NA

## D-Link

DIR-655 // SETUP ADVANCED TOOLS STATUS SUPPORT

**ADVANCED NETWORK**

If you are not familiar with these Advanced Network settings, please read the help section before attempting to modify these settings.

Save Settings Don't Save Settings

**UPnP**

Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.

Enable UPnP :

**PPPoE PASS THROUGH**

Enable PPPoE Pass Through :

**WAN PING**

If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address.

Enable WAN Ping Respond :

WAN Ping Inbound Filter : Allow All

Details : Allow\_All

**WAN PORT SPEED**

WAN Port Speed : 10/100/1000Mbps Auto

**MULTICAST STREAMS**

Enable Multicast Streams :

**Helpful Hints...**

UPnP helps other UPnP LAN hosts interoperate with the router. Leave the UPnP option enabled as long as the LAN has other UPnP applications.

For added security, it is recommended that you disable the WAN Ping Respond option. Ping is often used by malicious Internet users to locate active networks or PCs.

The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.

If you are having trouble receiving multicast streams from the Internet, make sure the Multicast Streams option is enabled.

More...

WIRELESS

# Guest Zone

The Guest Zone feature will allow you to create temporary zones that can be used by guests to access the Internet. These zones will be separate from your main wireless network.

**Enable Guest Zone:** Check to enable the Guest Zone feature.

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

**Wireless Network Name:** Enter a wireless network name (SSID) that is different from your main wireless network.

**Enable Routing Between Zones:** Check to allow network connectivity between the different zones created.

**Security Mode:** Select the type of security or encryption you would like to enable for the guest zone.

The screenshot shows the D-Link DIR-655 web interface. At the top, it displays 'Product Page: DIR-655', 'Hardware Version: B1', and 'Firmware Version: 2.00NA'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'DIR-655 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED' tab is selected, and the 'GUEST ZONE' sub-tab is active. The main content area is titled 'GUEST ZONE' and contains the following text: 'Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. The 'GUEST ZONE SELECTION' section contains the following configuration options:

- Enable Guest Zone :**  **Always**
- Wireless Band :** 2.4GHz Band
- Wireless Network Name :** dlink\_guest (Also called the SSID)
- Enable Routing Between Zones :**
- Security Mode :** None

On the right side of the interface, there is a 'Helpful Hints...' section with a 'More...' link.

# IPv6

## Link-Local Connectivity

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

**LAN IPv6 Address Settings:** Displays the IPv6 address of the router.

The screenshot displays the D-Link web management interface for a DIR-655 router. The top navigation bar includes 'Product Page: DIR-655', 'Hardware Version: B1', and 'Firmware Version: 2.00NA'. The main header features the D-Link logo and a navigation menu with tabs for 'DIR-655', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration categories, with 'IPv6' selected. The main content area is titled 'IPv6' and contains the following sections:

- IPv6:** A message stating, 'Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.' Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- IPv6 CONNECTION TYPE:** A section titled 'Choose the mode to be used by the router to the IPv6 Internet.' with a dropdown menu labeled 'My IPv6 Connection is : Linklocalonly'.
- LAN IPv6 ADDRESS SETTINGS :** A section titled 'Use this section to configure the internal network settings of your router. The LAN IPv6 Link-Local Address is the IPv6 Address that you use to access the web-based management interface.' Below this, the 'LAN IPv6 Link-Local Address' is displayed as 'FE80::218:ABFF:FE6A:2792/64'.

On the right side of the interface, there is a 'Helpful Hints...' section with text: 'When configuring the router to access the IPv6 Internet, be sure to choose the correct IPv6 Connection Type from the drop down menu. If you are unsure of which option to choose, contact your Internet Service Provider (ISP). If you are having trouble accessing the IPv6 Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.' Below this is a 'More...' link. The bottom of the page features the 'WIRELESS' logo.

## Static IPv6 (Stateful)

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

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

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

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

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

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

**My IPv6 Connection is :**

---

**WAN IPv6 ADDRESS SETTINGS :**

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

**IPv6 Address :**

**Subnet Prefix Length :**

**Default Gateway :**

**Primary DNS Address :**

**Secondary DNS Address :**

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.

**LAN IPv6 Address :**  /64

**LAN IPv6 Link-Local Address :** FE80::21B:E7FF:FE6A:21BE/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.

**Enable Autoconfiguration :**

**Autoconfiguration Type :**

**IPv6 Address Range(Start):**  /64

**IPv6 Address Range(End):**  /64

**IPv6 Address Lifetime:**  (minutes)



## Static IPv6 (Stateless)

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

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

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateless**. Refer to the previous page for Stateful.

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

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	Static IPv6 ▼
WAN IPv6 ADDRESS SETTINGS :	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
IPv6 Address :	_____
Subnet Prefix Length :	_____
Default Gateway :	_____
Primary DNS Address :	_____
Secondary DNS Address :	_____
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.	
LAN IPv6 Address :	_____ /64
LAN IPv6 Link-Local Address :	FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable Autoconfiguration :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	Stateless ▼
Router Advertisement Lifetime:	30 (minutes)

## DHCPv6 (Stateful)

**My IPv6 Connection:** Select **DHCPv6** from the drop-down menu.

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

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

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

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	DHCPv6
IPv6 DNS SETTINGS :	
Obtain DNS server address automatically or enter a specific DNS server address.	
<input checked="" type="radio"/> Obtain DNS server address automatically <input type="radio"/> Use the following DNS address	
Primary DNS Address :	<input type="text"/>
Secondary DNS Address :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.	
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable Autoconfiguration :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	Stateful (DHCPv6)
IPv6 Address Range(Start):	<input type="text"/> :: <input type="text"/>
IPv6 Address Range(End):	<input type="text"/> :: <input type="text"/>
IPv6 Address Lifetime:	30 (minutes)

## DHCPv6 (Stateless)

**My IPv6 Connection:** Select **DHCPv6** from the drop-down menu.

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateless**. Refer to the previous page for Stateful.

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

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

**My IPv6 Connection is :**

---

**IPv6 DNS SETTINGS :**

Obtain DNS server address automatically or enter a specific DNS server address.

Obtain DNS server address automatically  
 Use the following DNS address

**Primary DNS Address :**

**Secondary DNS Address :**

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.

**LAN IPv6 Address :**  /64

**LAN IPv6 Link-Local Address :** FE80::218:E7FF:FE6A:182C/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.

**Enable Autoconfiguration :**

**Autoconfiguration Type :**

**Router Advertisement Lifetime:**  (minutes)

## IPv6 over PPPoE (Stateful)

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

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

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

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

**User Name:** Enter your PPPoE user name.

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

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

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

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

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

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : PPPoE

---

**PPPoE :**

Enter the information provided by your Internet Service Provider (ISP).

Address Mode :  Dynamic IP  Static IP

IP Address :

User Name :

Password :

Verify Password :

Service Name :  (optional)

Reconnect Mode :  Always on  On demand  Manual

Maximum Idle Time :  (minutes, 0=Infinite)

MTU :  (bytes)

---

**IPv6 DNS SETTINGS :**

Obtain DNS server address automatically or enter a specific DNS server address.

Obtain DNS server address automatically

Use the following DNS address

Primary DNS Address :

Secondary DNS Address :

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.

LAN IPv6 Address :  /64

LAN IPv6 Link-Local Address :

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.

Enable Autoconfiguration :

Autoconfiguration Type :  Stateful (DHCPv6)

IPv6 Address Range(Start):  ::

IPv6 Address Range(End):  ::

IPv6 Address Lifetime:  (minutes)

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

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

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

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

## IPv6 over PPPoE (Stateless)

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

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

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

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

**User Name:** Enter your PPPoE user name.

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

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

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

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

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

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : PPPoE

---

**PPPOE :**

Enter the information provided by your Internet Service Provider (ISP).

**Address Mode:**  Dynamic IP  Static IP

**IP Address:**

**User Name:**

**Password:**

**Verify Password:**

**Service Name:**  (optional)

**Reconnect Mode:**  Always on  On demand  Manual

**Maximum Idle Time:**  (minutes, 0=infinite)

**MTU:**  (bytes)

---

**IPv6 DNS SETTINGS :**

Obtain DNS server address automatically or enter a specific DNS server address.

Obtain DNS server address automatically

Use the following DNS address

**Primary DNS Address:**

**Secondary DNS Address:**

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. (If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.)

**LAN IPv6 Address:**  /64

**LAN IPv6 Link-Local Address:**  /64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.

**Enable Autoconfiguration:**

**Autoconfiguration Type:** Stateless

**Router Advertisement Lifetime:**  (minutes)

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**.

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

## 6 to 4 Tunneling (Stateful)

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

**6 to 4 Settings:** Enter the IPv6 settings supplied by your Internet provider (ISP).

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

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

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

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : 6 to 4 ▼

---

**6to4 SETTINGS :**

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

6to4 Address : 0:0:0:0:0:0:0

Primary DNS Address :

Secondary DNS Address :

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.

LAN IPv6 Address :  ::1/64

LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.

Enable Autoconfiguration :

Autoconfiguration Type : Stateful (DHCPv6) ▼

IPv6 Address Range(Start):  ::

IPv6 Address Range(End):  ::

IPv6 Address Lifetime:  (minutes)



## 6 to 4 Tunneling (Stateless)

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

**6 to 4 Settings:** Enter the IPv6 settings supplied by your Internet provider (ISP).

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateless**. Refer to the previous page for Stateful.

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

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	6 to 4
6to4 SETTINGS :	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
6to4 Address :	0:0:0:0:0:0:0
Primary DNS Address :	
Secondary DNS Address :	
LAN IPV6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.	
LAN IPv6 Address :	2002:0:0:0001 ::1/64
LAN IPv6 Link-Local Address :	FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable Autoconfiguration :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	Stateless
Router Advertisement Lifetime:	30 (minutes)

## IPv6 in IPv4 Tunneling (Stateful)

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

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

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful**. Refer to the previous page for Stateful.

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

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

**Pv6 Address Lifetime:** Enter the Router Advertisement Lifetime (in minutes).

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : IPv6 in IPv4 Tunnel ▾

---

**IPv6 in IPv4 TUNNEL SETTINGS :**

Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.

Remote IPv4 Address : \_\_\_\_\_

Remote IPv6 Address : \_\_\_\_\_

Local IPv4 Address : \_\_\_\_\_

Local IPv6 Address : \_\_\_\_\_

Primary DNS Address : \_\_\_\_\_

Secondary DNS Address : \_\_\_\_\_

---

**LAN IPv6 ADDRESS SETTINGS :**

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.

LAN IPv6 Address : \_\_\_\_\_ /64

LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network:

Enable Autoconfiguration :

Autoconfiguration Type : Stateful (DHCPv6) ▾

IPv6 Address Range(Start): \_\_\_\_\_ :

IPv6 Address Range(End): \_\_\_\_\_ :

IPv6 Address Lifetime: 30 \_\_\_\_\_ (minutes)

## IPv6 in IPv4 Tunneling (Stateless)

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

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

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	IPv6 in IPv4 Tunnel ▾
IPv6 in IPv4 TUNNEL SETTINGS :	
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.	
Remote IPv4 Address :	<input type="text"/>
Remote IPv6 Address :	<input type="text"/>
Local IPv4 Address :	<input type="text"/>
Local IPv6 Address :	<input type="text"/>
Primary DNS Address :	<input type="text"/>
Secondary DNS Address :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.	
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable Autoconfiguration :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	Stateless ▾
Router Advertisement Lifetime:	30 <input type="text"/> (minutes)

## Stateless Autoconfiguration (Stateless)

**My IPv6 Connection:** Select **Stateless Autoconfiguration** from the drop-down menu.

**IPv6 DNS Settings:** Enter the settings supplied by your Internet provider (ISP).

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

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

**Enable** Check to enable the Autoconfiguration feature.

**Autoconfiguration:**

**Autoconfiguration Type:** Select **Stateless**. Refer to the previous page for Stateful.

**IPv6 Address Lifetime:** Enter the Router Advertisement Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	Stateless Autoconfiguration
IPv6 DNS SETTINGS :	
Obtain DNS server address automatically or enter a specific DNS server address.	
Primary DNS Address :	<input type="text"/>
Secondary DNS Address :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.	
LAN IPv6 Address :	<input type="text"/> / 64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE6A:21BE / 64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable Autoconfiguration :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	Stateless
Router Advertisement Lifetime :	30 (minutes)

## Stateless Autoconfiguration (Stateful)

**My IPv6 Connection:** Select **Stateless Autoconfiguration** from the drop-down menu.

**IPv6 DNS Settings:** Enter the settings supplied by your Internet provider (ISP).

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

**Autoconfiguration Type:** Select **Stateful**. Refer to the previous page for Stateful.

**IPv6 Address Lifetime:** Enter the start IPv6 Address for the DHCPv6 range for your local computers.

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

**IPv6 Address Lifetime:** Enter the Router Advertisement Lifetime (in minutes).

The screenshot displays the IPv6 configuration page, organized into several sections:

- IPv6 CONNECTION TYPE:** A heading followed by the instruction "Choose the mode to be used by the router to the IPv6 Internet." Below this, a dropdown menu labeled "My IPv6 Connection is:" is set to "Stateless Autoconfiguration".
- IPv6 DNS SETTINGS:** A heading followed by the instruction "Obtain DNS server address automatically or enter a specific DNS server address." Below this are two input fields: "Primary DNS Address:" and "Secondary DNS Address:".
- LAN IPv6 ADDRESS SETTINGS:** A heading followed by the instruction "Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again." Below this are two input fields: "LAN IPv6 Address:" (with a "/64" suffix) and "LAN IPv6 Link-Local Address:" (with the value "FE80::218:E7FF:FE6A:21BE/64" displayed).
- ADDRESS AUTOCONFIGURATION SETTINGS:** A heading followed by the instruction "Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network." Below this are several settings:
  - "Enable Autoconfiguration:" with a checked checkbox.
  - "Autoconfiguration Type:" with a dropdown menu set to "Stateful (DHCPv6)".
  - "IPv6 Address Range(Start):" and "IPv6 Address Range(End):" with input fields and double colons (::) for the range separator.
  - "IPv6 Address Lifetime:" with an input field containing "30" and the unit "(minutes)".