



User Manual

Wireless N Home Router

DIR-615

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 |
|----------|--------------|-------------------|
| 17.00 | May 20, 2013 | • Initial Release |

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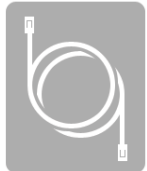
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Package Contents



DIR-615 Wireless N Home Router



Ethernet Cable



Power Adapter



User Manual on CD

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

Note: Using a power supply with a different voltage rating than the one included with the DIR-615 will cause damage and void the warranty for this product.

System Requirements

| | |
|---|---|
| Network Requirements | <ul style="list-style-type: none">• An Ethernet-based Cable or DSL modem• IEEE 802.11n/g wireless clients• 10/100 Ethernet |
| Web-based Configuration Utility Requirements | <p>Computer with the following:</p> <ul style="list-style-type: none">• Windows®, Macintosh, or Linux-based operating system• An installed Ethernet adapter <p>Browser Requirements:</p> <ul style="list-style-type: none">• Internet Explorer 6 or higher• Chrome 2.0 or higher• Firefox 3.0 or higher• Safari 3.0 or higher <p>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p> |
| CD Installation Wizard Requirements | <p>Computer with the following:</p> <ul style="list-style-type: none">• Windows® XP (Service Pack 3), Vista® or Windows® 7/8• An installed Ethernet adapter• CD-ROM drive |

Features

- **Faster Wireless Networking** - The DIR-615 provides a wireless connection at up to 300Mbps* with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and VOIP calling.
- **Compatible with 802.11g Devices** - The DIR-615 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 which help to protect your network from unauthorized access and malicious attacks.
- **Content Filtering** - Easily applied content and access filtering based on MAC address, URL, and/or domain name.
- **Filter Scheduling** - Set your own schedules, allowing you to control when your filters and access controls are activated.
- **Secure Multiple/Concurrent Sessions** - The DIR-615 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-615 can securely access corporate networks.
- **User-friendly Setup Wizard** - The easy-to-use web-based user interface includes a setup wizard which will walk you through the steps to set up your wireless router, access the Internet, and enable wireless security.

* 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, may lower actual data throughput rate. Environmental conditions may adversely affect wireless signal range.

Hardware Overview

Connections



| | | |
|----------|-----------------|---|
| 1 | LAN Ports (1-4) | Connect Ethernet devices such as computers, switches, and hubs. |
| 2 | Internet Port | Connect your DSL, cable modem or other Internet connection here to provide Internet connectivity to the router. |
| 3 | Power Receptor | Receptor for the supplied power adapter. |
| 4 | Reset | Pressing the Reset button restores the router to its original factory default settings. |

Hardware Overview

LEDs



| | | |
|---|--------------------|--|
| 1 | Power LED | A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process. The light will be solid orange during boot up. |
| 2 | Internet LED | A solid light indicates connection on the Internet port. This LED blinks during data transmission. |
| 3 | WAN LED | A solid light indicates that the wireless segment is ready. This LED blinks during wireless data transmission. |
| 4 | Local Network LEDs | A solid light indicates a connection to an Ethernet-enabled computer on ports 1-4. This LED blinks during data transmission. |

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 an attic or garage.

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- 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.
- When running the Setup Wizard from the included CD, make sure the computer you are running the CD from is connected to the Internet, or the wizard will not work. If you have disconnected any hardware, re-connect your computer back to the modem and make sure you are online.

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. However, 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 usage area. You can optimize wireless range and signal strength by following these basic guidelines:

Keep the number of walls and ceilings between the router and other network devices to a minimum - each wall or ceiling can reduce your network's range by up to 30 meters (98 feet). Position your devices so that the number of walls or ceilings in the signal's path is minimized.

Be aware of the direct line between network devices. A wall that is 0.5 meters thick (1.5 feet) appears to be almost 1 meter (3 feet) thick at a 45-degree angle. At a 2-degree angle it appears over 14 meters (42 feet) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

Building materials make a difference. A solid metal door or aluminum studs may have a detrimental 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 can degrade your wireless signal.

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

If you are using 2.4 GHz 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 2.4 GHz 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.

Connect to Cable/DSL/Satellite Modem

If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

1. Place the router in an open and central location. Do not plug the power adapter into the router.
2. Turn the power off on your modem. If there is no on/off switch, then unplug the modem's power adapter. Shut down your computer.
3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and plug it into the Internet port on the router.
4. Plug the Ethernet cable that came with your router into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.
5. Turn on or plug in your modem. Wait for the modem to boot (about 30 seconds).
6. Plug the power adapter to the router and connect to a power outlet. Wait about 30 seconds for the router to boot.
7. Turn on your computer.
8. Verify the link lights on the router. The power light, Internet light, and the LAN light (the port that your computer is plugged into) should be lit. If not, make sure your computer, modem, and router are powered on and verify the cable connections are correct.
9. Skip to "Configuration" on page 10 to configure your router.

Getting Started

The DIR-615 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 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:\DWizard.exe"** (where D: represents the drive letter of your CD-ROM drive). You can also use your operating system's file explorer to navigate to your CD drive and locate the **"DWizard"** file.

When the screen below appears, click **Start**.

Note: It is recommended that you make a record of your SSID and security key, and 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

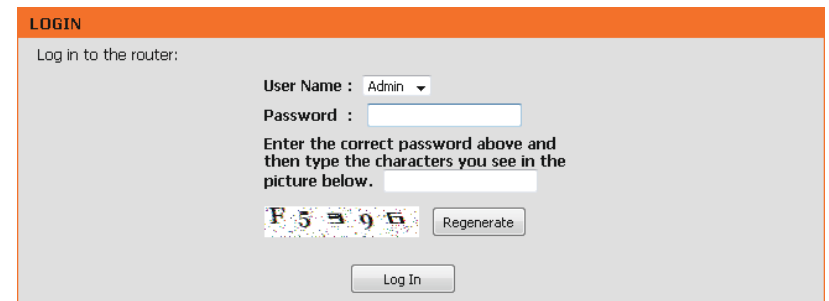
To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).

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



Select **Admin** from the drop-down menu and then enter your password. Leave the password blank by default. If graphical authentication has been enabled, type in the graphical authentication code (if you cannot read it, click **Regenerate**). The graphical authentication will be disabled by default.

If you get a **Page Cannot be Displayed** error, please refer to "Troubleshooting" on page 95 for assistance.



Internet Connection Setup Wizard

Once logged into the web interface of the router, the **Setup > Internet** page will appear. Click the **Internet Connection Setup Wizard** button to quickly configure your router using the setup wizard.

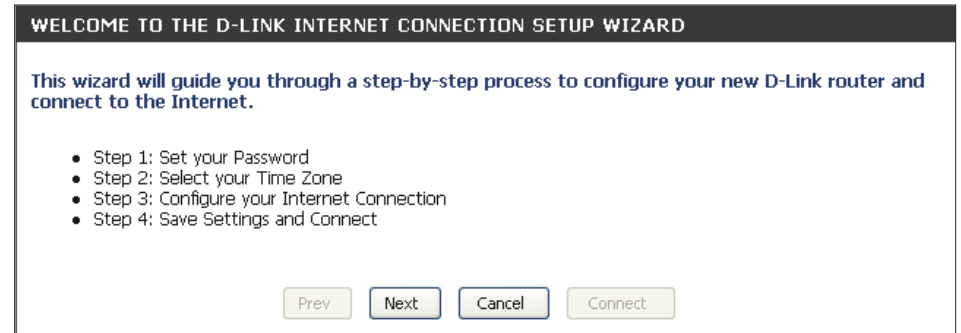
If you want to enter your settings without running the wizard, click **Manual Internet Configuration Wizard** and skip to page 16.

The screenshot displays the D-Link web interface for the DIR-615 router. The top navigation bar includes 'DIR-615', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar shows 'INTERNET', 'WIRELESS SETTINGS', and 'NETWORK SETTINGS'. The main content area is titled 'INTERNET CONNECTION' and contains the following sections:

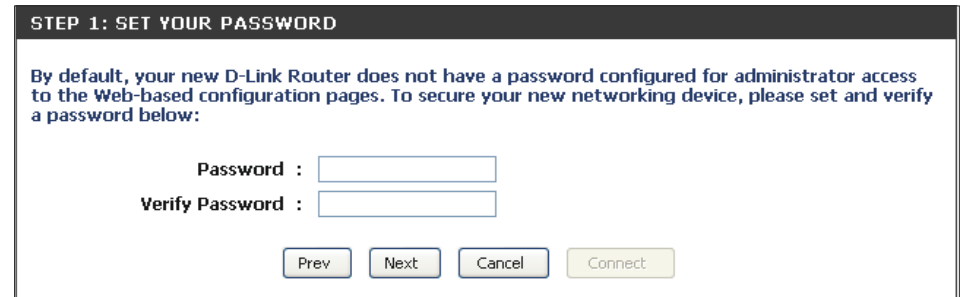
- INTERNET CONNECTION**: A text box explaining that there are two ways to set up the Internet connection: using the Web-based Internet Connection Setup Wizard or manually configuring the connection.
- INTERNET CONNECTION SETUP WIZARD**: A section with a text box stating, 'If you would like to utilize 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.' Below this is a button labeled 'Internet Connection Setup Wizard'.
- Note**: A text box stating, 'Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.'
- MANUAL INTERNET CONNECTION OPTIONS**: A section with a text box stating, 'If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.' Below this is a button labeled 'Manual Internet Connection Setup'.

On the right side of the page, there is a 'Helpful Hints...' section with two paragraphs of text and a 'More...' link.

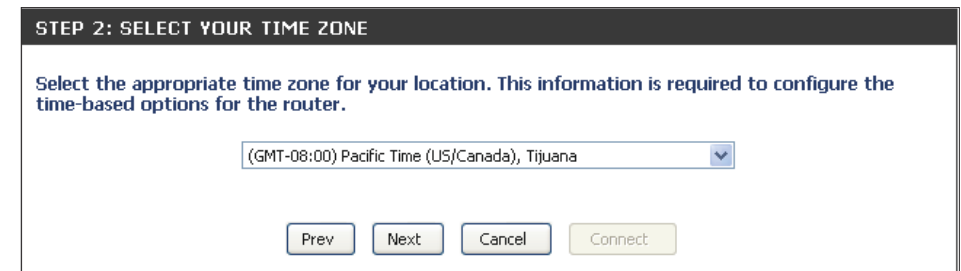
Click **Next** to continue.



Create a new password and then click **Next** to continue. You will need this password to access the web-based configuration utility.



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.

STEP 3: CONFIGURE YOUR INTERNET CONNECTION

Your Internet Connection could not be detected, please select your Internet Service Provider (ISP) from the list below. If your ISP is not listed; select the "Not Listed or Don't Know" option to manually configure your connection.

Not Listed or Don't Know ▼

If your Internet Service Provider was not listed or you don't know who it is, please select the Internet connection type below:

- DHCP Connection (Dynamic IP Address)**
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.
- Username / Password Connection (PPPoE)**
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.
- Username / Password Connection (PPTP)**
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.
- Username / Password Connection (L2TP)**
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.
- Static IP Address Connection**
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.

Prev Next Cancel Connect

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**.

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.

Under **DNS Settings**, you may need to enter the primary DNS server address provided to you by your ISP. Click **Next** to continue.

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 Your PC's MAC Address button to copy your computer's MAC Address to the D-Link Router.

MAC Address : (optional)
Clone Your PC's MAC Address

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 :
Secondary DNS Address : (optional)

Prev Next Cancel Connect

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

Note: Make sure to remove any 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.

User Name :

Password :

If you selected PPTP, select whether you require a **Dynamic IP** or **Static IP** connection. If you selected Static, enter the IP address, subnet mask, gateway IP address, and server IP address provided to you by your ISP. Next, enter your PPTP username and password.

Under **DNS Settings**, you may need to enter the primary DNS server address provided to you by your ISP.

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 :

PPTP Subnet Mask :

PPTP Gateway IP Address :

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

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address : (optional)

If you selected L2TP, select whether you require a **Dynamic IP** or **Static IP** connection. If you selected Static, enter the IP address, subnet mask, gateway IP address, and server IP address provided to you by your ISP. Next, enter your PPTP username and password.

Under **DNS Settings**, you may need to enter the primary DNS server address provided to you by your ISP.

Click **Next** to continue.

The setup is now complete. Click the **Connect** to save your settings. Please allow 1-2 minutes to connect.

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 : (optional)

SETUP COMPLETE!

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

Manual Configuration

Dynamic (Cable)

If you opt to set up your Internet connection manually, you will be redirected to a WAN page that allows you to select your Internet type and enter the correct configuration parameters.

Select your Internet connection type using the “**My Internet Connection is**” drop-down menu.

At any stage, you can click on the **Save Settings** button to accept the changes made, or click on the **Don't Save Settings** button to discard the changes made.

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.

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

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

Primary/Secondary DNS Server: Enter the primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave 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 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) ▼

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 Server :

Secondary DNS Server : (optional)

MTU :

MAC Address :

Static IP Address

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 an 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.

Primary DNS Server: The primary DNS server information will be supplied by your ISP (Internet Service Provider.)

Secondary DNS Server: The secondary DNS server information will be supplied by your ISP

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

MAC Address: The default MAC address is set to the Internet port's physical interface MAC address on the broadband router. It is not recommended that you change the default MAC address unless required by your ISP. You can 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.

The screenshot shows the 'INTERNET CONNECTION TYPE' section of a router's configuration page. It features a dropdown menu set to 'Static IP'. Below this is the 'STATIC IP ADDRESS INTERNET CONNECTION TYPE' section, which contains several input fields for IP Address, Subnet Mask (pre-filled with 0.0.0.0), Default Gateway, Primary DNS Server, Secondary DNS Server (marked as optional), and MTU (pre-filled with 1500). A MAC Address field is also present, with a 'Clone Your PC's MAC Address' button next to it.

| INTERNET CONNECTION TYPE | |
|--|--|
| Choose the mode to be used by the router to connect to the Internet. | |
| My Internet Connection is : | Static IP |
| STATIC IP ADDRESS INTERNET CONNECTION TYPE : | |
| Enter the static address information provided by your Internet Service Provider (ISP). | |
| IP Address : | <input type="text"/> |
| Subnet Mask : | 0.0.0.0 <input type="text"/> |
| Default Gateway : | <input type="text"/> |
| Primary DNS Server : | <input type="text"/> |
| Secondary DNS Server : | <input type="text"/> (optional) |
| MTU : | 1500 <input type="text"/> |
| MAC Address : | <input type="text"/> |
| | <input type="button" value="Clone Your PC's MAC Address"/> |

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 any PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection: 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**. You can also select a schedule for connection.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set your reconnect mode to **Always-on**.

DNS Addresses: Enter the primary and secondary DNS server addresses (static PPPoE only).

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 : PPPoE (Username / Password) ▼

PPPOE INTERNET CONNECTION TYPE :

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

Address Mode : Dynamic IP Static IP

IP Address :

Username :

Password :

Verify Password :

Service Name : (optional)

Reconnect Mode : Always on On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

DNS Mode : Receive DNS from ISP Enter DNS Manually

Primary DNS Server :

Secondary DNS Server : (optional)

MTU :

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**. You can also select a schedule for connection.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set your reconnect mode to **Always-on**.

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) ▾

PPTP INTERNET CONNECTION TYPE :

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 : (minutes, 0=infinite)

Primary DNS Server :

Secondary DNS Server : (optional)

MTU :

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**. You can also select a schedule for connection.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set your reconnect mode to **Always-on**.

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) ▾

L2TP INTERNET CONNECTION TYPE :

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 ▾ On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Server :

Secondary DNS Server : (optional)

MTU :

MAC Address :

DS-Lite DHCPv6

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

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

AFTR IPv6 Address: After selecting the manual configuration option above, the user can enter the AFTR IPv6 address used here.

B4 IPv4 Address: Enter the B4 IPv4 address value used here.

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

IPv6 WAN Default Gateway: Once connected, the IPv6 WAN default gateway address will be displayed here.

The screenshot shows a configuration page for the Internet Connection Type. The top section is titled "INTERNET CONNECTION TYPE" and contains the instruction "Choose the mode to be used by the router to connect to the Internet." Below this, a dropdown menu shows "My Internet Connection is : DS-Lite". The second section is titled "AFTR ADDRESS INTERNET CONNECTION TYPE :" and contains the instruction "Enter the AFTR address information provided by your Internet Service Provider (ISP)". This section includes radio buttons for "DS-Lite Configuration" with "DS-Lite DHCPv6 Option" selected and "Manual Configuration" unselected. Below are input fields for "AFTR IPv6 Address", "B4 IPv4 Address" (with a pre-filled value of "192.0.0." and an "(optional)" label), "WAN IPv6 Address", and "IPv6 WAN Default Gateway". At the bottom, there are two buttons: "Save Settings" and "Don't Save Settings".

Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Network Setup Wizard** and refer to “Wireless Network Setup Wizard” on page 74.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS) and refer to “Add Wireless Device with WPS Wizard” on page 77.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to the next page.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'D-Link', 'DIR-615', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'INTERNET', 'WIRELESS SETTINGS', and 'NETWORK SETTINGS'. The main content area is titled 'WIRELESS SETTINGS' and contains the following sections:

- WIRELESS SETTINGS**: A header section with a sub-header 'WIRELESS SETTINGS'. Below it, text states: "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**: A section with a sub-header 'WIRELESS NETWORK SETUP WIZARD'. Text: "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." A button labeled 'Wireless Network Setup Wizard' is present. A note below reads: "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**: A section with a sub-header 'ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD'. Text: "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." A button labeled 'Add Wireless Device with WPS' is present.
- MANUAL WIRELESS NETWORK SETUP**: A section with a sub-header 'MANUAL WIRELESS NETWORK SETUP'. Text: "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." A button labeled 'Manual Wireless Network Setup' is present.

On the right side, there is a 'Helpful Hints...' sidebar with text: "If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Network Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running." and "If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Network Setup** to input all the settings manually." followed by a 'More...' link.

Manual Wireless Network Setup

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all wireless functions. Click **Add New** to create your own time schedule to enable the wireless function.

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

802.11 Mode: Select one of the following:

- 802.11b Only** - Select if all of your wireless clients are 802.11b.
- 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 802.11g and 802.11b** - Select if you are using both 802.11b and 802.11g wireless clients.
- Mixed 802.11n and 802.11g** - Select if you are using a mix of 802.11n and 802.11g wireless clients.
- Mixed 802.11n, 802.11b, and 802.11g** - Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-615 to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-615. 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.

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

Channel Width: Select the channel width:

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

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WIRELESS NETWORK

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section may also need to be duplicated on your wireless client.

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2.

Save Settings Don't Save Settings

WIRELESS NETWORK SETTINGS

Wireless Band : 2.4GHz Band

Enable Wireless : Always New Schedule

Wireless Network Name : dlink07869 (Also called the SSID)

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

Enable Auto Channel Scan :

Wireless Channel : 2.412 GHz - CH 1

Transmission Rate : Best (automatic) (Mbit/s)

Channel Width : 20/40 MHz(Auto)

Visibility Status : Visible Invisible

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

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

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto(WPA or WPA2)

Cipher Type : TKIP and AES

Group Key Update Interval : 3600 (seconds)

PRE-SHARED KEY

Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key : password

Save Settings Don't Save Settings

Helpful Hints...

- Changing your Wireless Network Name is the first step in securing your wireless network. We recommend that you change it to a familiar name that does not contain any personal information.
- Enable Auto Channel Selection let the router can select the best possible channel for your wireless network to operate on.
- Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they perform a scan to see what's available. In order for your wireless devices to connect to your router, you will need to manually enter the Wireless Network Name on each device.
- If you have enabled Wireless Security, make sure you write down the WEP Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.
- More...

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcast by the DIR-615. If Invisible is selected, the SSID of the DIR-615 will not be seen by site survey utilities, so you will have to manually enter the SSID of your DIR-615 in order to connect to it.

Wireless Security Mode: Select the type of wireless security encryption that you want to use for your wireless network. For more information regarding how to set up wireless security, please refer to “Wireless Security” on page 73

WIRELESS NETWORK SETTINGS

Wireless Band : 2.4GHz Band

Enable Wireless : Always New Schedule

Wireless Network Name : dlink (Also called the SSID)

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

Enable Auto Channel Scan :

Wireless Channel : 2.412 GHz - CH 1

Transmission Rate : Best (automatic) (Mbit/s)

Channel Width : 20/40 MHz(Auto)

Visibility Status : Visible Invisible

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

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

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode : Auto(WPA or WPA2)

Cipher Type : TKIP and AES

Group Key Update Interval : 3600 (seconds)

PRE-SHARED KEY

Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key : password

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.

Note: If you change the IP address, once you click **Apply**, you will need to enter the new IP address in your browser in order to access 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.

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NETWORK SETTINGS

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 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 in this section, you may need to adjust your PC's network settings to access the network again.

Please note that this section is optional and you do not need to change any of the settings here to get your network up and running.

Save Settings Don't Save Settings

ROUTER SETTINGS

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.

Router IP Address : 192.168.0.1
 Default Subnet Mask : 255.255.255.0
 Host Name : dlinkrouter
 Local Domain Name : (optional)
 Enable DNS Relay :

DHCP SERVER SETTINGS

Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.

Enable DHCP Server :
 DHCP IP Address Range : 100 to 199 (addresses within the LAN subnet)
 DHCP Lease Time : 10080 (minutes)
 Always broadcast : (compatibility for some DHCP Clients)

ADD DHCP RESERVATION

Enable :
 Computer Name : << Computer Name >>
 IP Address :
 MAC Address :
 Clone Your PC's MAC Address
 Add / Update Clear

DHCP RESERVATIONS LIST

| Enable | Host Name | IP Address | MAC Address |
|--------|-----------|------------|-------------|
| | | | |

NUMBER OF DYNAMIC DHCP CLIENTS

| Host Name | IP Address | MAC Address | Expired Time |
|-----------|------------|-------------|--------------|
| | | | |

Save Settings Don't Save Settings

Helpful Hints...

- If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck **Enable DHCP Server** to disable this feature.
- If you have devices on your network that should always have fixed IP addresses, add a **DHCP Reservation** for each such device.
- More...

DHCP Server Settings

The DIR-615 has a built-in Dynamic Host Control Protocol (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 TCP/IP settings provided by the DIR-615. The DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

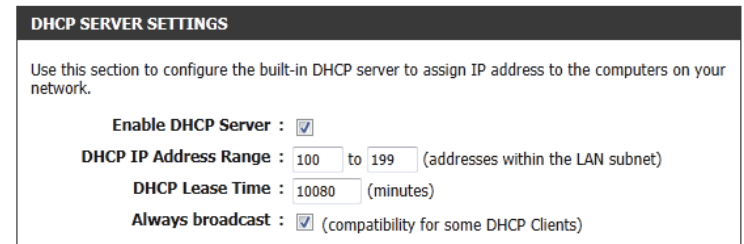
Enable DHCP Server: Check this box to enable the DHCP server on your router. Uncheck to disable this function.

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

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

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

Always Broadcast: Enable this function to ensure compatibility with some DHCP clients.



The screenshot shows the DHCP Server Settings page. At the top, there is a title bar that reads "DHCP SERVER SETTINGS". Below the title bar, there is a descriptive text: "Use this section to configure the built-in DHCP server to assign IP address to the computers on your network." The configuration options are as follows:

- Enable DHCP Server :** (checked)
- DHCP IP Address Range :** 100 to 199 (addresses within the LAN subnet)
- DHCP Lease Time :** 10080 (minutes)
- Always broadcast :** (compatibility for some DHCP Clients)

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.

Copy Your PC's MAC Address: Click this button to copy the MAC address of the computer you are currently using into the MAC address field.

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

Number of Dynamic DHCP Clients: This section displays the number of dynamic DHCP clients currently connected, and lists details of each client in the table below,

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, which is located in the DHCP server section.

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 :

DHCP RESERVATIONS LIST

| Enable | Host Name | IP Address | MAC Address | | |
|--------|-----------|------------|-------------|--|--|
| | | | | | |
| | | | | | |

NUMBER OF DYNAMIC DHCP CLIENTS

| Host Name | IP Address | MAC Address | Expired Time |
|-----------|------------|-------------|--------------|
| | | | |
| | | | |

Virtual Server

The DIR-615 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-615 firewall feature filters out unrecognized packets to protect your LAN network so all computers networked with the DIR-615 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-615 redirects the external service request to the appropriate server within the LAN network.

The DIR-615 is also capable of port-redirection, meaning incoming traffic to a particular port may be redirected to a different port on the server computer.

On this page, 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.

If you are unsure of which port to open, check your application's help file, FAQ, or technical support site. For a list of ports for common applications, please visit your local D-Link support website.

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DIR-615 // 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

Remaining number of rules that can be created: 24

| | Name | IP Address | Port | Traffic type | Schedule |
|--------------------------|------------------------|---------------------|--------------|---------------|-----------------|
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Public Port | Protocol Both | Schedule Always |
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Private Port | Protocol Both | Schedule Always |
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Public Port | Protocol Both | Schedule Always |
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Private Port | Protocol Both | Schedule Always |
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Public Port | Protocol Both | Schedule Always |
| <input type="checkbox"/> | << Application name >> | << Computer Name >> | Private Port | Protocol Both | Schedule Always |

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.
- More...

Virtual Servers List

This will allow you to open a single port for access by specified clients. If you have multiple clients on your network that require an open port, you will need to create a Virtual Server rule for each client.

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 <<.

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**, **Both** or **Other** 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.

24 - VIRTUAL SERVERS LIST

Remaining number of rules that can be created: 24

| | | Port | Traffic Type | |
|--------------------------|---|--------------------------------------|--------------------|----------------------|
| <input type="checkbox"/> | Name <input type="text"/> << Application name ▾ | Public Port <input type="text"/> | Protocol Both ▾ | Schedule Always ▾ |
| | IP Address <input type="text"/> << Computer Name ▾ | Private Port <input type="text"/> | | |
| <input type="checkbox"/> | Name <input type="text"/> << Application name ▾ | Public Port <input type="text"/> | Protocol Both ▾ | Schedule Always ▾ |
| | IP Address <input type="text"/> << Computer Name ▾ | Private Port <input type="text"/> | | |
| <input type="checkbox"/> | Name <input type="text"/> << Application name ▾ | Public Port <input type="text"/> | Protocol Both ▾ | Schedule Always ▾ |
| | IP Address <input type="text"/> << Computer Name ▾ | Private Port <input type="text"/> | | |
| <input type="checkbox"/> | Name <input type="text"/> << Application name ▾ | Public Port <input type="text"/> | Protocol Both ▾ | Schedule Always ▾ |
| | IP Address <input type="text"/> << Computer Name ▾ | Private Port <input type="text"/> | | |

Application Rules

Some applications, such as Internet gaming, video conferencing, and Internet telephony require multiple connections. These applications have difficulties working through NAT (Network Address Translation). Application rules allow some of these applications to work with the DIR-615. 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.

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. Separate ports with a comma, and specify a range with a dash. Example: 24,1009,3000-4000

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. Separate ports with a comma, and specify a range with a dash. Example: 24,1009,3000-4000

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

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 schedules in the **Tools** > **Schedules** section.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'DIR-615 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration sections. The main content area is titled 'APPLICATION RULES' and contains the following text:

The Application Rules option is used to open single or multiple ports in your firewall when the router senses data sent to the Internet on an outgoing "Trigger" port or port range. Special Application rules apply to all computers on your internal network.

Buttons: [Save Settings] [Don't Save Settings]

24 -- APPLICATION RULES

Remaining number of rules that can be created: 24

| | Name | Application | Port | Traffic Type | Schedule |
|--------------------------|----------------------|------------------------|----------------------------------|--------------|----------|
| <input type="checkbox"/> | <input type="text"/> | << Application Name >> | Trigger <input type="text"/> | All | Always |
| <input type="checkbox"/> | <input type="text"/> | << Application Name >> | Firewall <input type="text"/> | All | Always |
| <input type="checkbox"/> | <input type="text"/> | << Application Name >> | Trigger <input type="text"/> | All | Always |
| <input type="checkbox"/> | <input type="text"/> | << Application Name >> | Firewall <input type="text"/> | All | 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.
- Use the Application Name drop-down menu to view a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
- 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...

Port Forwarding

This page will allow you to open a single port or a range of ports. Check the box to the left of each rule to activate it.

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 comma, and specify a range with a dash. Example: 24,1009,3000-4000

Schedule: The schedule of time when the port forwarding 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.

PORT FORWARDING

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 the format, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689). This option is only applicable to the INTERNET session.

Save Settings Don't Save Settings

24 -- PORT FORWARDING RULES

Remaining number of rules that can be created: 24

| | Name | IP Address | Ports to Open | Schedule |
|--------------------------|------------------------|---------------------|---------------|--------------------|
| <input type="checkbox"/> | << Application Name >> | << Computer Name >> | TCP UDP | Schedule Always |
| <input type="checkbox"/> | << Application Name >> | << Computer Name >> | TCP UDP | Schedule Always |
| <input type="checkbox"/> | << Application Name >> | << Computer Name >> | TCP UDP | Schedule Always |
| <input type="checkbox"/> | << Application Name >> | << Computer Name >> | TCP UDP | Schedule Always |
| <input type="checkbox"/> | << Application Name >> | << Computer Name >> | TCP UDP | Schedule Always |

Helpful Hints...

- Check the Application Name drop-down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
- You can select your computer from the list of DHCP clients in the Computer Name drop-down menu, or enter the IP address manually of the computer you would like to open the specified port to.
- Select a schedule for when the port forwarding 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.
- You can enter ports in various formats: Range (50-100) Individual (80, 68, 888) Mixed (1020-5000, 689)

QoS Engine

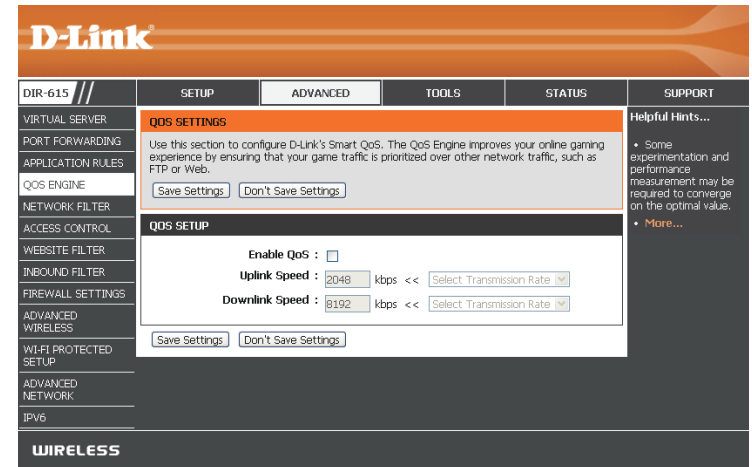
The QoS Engine option helps improve your online performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically.

Enable QoS Engine: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Automatic Uplink Speed: 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.

Measured Uplink Speed: 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. ISPs usually list speeds as a download/upload pair. For example, 1.5 Mbps/284 Kbps. Using this example, you would enter 284. Alternatively you can test your uplink speed with a service such as www.dsreports.com.



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. Enter the MAC address you would like to filter.

MAC Address: To find the MAC address on a computer, please refer to “Networking Basics” on page 103.

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

Schedule: Select the schedule which will dictate when the filtering rules will be effective. Click on the **New Schedule** button to begin the Schedule Wizard to and create a new schedule.

Helpful Hints...

- Create a list of MAC addresses and choose whether to allow or deny them 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 and click the arrow to add that device's MAC to the list.
- Use the **Always** drop down menu if you have previously defined a schedule in the router. If not, click on the **New Schedule** button to add one.
- [More...](#)

| MAC Address | DHCP Client List | Schedule |
|--------------------------|------------------|---------------------|
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |
| <input type="checkbox"/> | << Computer Name | Always New Schedule |

Access Control

The Access Control section allows you to control access in and out of your network. Use this feature as a parental control 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: Check the **Enable Access Control** check box and click the **Add Policy** button to start the **Access Control Wizard**. All current policies will be displayed in the policy table. To edit a policy, click on the **Edit** icon. To delete the policy, click on the **Delete** icon.

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ACCESS CONTROL

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

[Save Settings] [Don't Save Settings]

ACCESS CONTROL

Enable Access Control : [Add Policy]

POLICY TABLE

| Enable | Policy | Machine | Filtering | Logged | Schedule | | |
|-------------------------------------|--------|---------|---------------------|--------|----------|--------|----------|
| <input checked="" type="checkbox"/> | guest | | Log Web Access Only | Yes | Always | [Edit] | [Delete] |

[Save Settings] [Don't Save Settings]

Helpful Hints...

- Check **Enable Access Control** if you want to enforce rules that limit Internet access from specific LAN computers.
- Click **Add Policy** to start the process of creating a rule. You can cancel the process at any time. When you are finished creating a rule it will be added to the **Policy Table** below.
- Click the **Edit** icon to modify an existing rule using the Policy Wizard.
- Click the **Delete** icon to permanently remove a rule.
- **More...**

Access Control Wizard

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

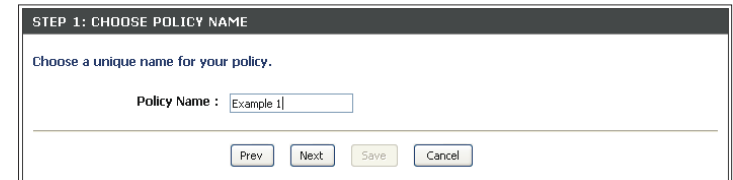
ADD NEW POLICY

This wizard will guide you through the following steps to add a new policy for Access Control.

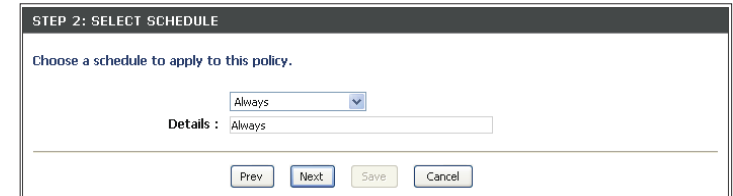
Step 1 - Choose a unique name for your policy
 Step 2 - Select a schedule
 Step 3 - Select the machine to which this policy applies
 Step 4 - Select filtering method
 Step 5 - Select filters
 Step 6 - Configure Web Access Logging

[Prev] [Next] [Save] [Cancel]

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



Select a schedule from the drop-down menu and then click **Next** to continue. You can create new schedules in the **Tools > Schedules** section.



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.

STEP 4: SELECT FILTERING METHOD

Select the method for filtering.

Method : Log Web Access Only Block All Access Block Some Access

Apply Web Filter :

Apply Advanced Port Filters :

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.

STEP 5: PORT FILTER

Add Port Filters Rules.

Specify rules to prohibit access to specific IP addresses and ports.

| Enable | Name | Dest IP Start | Dest IP End | Protocol | Dest Port Start | Dest Port End |
|--------------------------|----------------------|--------------------------------------|--|----------------------------------|--------------------------------|------------------------------------|
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |
| <input type="checkbox"/> | <input type="text"/> | <input type="text" value="0.0.0.0"/> | <input type="text" value="255.255.255.255"/> | <input type="text" value="Any"/> | <input type="text" value="0"/> | <input type="text" value="65535"/> |

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

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

STEP 6: CONFIGURE WEB ACCESS LOGGING

Web Access Logging : Disabled Enabled

Website Filters

Website Filters are used to allow you to set up a list of allowed web sites that can be used by multiple users through the network. To use this feature, select to **Allow** or **Deny**, enter the domain or website and click **Add**, and then click **Save Settings**. You must create a policy and select **Apply Web Filter** under the Access Control settings in order for website filters to work. Please refer to "Access Control" on page 34 for more information.

Configure Website Filter Below: Select **Deny** or **Allow** computers access to only these sites.

Clear the list below: Click to delete all entries in the list.

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

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'D-Link', 'DIR-615 //', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options, with 'WEBSITE FILTER' selected. The main content area is titled '24 - WEBSITE FILTERING RULES' and contains the following elements:

- WEBSITE FILTER** section: A description stating that the Website Filter option allows setting up a list of websites to allow or deny through the network. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- 24 - WEBSITE FILTERING RULES** section: A heading for the rule configuration.
- Configure Website Filter below:** A section with a dropdown menu set to 'DENY computers access to ONLY these sites' and a 'Clear the list below...' button.
- Website URL/Domain** section: A table with two columns for entering website URLs or domains. The table is currently empty.
- Save Settings** and **Don't Save Settings** buttons at the bottom of the configuration area.
- Helpful Hints...** sidebar on the right: Contains instructions such as 'Create a list of Websites that you would like the devices on your network to be allowed or denied access to.', 'Keywords can be entered in this list in order to block any URL containing the keyword entered.', and 'Use with Advanced -> Access Control.' It also includes a 'More...' link.

The bottom of the page features a 'WIRELESS' logo.

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 an IP range.

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

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

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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 : **Allow**

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

INBOUND FILTER RULES LIST

| Name | Action | Remote IP Range |
|------|--------|-----------------|
| | | |

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** 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 permanently remove a rule.
- **More...**

WIRELESS

Firewall Settings

A firewall protects your network from the outside world. The DIR-615 offers a firewall type functionality. The Stateful Packet Inspection (SPI) feature helps prevent malicious 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 the Demilitarized Zone (DMZ). This option will expose the chosen computer completely to the outside world.

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

Enable Anti-Spoof Checking: Enable this option to provide protection from certain kinds of “spoofing” attacks.

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. Check the **Enable DMZ** box to place a computer in the DMZ.

Note: Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended for experienced users who understand the associated risks.

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 **System > Network Settings** page so that the IP address of the DMZ machine does not change.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'D-Link', 'DIR-615', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration sections: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QOS ENGINE, NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WPA-PROTECTED SETUP, ADVANCED NETWORK, and IPV6. The main content area is titled 'FIREWALL & DMZ SETTINGS' and contains the following sections:

- FIREWALL SETTINGS:** Includes an 'Enable SPI' checkbox, which is currently unchecked.
- ANTI-SPOOF CHECKING:** Includes an 'Enable anti-spoof checking' checkbox, which is currently unchecked.
- DMZ HOST:** Includes a text description: 'The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.' Below this is a 'Note: Putting 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.' There is an 'Enable DMZ' checkbox (unchecked), a 'DMZ IP Address' input field, and a 'Computer Name' dropdown menu.
- APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION:** Includes checkboxes for 'PPTP', 'IPSec (VPN)', 'RTSP', and 'SIP', all of which are checked.

At the bottom of the main content area are 'Save Settings' and 'Don't Save Settings' buttons. The bottom of the page features a 'WIRELESS' section header.

Advanced Wireless Settings

This section allows you to adjust the advanced settings of your wireless network. It is not recommended that you make changes in this section unless you are familiar with these settings, or you have been instructed to do so.

Transmit Power: Set the transmit power of the antennas.

WLAN Partition: Enabling this feature prevents wireless clients from communicating with each other over the wireless network. Clients will still be able to communicate with the router and access the Internet, however communications with other connected wireless clients will be blocked.

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

HT 40/20 Coexistence: Enable this feature to force the use of the 40 MHz band even in heavily congested areas. Enabling this feature may reduce transmission speeds when there are a number of other wireless N devices operating within the same vicinity. When disabled, the DIR-615 will drop back to the slower 20 MHz when heavy congestion is detected on the 40 MHz band.

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ADVANCED WIRELESS SETTINGS

These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard settings. We do not recommend changing these settings from the factory defaults. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

[Save Settings] [Don't Save Settings]

ADVANCED WIRELESS SETTINGS

Wireless Band : 2.4GHz Band

Transmit Power : High

WLAN Partition :

WMM Enable :

HT 20/40 Coexistence : Enable Disable

[Save Settings] [Don't Save Settings]

WIRELESS

Helpful Hints...

- It is recommended that you leave these parameters with their default values. Adjusting them could limit the performance of your wireless network.
- Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.
- More...

Wi-Fi Protected Setup

Wi-Fi Protected Setup (WPS) allows you to easily and securely add compatible wireless devices to your network. WPS uses two methods to add devices, Push Button Configuration (PBC) and PIN configuration. PBC allows configuration by pressing a WPS button on the router and the new device, and the PIN method provides a PIN code which must be entered on the new device or client in order to connect.

Enable: Check this box to enable devices to be added using the WPS method.

Wi-Fi Protected Setup: Displays the current status of the WPS mode.

Lock WPS-PIN: Check this box to block configuration using the WPS-PIN method.
Setup: If this option is selected, devices can still be added using the WPS-PBC method.

PIN: Displays the current PIN code for adding devices to your network. Click the **Reset PIN to Default** button to return the PIN code to its default setting. Click the **Generate New PIN** button to generate a new PIN number. These settings will be saved once the **Save Settings** button has been clicked.

Add Wireless Station: Click the **Connect your Wireless Device** button to be taken through the steps of adding a new device. For more information on adding devices using WPS, please refer to “Configure WPS” on page 85.

The screenshot shows the D-Link DIR-615 web interface. The main content area is titled "Wi-Fi Protected Setup" and contains the following settings:

- Wi-Fi Protected Setup:**
 - Enable:
 - Wifi Protected Setup: Enable/Configured
 - Lock WPS-PIN Setup:
- PIN SETTINGS:**
 - PIN: 12345678
 - Buttons: Reset PIN to Default, Generate New PIN
- ADD WIRELESS STATION:**
 - Button: Connect your Wireless Device

At the bottom of the main content area are buttons for "Save Settings" and "Don't Save Settings".

The sidebar on the right contains "Helpful Hints..." with the following information:

- Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup.
- Only "Admin" account can change security settings.
- Lock WPS-PIN Setup Locking the WPS-PIN Method prevents the settings from being changed by any new external registrar using its PIN. Devices can still be added to the wireless network using Wi-Fi Protected Setup Push Button Configuration (WPS-PIN).
- Click **Connect your Wireless Device** to use Wi-Fi Protected Setup to add wireless devices to the wireless network.
- More...

Advanced Network Settings

This section allows you to adjust the advanced settings of your wired network. It is not recommended that you make changes in this section unless you are familiar with these settings, or you have been instructed to do so.

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

WAN Ping: Unchecking the box will not allow the DIR-615 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”.

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

IPv4 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet over IPV4 routes.

IPv6 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet over IPV6 routes.

The screenshot displays the 'Advanced Network Settings' page for a D-Link DIR-615 router. The page is organized into several sections:

- ADVANCED NETWORK SETTINGS:** A warning message states: "These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network." Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- UPNP:** A description states: "Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices." The 'Enable UPnP' checkbox is checked.
- WAN PING:** A description states: "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." The 'Enable WAN Ping Response' checkbox is unchecked.
- WAN PORT SPEED:** The 'WAN Port Speed' is set to 'Auto 10/100Mbps' via a dropdown menu.
- IPV4 MULTICAST STREAMS:** The 'IPv4 Enable Multicast Streams' checkbox is unchecked.
- IPV6 MULTICAST STREAMS:** The 'Enable IPv6 Multicast Streams' checkbox is checked.

A 'Helpful Hints...' sidebar on the right provides additional information:

- 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 Response 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 video on demand type of service from the Internet, make sure the Multicast Stream option is enabled.
- More...

IPv6

This section allows you to set up an IPv6 connection. There are several connection types to choose from: Auto Detection, Static IPv6, Autoconfiguration (SLAAC/DHCPv6), PPPoE, IPv6 in IPv4 Tunnel, 6to4, 6rd, and Link-local. If you are unsure of your connection method, or are missing any of the information required in any of the steps in this section, please contact your IPv6 Internet Service Provider.

At any time during the IPv6 setup, you can click the **Save Settings** button to save your current configuration, or click the **Don't Save Settings** button to discard any changes.

Auto Detection

The DIR-615 is able to automatically detect your IPv6 connection type and acquire the relevant settings from your ISP. You should only populate the other fields on this page if you are familiar with their functions, or you have been instructed to do so by your ISP.

My IPv6 Connection Is: Select **Auto Detection** to have the DIR-615 automatically detect your IPv6 connection. Once selected, you can click **Save Settings** to save the configuration. If the auto detection is successful, the Internet LED on the front of your router will be lit green.

Note: If you have a PPPoE account which only allows an IPv6 connection, you cannot use the auto detection feature and should select PPPoE and set up the connection manually.

IPv6 DNS Settings: Select either **Obtain IPv6 DNS Servers Automatically** or **Use the following IPv6 DNS Servers**.

Primary/Secondary DNS Address: If you did not choose to obtain DNS servers automatically, enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP-PD services.

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

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'D-Link', 'DIR-615', and tabs for '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 CONNECTION TYPE:** A dropdown menu labeled 'My IPv6 Connection is:' is set to 'Auto Detection'. Below it, a text prompt says 'Choose the mode to be used by the router to connect to the IPv6 Internet.'
- IPv6 DNS SETTINGS:** A text prompt says 'Obtain DNS server address automatically or enter a specific DNS server address.' There are two radio buttons: 'Obtain IPv6 DNS Servers automatically' (selected) and 'Use the following IPv6 DNS Servers'. Below are input fields for 'Primary DNS Server:' and 'Secondary DNS Server:'.
- LAN IPv6 ADDRESS SETTINGS:** A text prompt says '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 network settings to access the network again.' There is a checked checkbox for 'Enable DHCP-PD'. Below are input fields for 'LAN IPv6 Address:' and 'LAN IPv6 Link-Local Address:'.

On the right side, there is a 'Helpful Hints...' section with additional instructions and a 'More...' link.

LAN Link-Local Address: Displays the router's LAN link-local address.

Enable Automatic IPv6 Address Assignment: Check to enable the automatic IPv6 address assignment feature.

Enable Automatic DHCP-PD in LAN: Check this box to automatically enable DHCP-PD services.

Autoconfiguration Type: Choose either **Stateful DHCPv6**, **SLAAC + RDNSS**, or **SLAAC + Stateless DHCPv6** from the drop-down menu.

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

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 network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe38:c910 /64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC+Stateless DHCP

Router Advertisement Lifetime : (minutes)

Static IPv6

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

Use Link-Local Address: Check the box and enter the address settings supplied by your Internet provider (ISP).

Subnet Prefix Length: Enter a subnet prefix length.

IPv6 Default Gateway: Enter the default gateway for your IPv6 connection.

Primary/Secondary IPv6 DNS Servers: 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 Automatic IPv6 Address Assignment: Check to enable the autoconfiguration feature.

Autoconfiguration Type: Choose either **Stateful DHCPv6**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6** from the drop-down menu.

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

The screenshot shows the IPv6 configuration page for a D-Link DIR-615 router. The page is divided into several sections:

- IPV6:** A header section with a note: "Use this section to configure your IPv6 Connection Type. If you are unsure of your connection method, please contact your Internet Service Provider." It includes "Save Settings" and "Don't Save Settings" buttons.
- IPV6 CONNECTION TYPE:** A section titled "Choose the mode to be used by the router to connect to the IPv6 Internet." The "My IPv6 Connection is" dropdown menu is set to "Static IPv6".
- WAN IPV6 ADDRESS SETTINGS:** A section titled "Enter the IPv6 address information provided by your Internet Service Provider (ISP)." It includes:
 - Use Link-Local Address:** A checked checkbox.
 - IPv6 Address:** fe80::cad3:a3ff:fe38:c911
 - Subnet Prefix Length:** 64
 - Default Gateway:** (empty field)
 - Primary DNS Server:** (empty field)
 - Secondary DNS Server:** (empty field)
- LAN IPV6 ADDRESS SETTINGS:** A section titled "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 network settings to access the network again." It includes:
 - LAN IPv6 Address:** (empty field) /64
 - LAN IPv6 Link-Local Address:** fe80::cad3:a3ff:fe38:c910 /64
- ADDRESS AUTOCONFIGURATION SETTINGS:** A section titled "Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network." It includes:
 - Enable Automatic IPv6 address assignment:** A checked checkbox.
 - Autoconfiguration Type:** SLAAC+Stateless DHCP
 - Router Advertisement Lifetime:** (empty field) (minutes)

On the right side of the page, there is a "Helpful Hints..." section with two bullet points:

- 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.

 A "More..." link is also present.

DHCP Autoconfiguration

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

IPv6 DNS Settings: Select either **Obtain IPv6 DNS Servers Automatically** or **Use the following IPv6 DNS Servers**.

Primary/Secondary DNS Address: If you did not choose to obtain DNS servers automatically, enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP-PD services.

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 Automatic IPv6 Address Assignment: Check to enable the automatic IPv6 address assignment feature.

Enable Automatic DHCP-PD in LAN: Check this box to automatically enable DHCP-PD services.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

IPV6

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

[Save Settings] [Don't Save Settings]

IPV6 CONNECTION TYPE

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

My IPv6 Connection is :

IPV6 DNS SETTINGS

Obtain IPv6 DNS server address automatically or enter a specific DNS server address.

Obtain IPv6 DNS Servers automatically

Use the following IPv6 DNS Servers

Primary DNS Server :

Secondary DNS Server :

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 network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe38:c910 /64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type :

Router Advertisement Lifetime : (minutes)

[Save Settings] [Don't Save Settings]

WIRELESS

Helpful Hints...

- 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.
- More...

PPPoE

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

PPPoE Session: Enter the PPPoE account settings supplied by your Internet provider.

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

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

Username: Enter your PPPoE user name.

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

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

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

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity.

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

IPv6 DNS Settings: Select either **Obtain IPv6 DNS Servers Automatically** or **Use the following IPv6 DNS Servers**.

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

Enable DHCP-D: Check this box to enable DHCP prefix delegation for each LAN on the network.

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

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

IPv6

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

[Save Settings] [Don't Save Settings]

IPv6 CONNECTION TYPE

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

My IPv6 Connection is :

PPPOE INTERNET CONNECTION TYPE :

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

PPPoE Session : Share with IPv4 Create a new session

Address Mode : Dynamic IP Static IP

IP Address :

Username :

Password :

Verify Password :

Service Name : (optional)

Reconnect Mode : Always on On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

MTU : (bytes) MTU default = 1492

IPv6 DNS SETTINGS

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

Obtain IPv6 DNS Servers automatically

Use the following IPv6 DNS Servers

Primary DNS Server :

Secondary DNS Server :

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 network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe38:c910 /64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type :

Router Advertisement Lifetime : (minutes)

[Save Settings] [Don't Save Settings]

WIRELESS

Helpful Hints...

- 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.
- [More...](#)

- LAN Link-Local Address:** Displays the router's LAN link-local address.
- Enable Automatic IPv6 Address Assignment:** Check to enable the automatic IPv6 address assignment feature.
- Enable Automatic DHCP-PD in LAN:** Check this box to enable automatic configuration of the DHCP prefix delegation for each LAN on the network.
- Autoconfiguration Type:** Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.
- IPv6 Address Lifetime:** Enter the IPv6 address lifetime (in minutes).

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 network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe38:c910 /64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC+Stateless DHCP ▼

Router Advertisement Lifetime : (minutes)

IPv6 in IPv4 Tunnel

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

Remote IPv4 Address: Enter the IPv4 remote address you will use.

Remote IPv6 Address: Enter the IPv6 remote address you will use.

Local IPv4 Address: Enter the IPv4 local address you will use.

Local IPv6 Address: Enter the IPv6 local address you will use.

Subnet Prefix Length: Enter the subnet prefix length given to you by your tunnel broker

IPv6 DNS Settings: Select either **Obtain IPv6 DNS Servers Automatically** or **Use the following IPv6 DNS Servers**.

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

Enable DHCP-D: Check this box to enable DHCP prefix delegation for each LAN.

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

LAN IPv6 Link-Local Address: Displays the router's LAN link-local address.

Enable Automatic IPv6 Address Assignment: Check to enable the automatic IPv6 address assignment feature.

The screenshot shows the 'ADVANCED' setup page for a D-Link DIR-615 router, specifically the 'IPv6' configuration section. The page is titled 'IPv6' and includes a 'Helpful Hints...' sidebar on the right. The main content area is divided into several sections:

- IPv6 CONNECTION TYPE:** A dropdown menu is set to 'IPv6 in IPv4 Tunnel'. Below it, a message states: 'Choose the mode to be used by the router to connect to the IPv6 Internet. My IPv6 Connection is : IPv6 in IPv4 Tunnel'.
- IPv6 IN IPv4 TUNNEL SETTINGS:** This section prompts the user to 'Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.' It contains four input fields: 'Remote IPv4 Address', 'Remote IPv6 Address', 'Local IPv4 Address', and 'Local IPv6 Address', followed by a 'Subnet Prefix Length' field.
- IPv6 DNS SETTINGS:** This section allows the user to 'Obtain DNS server address automatically or enter a specific DNS server address.' There are two radio buttons: 'Obtain IPv6 DNS Servers automatically' (selected) and 'Use the following IPv6 DNS Servers'. Below are input fields for 'Primary DNS Server' and 'Secondary DNS Server'.
- LAN IPv6 ADDRESS SETTINGS:** This section prompts the user to '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 network settings to access the network again.' It includes a checked checkbox for 'Enable DHCP-PD', an input field for 'LAN IPv6 Address' (with a '/64' suffix), and a label for 'LAN IPv6 Link-Local Address' with the value 'fe80::cad3:a3ff:fe38:c910 /64'.
- ADDRESS AUTOCONFIGURATION SETTINGS:** This section prompts the user to 'Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.' It includes checked checkboxes for 'Enable Automatic IPv6 address assignment' and 'Enable Automatic DHCP-PD in LAN', a dropdown menu for 'Autoconfiguration Type' set to 'SLAAC+Stateless DHCP', and an input field for 'Router Advertisement Lifetime' (with '(minutes)' next to it).

At the bottom of the configuration area are 'Save Settings' and 'Don't Save Settings' buttons. The page footer includes the 'WIRELESS' logo.

Enable Automatic DHCP-PD in LAN: Check this box to enable automatic configuration of the DHCP prefix delegation for each LAN on the network.

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

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

ADDRESS AUTOCONFIGURATION SETTINGS

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

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC+Stateless DHCP ▾

Router Advertisement Lifetime : (minutes)

IPv6 to IPv4 (6to4)

My IPv6 Connection Is: Select **6to4** from the drop-down menu.

6to4 Address: Enter the IPv6 settings supplied by your ISP.

6to4 Relay: Enter the IPv6 relay supplied by your 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 Automatic IPv6 Address Assignment: Check to enable the automatic IPv6 address assignment feature.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

The screenshot shows the D-Link DIR-615 web interface for IPv6 configuration. The interface is divided into several sections:

- IPV6:** A section with a title bar and a description: "Use this section to configure your IPv6 Connection Type. If you are unsure of your connection method, please contact your Internet Service Provider." It includes "Save Settings" and "Don't Save Settings" buttons.
- IPV6 CONNECTION TYPE:** A section with the instruction "Choose the mode to be used by the router to connect to the IPv6 Internet." It features a dropdown menu labeled "My IPv6 Connection is:" with "6to4" selected.
- WAN IPV6 ADDRESS SETTINGS:** A section with the instruction "Enter the IPv6 address information provided by your Internet Service Provider (ISP)." It includes input fields for "6to4 Address:", "6to4 Relay:", "Primary DNS Server:", and "Secondary DNS Server:".
- LAN IPV6 ADDRESS SETTINGS:** A section with 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 network settings to access the network again." It includes input fields for "LAN IPv6 Address:" (with a hint "xxxx:xxxx:xxxx: :1 /64") and "LAN IPv6 Link-Local Address:" (with a hint "fe80::cad3:a3ff:fe38:c910 /64").
- ADDRESS AUTOCONFIGURATION SETTINGS:** A section with the instruction "Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network." It includes a checked checkbox for "Enable Automatic IPv6 address assignment", a dropdown menu for "Autoconfiguration Type:" set to "SLAAC+Stateless DHCP", and an input field for "Router Advertisement Lifetime:" (with a hint "(minutes)").

At the bottom of the interface, there is a "WIRELESS" section. On the right side, there is a "Helpful Hints..." section with additional instructions and a "More..." link.

6rd

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

Enable Hub and Spoke Mode: Check this box if you want to minimize the number of routes to the destination by using a hub and spoke method of networking.

6rd Configuration: Choose the **6rd DHCPv4 Option** to automatically discover and populate the data values, or **Manual Configuration** to enter the settings yourself.

6rd IPv6 Prefix: Enter the 6rd IPv6 prefix settings supplied by your ISP.

IPv4 Address: Your IPv4 address will appear here.

Mask Length: Enter the desired IPv4 mask length.

Assigned IPv6 Prefix: When an IPv6 prefix is assigned, it will appear here.

6rd Border Relay IPv4 Address: Enter the 6rd border relay IPv4 address settings supplied by your 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 Automatic IPv6 Address Assignment: Check to enable the automatic IPv6 address assignment feature.

The screenshot shows the 'ADVANCED' setup page for the D-Link DIR-615 router, specifically the 'IPv6' configuration section. The left sidebar lists various setup categories, with 'IPv6' selected. The main content area is divided into several sections:

- IPV6 CONNECTION TYPE:** A dropdown menu is set to '6rd'. Below it, a text box says 'Choose the mode to be used by the router to connect to the IPv6 Internet.'
- WAN IPV6 ADDRESS SETTINGS:** This section includes:
 - 'Enable Hub and Spoke Mode': An unchecked checkbox.
 - '6rd Configuration': Two radio buttons, '6rd DHCPv4 option' (selected) and 'Manual Configuration'.
 - '6rd IPv6 Prefix': A text input field.
 - 'IPv4 Address': A text input field.
 - 'Mask Length': A text input field.
 - 'Assigned IPv6 Prefix': A text input field.
 - 'Tunnel Link-Local Address': A text input field.
 - '6rd Border Relay IPv4 Address': A text input field.
 - 'Primary DNS Server': A text input field.
 - 'Secondary DNS Server': A text input field.
- LAN IPV6 ADDRESS SETTINGS:** This section includes:
 - 'LAN IPv6 Address': A text input field.
 - 'LAN IPv6 Link-Local Address': A text input field containing the value 'fe80::cad3:a3ff:fe38:c910 /64'.
- ADDRESS AUTOCONFIGURATION SETTINGS:** This section includes:
 - 'Enable Automatic IPv6 address assignment': A checked checkbox.
 - 'Autoconfiguration Type': A dropdown menu set to 'SLAAC+Stateless DHCP'.
 - 'Router Advertisement Lifetime': A text input field followed by '(minutes)'.

At the bottom of the main content area are two buttons: 'Save Settings' and 'Don't Save Settings'. The bottom of the page features a 'WIRELESS' section header.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

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 network settings to access the network again.

LAN IPv6 Address :

LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe38:c910 /64

ADDRESS AUTOCONFIGURATION SETTINGS

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

Enable Automatic IPv6 address assignment :

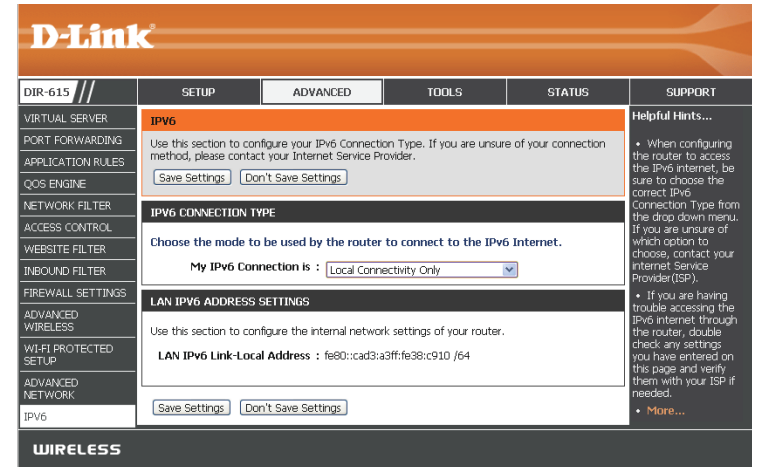
Autoconfiguration Type : SLAAC+Stateless DHCP

Router Advertisement Lifetime : (minutes)

Local Connectivity Only

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

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



Administrator Settings

This page will allow you to change the *Administrator* and *User* passwords. You can also enable remote management. There are two accounts that can access the management interface through the web browser. The accounts are admin and user. Admin has read/write access while user has read-only access. User can only view the settings but cannot make any changes. Only the *Admin* account has the ability to change both admin and user account passwords.

Admin Password: Enter a new password for the administrator login name. The administrator can make changes to all settings.

Gateway Name: Enter a name for the DIR-615 router.

Enable Graphical Authentication: Enables a challenge-response test to require users to type letters or numbers from a distorted image displayed on the screen to prevent online hackers and unauthorized users from using automated methods to gain access to your router's network settings.

Enable HTTPS Server: Check to enable HTTPS to connect to the router securely.

Enable Remote Management: Remote management allows the DIR-615 to be configured from the Internet via a web browser. A username and password is still required to access the web-based management interface. In general, only a member of your network can browse the built-in web pages to perform administrator tasks. This feature enables you to perform administrator tasks from the remote (Internet) host.

Remote Admin Inbound Filter: The port number used to access the DIR-615. Example: `http://x.x.x.x:8080` where x.x.x.x is the Internet IP address of the DIR-615 and 8080 is the port used for the web management interface. If you have enabled **HTTPS Server** and checked **Use HTTPS**, you must enter **https://** as part of the URL to access the router remotely.

The screenshot shows the D-Link DIR-615 web management interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration categories like ADMIN, TIME, SYSLOG, etc. The main content area is titled 'ADMINISTRATOR SETTINGS' and contains the following sections:

- ADMINISTRATOR SETTINGS:** A text box explaining that the 'admin' account has read/write access and can change passwords. It notes that by default, no password is configured and recommends creating one. Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- ADMIN PASSWORD:** A section with the instruction 'Please enter the same password into both boxes, for confirmation.' It features two password input fields labeled 'Password' and 'Verify Password'.
- SYSTEM NAME:** A section with a 'Gateway Name' input field, currently showing 'DIR-602L'.
- ADMINISTRATION:** A section with three checkboxes: 'Enable Graphical Authentication' (checked), 'Enable Remote Management' (checked), and 'Remote Admin Port' (set to 8080). It also includes 'Save Settings' and 'Don't Save Settings' buttons.

On the right side of the interface, there is a 'Helpful Hints...' section with several bullet points providing security and management advice.

Time Settings

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the time server. Daylight saving can also be configured to automatically adjust the time when needed.

Time Zone: Select the time zone from the drop-down menu.

Daylight Saving: To select daylight saving time manually, select enabled or disabled, and enter a start date and an end date for daylight saving time.

Enable NTP Server: Network Time Protocol (NTP) synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Manual: To manually input the time, enter the values in these fields for the year, month, day, hour, minute, and second and then click **Set Time**. You can also click **Sync Your Computer's Time Settings**.

The screenshot shows the D-Link DIR-615 web interface. The main navigation bar includes 'DIR-615 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration categories: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'TIME AND DATE' and contains the following sections:

- TIME AND DATE:** A brief introduction explaining the purpose of the section and providing 'Save Settings' and 'Don't Save Settings' buttons.
- TIME AND DATE CONFIGURATION:**
 - Time: 2013/04/10 11:11:55
 - Time Zone: (GMT+08:00) Taipei
 - Enable Daylight Saving:
 - Daylight Saving Offset: +01:00
 - Daylight Saving Dates: A table with columns for Month, Week, Day of Week, and Time.

| Month | Week | Day of Week | Time |
|-----------|------|-------------|--------------|
| DST Start | Jan | 1st | Sun 12:00 AM |
| DST End | Jan | 1st | Sun 12:00 AM |
- AUTOMATIC TIME AND DATE CONFIGURATION:**
 - Automatically synchronize with D-Link's Internet time server
 - NTP Server Used: ntp1.dlink.com (with an 'Update Now' button)
 - Message: 'The time has been successfully synchronized. (NTP Server Used: ntp1.dlink.com, Time: 2013/04/10 11:11:44) Next time synchronization: 2013/04/17 11:11:44'
- SET THE TIME AND DATE MANUALLY:**
 - Year: 2009, Month: Jan, Day: 1
 - Hour: 0, Minute: 21, Second: 49
 - 'Sync. your computer's time settings' button
 - 'Save Settings' and 'Don't Save Settings' buttons

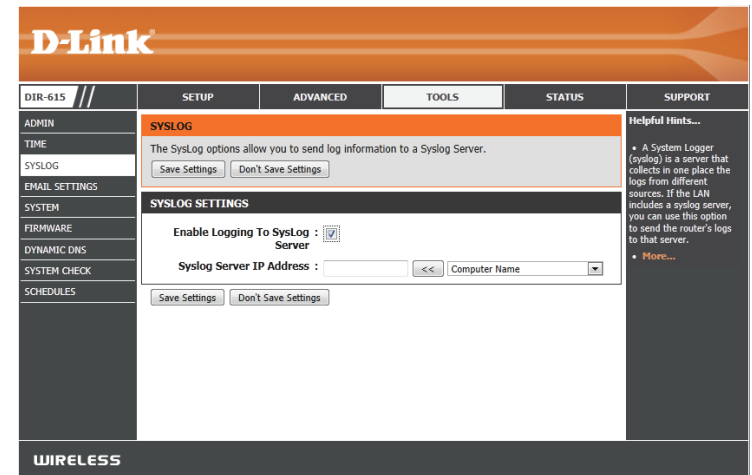
On the right side, there is a 'Helpful Hints...' section with a bullet point: 'Either enter the time manually by clicking the Sync Your Computers Time Settings button, or use the Automatic Time Configuration option to have your router synchronize with a time server on the Internet. More...'

SysLog

The DIR-615 keeps a running log of events and activities occurring on the router. You may send these logs to a SysLog server on your network.

Enable Logging to SysLog Server: Check this box to send the router logs to a SysLog Server.

SysLog Server IP Address: The address of the SysLog server that will be used to send the logs. You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).



The screenshot displays the D-Link DIR-615 web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'SYSLOG' and contains the following text: 'The SysLog options allow you to send log information to a Syslog Server.' Below this are 'Save Settings' and 'Don't Save Settings' buttons. The 'SYSLOG SETTINGS' section includes a checked checkbox for 'Enable Logging To SysLog Server', a 'Syslog Server IP Address' input field with a '<<' button, and a 'Computer Name' dropdown menu. Another set of 'Save Settings' and 'Don't Save Settings' buttons is located at the bottom of this section. On the right side, there is a 'Helpful Hints...' section with a bullet point explaining that a System Logger (syslog) is a server that collects logs from different sources and that the LAN includes a syslog server. A 'More...' link is also present.

Email Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Enable Email Notification: When this option is enabled, router activity logs are emailed to a designated email address.

From Email Address: This email address will appear as the sender when you receive a log file or firmware upgrade notification via e-mail.

To Email Address: Enter the email address where you want the email sent.

Email Subject: Enter the text you want to appear in the subject line of emails sent.

SMTP Server Address: Enter the SMTP server address for sending email.

Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending email (if required).

Password: Enter the password associated with the account. Re-type the password associated with the account (if required).

On Log Full: When this option is selected, logs will be sent via email when the log is full.

On Schedule: Selecting this option will send the logs via email according to schedule.

Schedule: This option is enabled when **On Schedule** is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

Detail: Displays the details of the schedule you have selected.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'DIR-615', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'EMAIL SETTINGS' and contains the following sections:

- EMAIL NOTIFICATION:** A section with a checkbox for 'Enable Email Notification'.
- EMAIL SETTINGS:** A section with input fields for:
 - From Email Address
 - To Email Address
 - Email Subject
 - SMTP Server Address
 - SMTP Server Port (set to 25)
 - Enable Authentication (checkbox)
 - Account Name
 - Password
 - Verify Password
- EMAIL LOG WHEN FULL OR ON SCHEDULE:** A section with checkboxes for 'On Log Full' and 'On Schedule', a 'Schedule' dropdown menu (set to 'Never'), and a 'Detail' input field.

Buttons for 'Save Settings' and 'Don't Save Settings' are located at the bottom of each section. A 'Send Mail Now' button is also present in the Email Settings section. A 'Helpful Hints...' sidebar is visible on the right.

System Settings

This section allows you to save, load, or restore your router's system settings

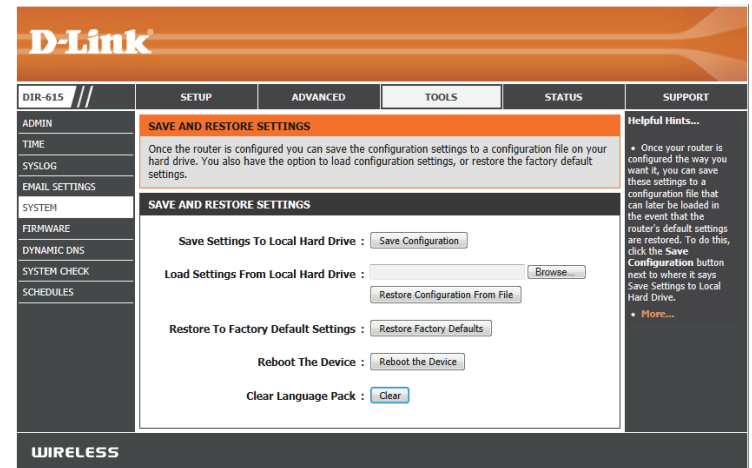
Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file download dialog in your web browser, where you can select a location and file name for the settings file.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the **Browse** control to find a previously saved file of configuration settings. Then, click the **Load** button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

Reboot Device: Click to reboot the router.

Clear Language Pack: Clicking on this button will clear any installed language packs and return the system language to its factory default.



Update Firmware

You can upgrade the firmware of the router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware Information: Click on **Check Now** to check if there is an updated version of the firmware. If new firmware is found, download the required files to your hard drive.

Firmware Upgrade: After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

Language Pack Upgrade: If you have downloaded a language pack for your router. Click on **Browse** to locate the language pack on your computer's hard drive. Once located, click on **Upload** to upload the language pack to your router.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'FIRMWARE UPDATE' and contains the following information:

- FIRMWARE UPDATE:** There may be new firmware for your router to improve functionality and performance. [Click here to check for an upgrade on our support site.](#) To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade. The language pack allows you to change the language of the user interface on the router. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.
- FIRMWARE INFORMATION:**
 - Current Firmware Version : 17.00
 - Current Firmware Time : 04/03/2013 09:59:00
 - Check Online Now for Latest Firmware Version
- FIRMWARE UPGRADE:**

Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.

To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.

Upload :
- LANGUAGE PACK UPGRADE:**

Upload :

On the right side, there is a 'Helpful Hints...' section with a bullet point: 'Firmware Update are released periodically to improve the functionality of your router and also to add features. If you run into a problem with a specific feature of the router, check our support site by clicking on the Check Now and see if an updated version of firmware is available for your router.' Below this is a 'More...' link.

DDNS

The DDNS feature allows you to host a server (web, FTP, game server) using a domain name that you have purchased (www.purchasedname.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.

DDNS: Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

Server Address: Choose your DDNS provider from the drop-down menu.

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

Username or Key: Enter the username for your DDNS account.

Password or Key: Enter the password for your DDNS account.

DDNS Account Testing: Click this button to test your DDNS account settings.

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes 'DIR-615 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration categories: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS (highlighted), SYSTEM CHECK, and SCHEDULES. The main content area is titled 'DYNAMIC DNS' and contains the following text: 'The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is. Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.' Below this text are 'Save Settings' and 'Don't Save Settings' buttons. The 'DYNAMIC DNS SETTINGS' section includes: 'Enable DDNS : ', 'Server Address : dlinkddns.com(Free) [dropdown]', 'Host Name : [text input]', 'User Account : [text input]', 'Password : [text input]', and a 'DDNS Account Testing' button. At the bottom of the settings section are 'Save Settings' and 'Don't Save Settings' buttons. The bottom of the page features a 'WIRELESS' section.

System Check

Ping Test: The ping test is used to send ping packets to test if a computer is on the Internet. Enter the IP address that you wish to ping, and click **Ping**.

IPv6 Ping Test: To test and IPv6 address, enter an IPv6 address and click **Ping**

Ping Results: The results of your ping attempts will be displayed here.

| D-Link | |
|-----------------|--|
| DIR-615 // | TOOLS |
| ADMIN | PING TEST |
| TIME | Ping Test sends "ping" packets to test a computer on the Internet. |
| SYSLOG | PING TEST |
| EMAIL SETTINGS | Host Name or IP Address : <input type="text"/> <input type="button" value="Ping"/> |
| SYSTEM | IPV6 PING TEST |
| FIRMWARE | Host Name or IPv6 Address : <input type="text"/> <input type="button" value="Ping"/> |
| DYNAMIC DNS | PING RESULT |
| SYSTEM CHECK | Enter a host name or IP address above and click 'Ping' |
| SCHEDULES | |
| | <p>Helpful Hints...</p> <ul style="list-style-type: none"> "Ping" checks whether a computer on the Internet is running and responding. Enter either the IP address of the target computer or enter its fully qualified domain name. More... |
| WIRELESS | |

Schedules

The Schedules page allows you to create schedules which can be used to control various settings on the router, such as website filters, application rules, and MAC filtering.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or **All Week** to include every day.

Time: Check **All Day - 24hrs** or enter a start and end time for your schedule.

Save: Click **Save** to save your schedule. You must click **Save Settings** at the top for your schedules to go into effect.

Schedule Rules The list of schedules will be listed here. Click the **Edit** icon to make changes or click the **Delete** icon to remove the schedule.

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

SCHEDULES

The Schedule configuration option is used to manage schedule rules for features that support scheduling.

10 -- ADD SCHEDULE RULE

Name :

Day(s) : All Week Select Day(s)

Sun Mon Tue Wed Thu Fri Sat

All Day - 24 hrs :

Time Format : 24-hour

Start Time : 0 : 00 AM (hour:minute)

End Time : 23 : 59 PM (hour:minute)

SCHEDULE RULES LIST

| Name | Day(s) | Time Frame | | |
|-----------|---------------------|--------------|--|--|
| schedule1 | MON,TUE,WED,THU,FRI | 9:00 ~ 18:59 | | |

Helpful Hints...

- Schedules are used with a number of other features to define when these features are in effect.
- Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".
- Click Add to add a completed schedule to the list below.
- Click Edit icon to change an existing schedule.
- Click Delete icon to permanently delete a schedule.
- More...

WIRELESS

Device Information

This page displays the current information for the DIR-615. It will display the LAN, WAN (Internet), and wireless information.

If your Internet connection is set up for a dynamic IP address, then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

See the following page for more information.

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFORMATION

All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.

Helpful Hints...

- All of your LAN, Internet and WIRELESS 802.11 N connection details are displayed here.
- [More...](#)

GENERAL

Time :
Firmware Version : 17.00 Wed 03 Apr 2013

WIRELESS LAN

Wireless Radio :
MAC Address :
802.11 Mode :
Channel Width :
Channel :
Network Name (SSID) :
Wi-Fi Protected Setup :
Security :

LAN COMPUTERS

| MAC Address | IP Address | Name(if any) |
|-------------|------------|--------------|
| | | |

IGMP MULTICAST MEMBERSHIPS

IPv4 Multicast Group Address
IPv6 Multicast Group Address

WIRELESS

General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings for the router. You can also choose to release and renew the IP settings.

LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN: Displays the wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).

IGMP Multicast Memberships: Displays the multicast group IP address.

| GENERAL | | |
|---|---------------|-------------------|
| Time : Monday, September 14, 2009 3:44:50 AM | | |
| Firmware Version : 5.00NA , Mon, 14 Sep 2009 | | |
| WAN | | |
| Connection Type : DHCP Client | | |
| Cable Status : Disconnected | | |
| Network Status : Disconnected | | |
| Connection Up Time : N/A | | |
| <input type="button" value="Renew"/> <input type="button" value="Release"/> | | |
| MAC Address : 00:18:e7:6a:18:2d | | |
| IP Address : 0.0.0.0 | | |
| Subnet Mask : 0.0.0.0 | | |
| Default Gateway : 0.0.0.0 | | |
| Primary DNS Server : 0.0.0.0 | | |
| Secondary DNS Server : 0.0.0.0 | | |
| Advanced DNS : Disabled | | |
| LAN | | |
| MAC Address : 00:18:e7:6a:18:2c | | |
| IP Address : 192.168.0.1 | | |
| Subnet Mask : 255.255.255.0 | | |
| DHCP Server : Enabled | | |
| WIRELESS LAN | | |
| Wireless Radio : Enabled | | |
| MAC Address : 00:18:e7:6a:18:2c | | |
| Network Name (SSID) : dlink | | |
| Channel : 6 | | |
| Security Mode : disable | | |
| LAN COMPUTERS | | |
| IP Address | Name (if any) | MAC |
| SP3X3-PC | 192.168.0.100 | 00:17:42:c7:72:19 |
| IGMP MULTICAST MEMBERSHIPS | | |
| Multicast Group Address | | |

Log

The router automatically logs (records) events of possible interest in the internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog server support so you can send the log files to a computer on your network that is running a Syslog utility.

What to View: You can select the types of messages that you want to display from the log. Firewall & Security, System, and Router Status messages can be selected.

View Levels: There are three levels of message importance: Informational, Warning, and Critical. Select the levels that you want displayed in the log.

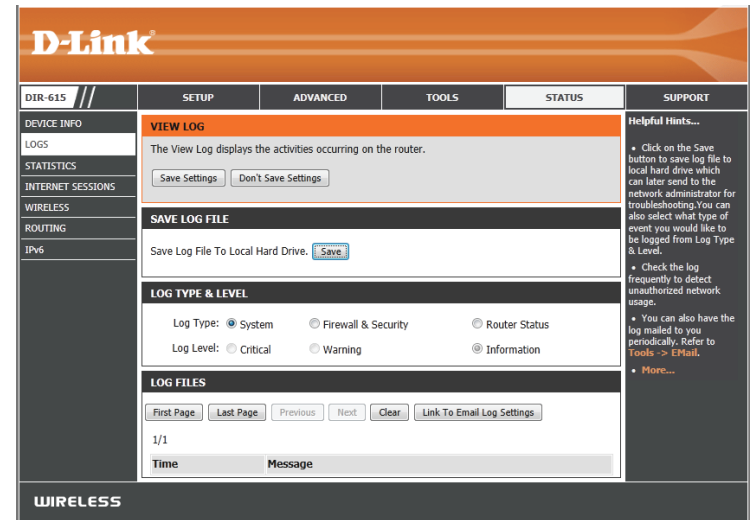
Apply Log Settings: Will filter the log results so that only the selected options appear.

Refresh: Updates the log details on the screen so it displays any recent activity.

Clear: Clears all of the log contents.

Email Now: This option will send a copy of the router log to the e-mail address configured in the **Tools > Email Settings** screen.

Save Log: This option will save the router to a log file on your computer.



Statistics

The screen below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-615 on both the Internet and the LAN ports. The traffic counter will reset if the device is rebooted.

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
WIRELESS
ROUTING
IPv6

TRAFFIC STATISTICS
Traffic Statistics displays Receive and Transmit packets passing through the device.
[Refresh Statistics](#) [Reset Statistics](#)

LAN STATISTICS

| | | | |
|----------------------|------|----------------------|------|
| Sent : | 6049 | Received : | 7970 |
| TX Packets Dropped : | 0 | RX Packets Dropped : | 0 |
| Collisions : | 0 | Errors : | 0 |

WAN STATISTICS

| | | | |
|----------------------|------|----------------------|-------|
| Sent : | 1752 | Received : | 26437 |
| TX Packets Dropped : | 0 | RX Packets Dropped : | 0 |
| Collisions : | 0 | Errors : | 0 |

WIRELESS STATISTICS - 2.4GHZ BAND

| | | | |
|----------------------|-----|----------------------|-------|
| Sent : | 653 | Received : | 10791 |
| TX Packets Dropped : | 0 | RX Packets Dropped : | 0 |
| Collisions : | 0 | Errors : | 9 |

Helpful Hints...

- This is a summary displaying the number of packets that have passed between the Internet and the LAN since the router was last initialized.
- [More...](#)

WIRELESS

Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.

D-Link

DIR-615 // SETUP ADVANCED TOOLS STATUS SUPPORT

INTERNET SESSIONS

This page displays Source and Destination sessions passing through the device.

| IP | TCP Count | UDP Count |
|-------------------------------|-----------|-----------|
| 192.168.0.101 | 15 | 0 |

Helpful Hints...

- This is a list of all active conversations between WAN computers and LAN computers.
- [More...](#)

WIRELESS

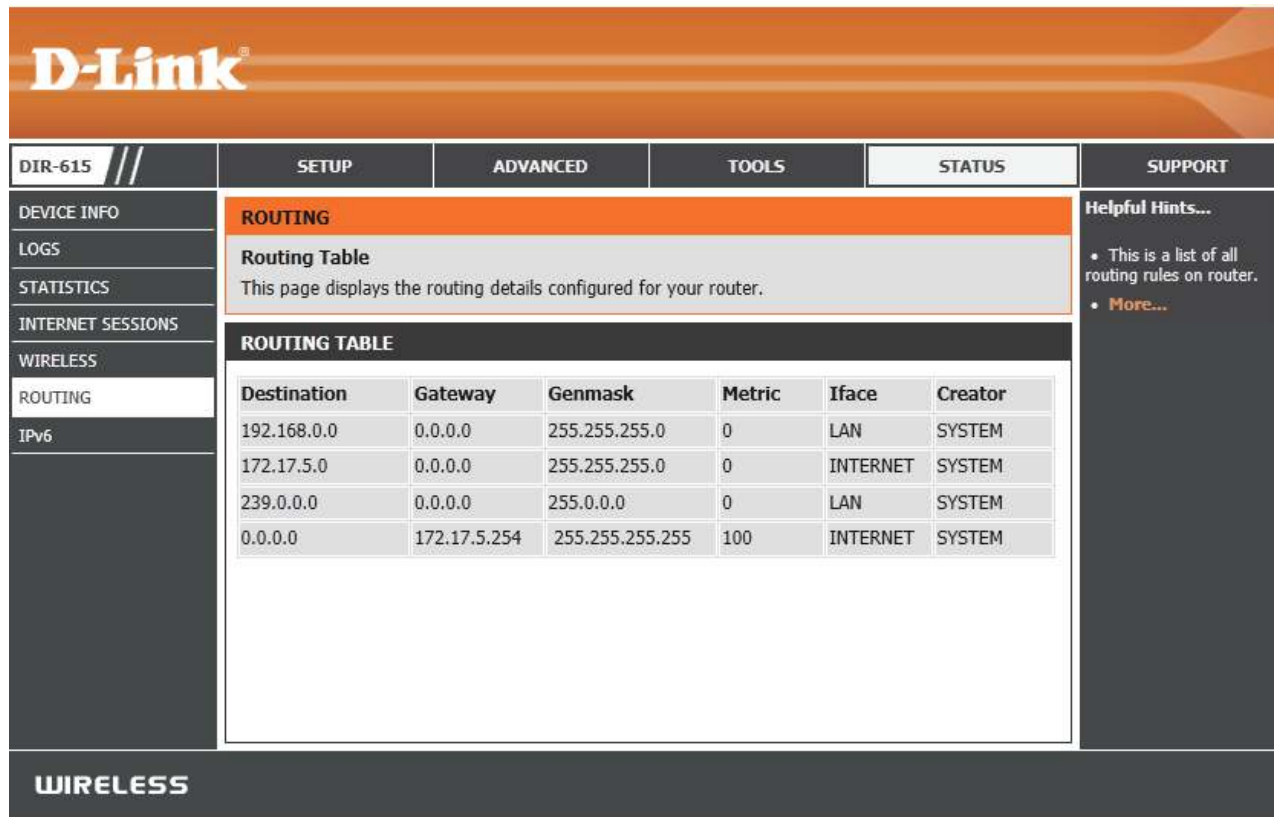
Wireless

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

The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes the D-Link logo and menu items: DIR-615, SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a list of menu items: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, WIRELESS (highlighted), ROUTING, and IPv6. The main content area is titled "CONNECTED WIRELESS CLIENT LIST" and includes a descriptive text: "View the wireless clients that are connected to the router. (A client might linger in the list for a few minutes after an unexpected disconnect.)" Below this, it shows "NUMBER OF WIRELESS CLIENTS - 2.4GHZ BAND :". A table header is visible with columns: MAC Address, IP Address, Mode, Rate (Mbps), and Signal (%). On the right side, there is a "Helpful Hints..." section with a bullet point: "This is a list of all wireless clients that are currently connected to your wireless router." and a "More..." link. The bottom of the page features a large "WIRELESS" header.

Routing Table

This page displays the routing details configured for your router.



The screenshot shows the D-Link DIR-615 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains menu items for DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, WIRELESS, ROUTING, and IPv6. The main content area is titled "ROUTING" and "Routing Table", with a sub-header "ROUTING TABLE". Below this is a table with the following data:

| Destination | Gateway | Genmask | Metric | Iface | Creator |
|-------------|--------------|-----------------|--------|----------|---------|
| 192.168.0.0 | 0.0.0.0 | 255.255.255.0 | 0 | LAN | SYSTEM |
| 172.17.5.0 | 0.0.0.0 | 255.255.255.0 | 0 | INTERNET | SYSTEM |
| 239.0.0.0 | 0.0.0.0 | 255.0.0.0 | 0 | LAN | SYSTEM |
| 0.0.0.0 | 172.17.5.254 | 255.255.255.255 | 100 | INTERNET | SYSTEM |

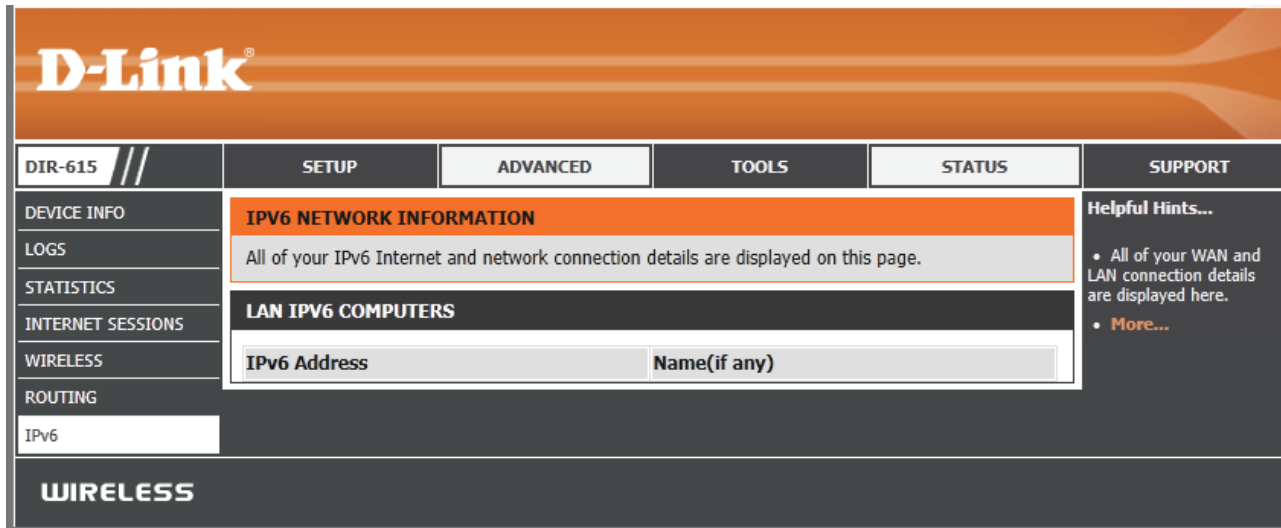
On the right side of the interface, there is a "Helpful Hints..." section with the following text:

- This is a list of all routing rules on router.
- [More...](#)

The bottom of the interface features a "WIRELESS" section header.

IPv6

This screen will display all of your IPv6 Internet and network connection details.



Support

The screenshot displays the D-Link DIR-615 web interface. At the top, the D-Link logo is visible on an orange background. Below the logo is a navigation bar with tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The SUPPORT tab is currently selected. On the left side, there is a vertical menu with options: MENU, SETUP, ADVANCED, TOOLS, and STATUS. The main content area is titled 'SUPPORT MENU' and contains several sections of help links:

- SUPPORT MENU**
 - [Setup](#)
 - [Advanced](#)
 - [Tools](#)
 - [Status](#)
- SETUP HELP**
 - [Internet](#)
 - [Wireless Settings](#)
 - [Network Settings](#)
 - [Storage](#)
 - [IPv6](#)
 - [Mydlink Settings](#)
- ADVANCED HELP**
 - [Virtual Server](#)
 - [Application Rules](#)
 - [QoS Engine](#)
 - [Network Filter](#)
 - [Access Control](#)
 - [Website Filter](#)
 - [Firewall Settings](#)
 - [Advanced Wireless](#)
 - [Wi-Fi Protected Setup](#)
 - [Advanced Network](#)
- TOOLS HELP**
 - [Admin](#)
 - [Time](#)
 - [Email Settings](#)
 - [System](#)
 - [Firmware](#)
 - [Dynamic DNS](#)
 - [System Check](#)
 - [Schedules](#)
- STATUS HELP**
 - [Device Info](#)
 - [Logs](#)
 - [Statistics](#)
 - [Internet Sessions](#)
 - [Wireless](#)
 - [IPv6](#)

At the bottom of the interface, there is a dark grey bar with the word 'WIRELESS' in white capital letters.

Wireless Security

This section will show you the different levels of wireless security you can use to protect your network from unauthorized access. The DIR-615 offers the following types of security:

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

What is WPA?

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

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

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

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

Wireless Network Setup Wizard

To set up your wireless network and implement wireless security features, browse to the Setup page and then click the **Wireless Connection Setup Wizard** button.

The screenshot displays the D-Link DIR-615 web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar shows a menu with options for INTERNET, WIRELESS SETTINGS, and NETWORK SETTINGS. The main content area is titled "WIRELESS SETTINGS" and contains three sections:

- WIRELESS NETWORK SETUP WIZARD**: This section explains that the wizard is designed to assist in setting up a wireless network and making it secure. It includes a button labeled "Wireless Network Setup Wizard" and a note: "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 section explains that the wizard is designed to assist in connecting a wireless device to the router. It includes a button labeled "Add Wireless Device with WPS".
- MANUAL WIRELESS NETWORK SETUP**: This section explains that if the wireless network is already set up with Wi-Fi Protected Setup, manual configuration will destroy the existing network. It includes a button labeled "Manual Wireless Network Setup".

On the right side of the interface, there is a "Helpful Hints..." section with two paragraphs of text and a "More..." link.

Enter the SSID (Service Set Identifier). The SSID is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive. Select **Automatically assign a network key** and click **Next**.

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD

Give your network a name, using up to 32 characters.

Network Name (SSID) :

Automatically assign a network key (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.

Manually assign a network key
Use this options if you prefer to create our own key.

Use WPA encryption instead of WEP(WPA is stronger than WEP and all D-Link wireless client adapters support WPA)

Note: All D-Link wireless adapters currently support WPA. .

Once this screen appears, the setup is complete. You will be given a detailed summary of your wireless security settings.

Click **Save** to continue.

SETUP COMPLETE!

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

Wireless Network Name : dlink
Wep Key Length : 128 bits
Default WEP Key to Use : 1
Authentication : Open
Wep Key : 64e3d1782085aedb4a47e30995

Enter the SSID (Service Set Identifier). The SSID is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive. Select **Manually assign a network key** and click **Next**.

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD

Give your network a name, using up to 32 characters.

Network Name (SSID) :

Automatically assign a network key (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.

Manually assign a network key
Use this options if you prefer to create our own key.

Use WPA encryption instead of WEP(WPA is stronger than WEP and all D-Link wireless client adapters support WPA)

Note: All D-Link wireless adapters currently support WPA. .

Select a wireless security password. It must be exactly 5 or 13 ASCII characters, or be exactly 10 or 26 characters using 0-9 and A-F.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD

You have selected your security level - you will need to set a wireless security password.

The WEP (Wired Equivalent Privacy) key must meet one of following guidelines:

- Exactly 5 or 13 characters
- Exactly 10 or 26 characters using 0-9 and A-F

A longer WEP key is more secure than a short one

Wireless Security Password :

Note: You will need to enter the same password as keyed in this step into your wireless clients in order to enable proper wireless communication.

Click **Next** to continue.

Your setup is complete. You will be given a detailed summary of your wireless security settings. Click **Save** to finish the wizard.

SETUP COMPLETE!

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

Wireless Network Name : dlink
Wep Key Length : 64 bits
Default WEP Key to Use : 1
Authentication : Open
Wep Key : 1111111111

Add Wireless Device with WPS Wizard

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



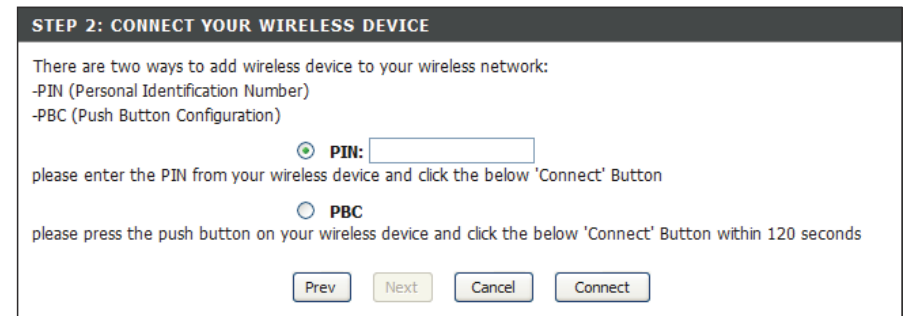
Select **Auto** to add a wireless client using WPS (Wi-Fi Protected Setup). The wizard will take you through the steps to add your devices using WPS.

If you select **Manual**, a settings summary screen will appear. Use the information displayed on this screen to connect your wireless client. Please refer to your device's user documentation if you require further information on how to connect to a wireless network manually.



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

PBC: Select this option to use PBC (Push Button) method to add a wireless client. Click **Connect**. Press the WPS button on your new device within 120 seconds to establish a connection. Note that this button may be a physical button on the device's exterior, or a software button within the device's user interface.



Configure WPA-Personal (PSK)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.
2. Next to **Security Mode**, select **WPA-Personal**.
3. Next to **WPA Mode**, select **Auto**, **WPA2 Only**, or **WPA Only**. Use Auto if you have wireless clients using both WPA and WPA2.
4. Next to **Cypher Type**, select **TKIP and AES**, **TKIP**, or **AES**. If you have wireless clients that use both types, use TKIP and AES.
5. Next to **Group Key Update Interval**, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
6. Next to **Pre-Shared Key**, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.
7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

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 :

WPA

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

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode :

Cipher Type :

Group Key Update Interval : (seconds)

PRE-SHARED KEY

Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

Configure WPA-Enterprise (RADIUS)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

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

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

Note: *Wi-Fi Protected Setup must be disabled in order to select WPA-Enterprise.*

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

4. Next to **Cypher Type**, select **TKIP and AES**, **TKIP**, or **AES**. If you have wireless clients that use both types, use TKIP and AES.

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

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

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

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

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

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

WIRELESS SECURITY MODE

Security Mode :

WPA

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

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode :

Cipher Type :

Group Key Update Interval : (seconds)

EAP (802.1X)

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.

RADIUS server IP Address :

RADIUS server Port :

RADIUS server Shared Secret :

Connect to a Wireless Network

Windows® 8 WPA/WPA2

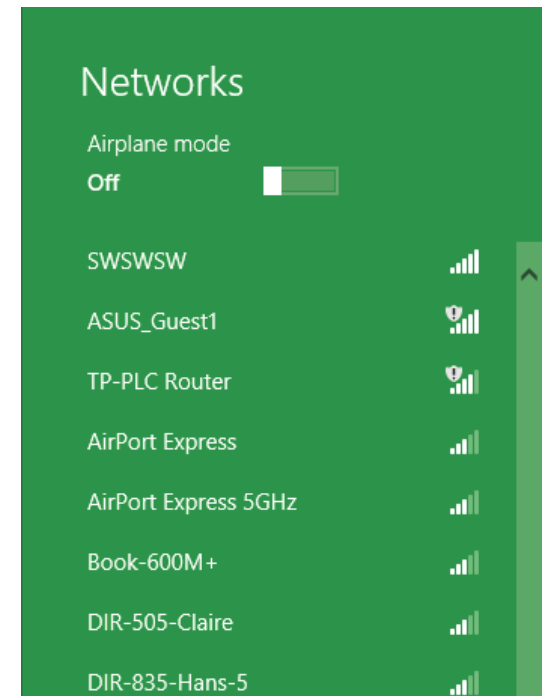
It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.

To join an existing network, locate the wireless network icon in the taskbar, next to the time display.



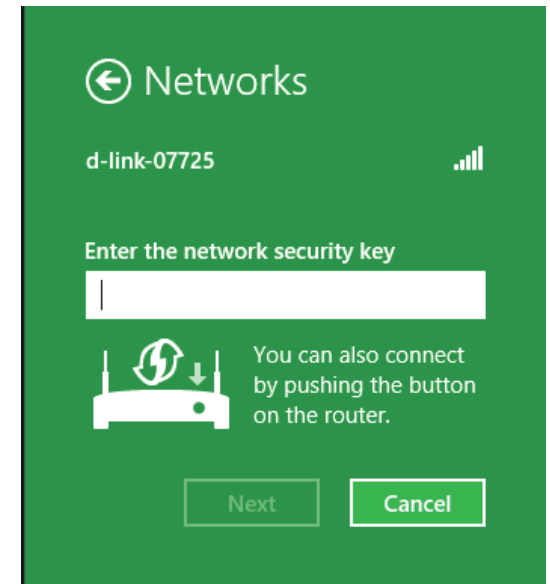
Wireless Icon

Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the desired network by clicking on the network name.

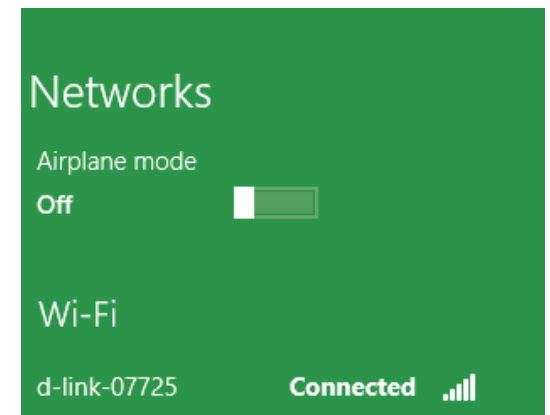


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at the point to enable the WPS function.



When you have established a successful connection to a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.



Windows® 7

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).



2. The utility will display any available wireless networks in your area.

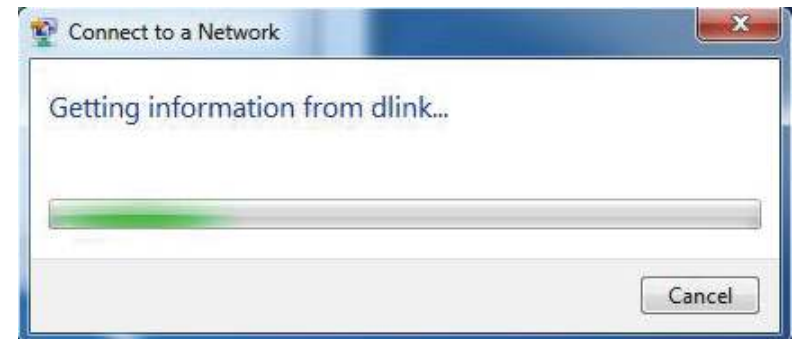


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to “Networking Basics” on page 103 for more information.



4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

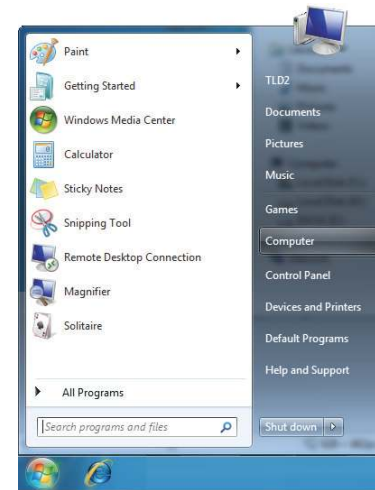
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



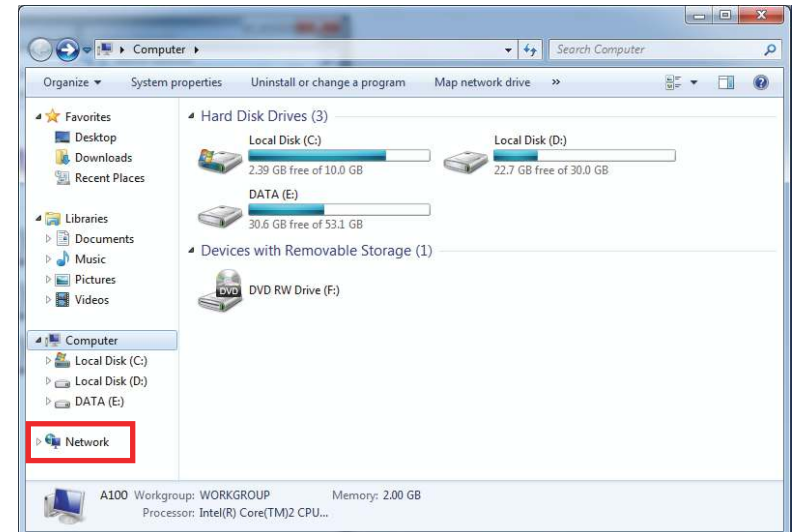
Configure WPS

The WPS feature of the DIR-615 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature of the DIR-615:

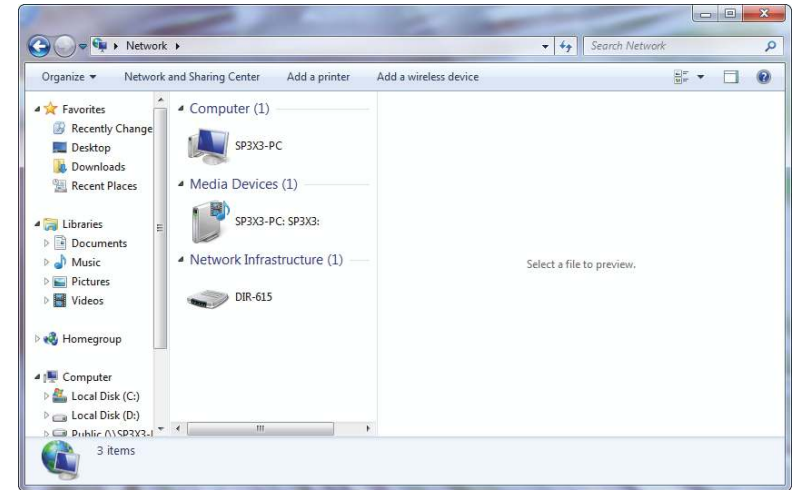
1. Click the **Start** button and select **Computer** from the Start menu.



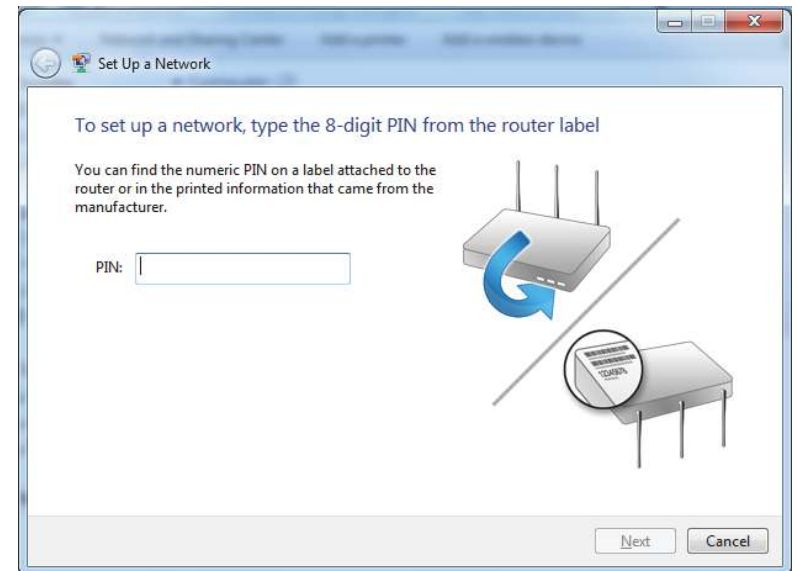
2. Click the **Network** option.



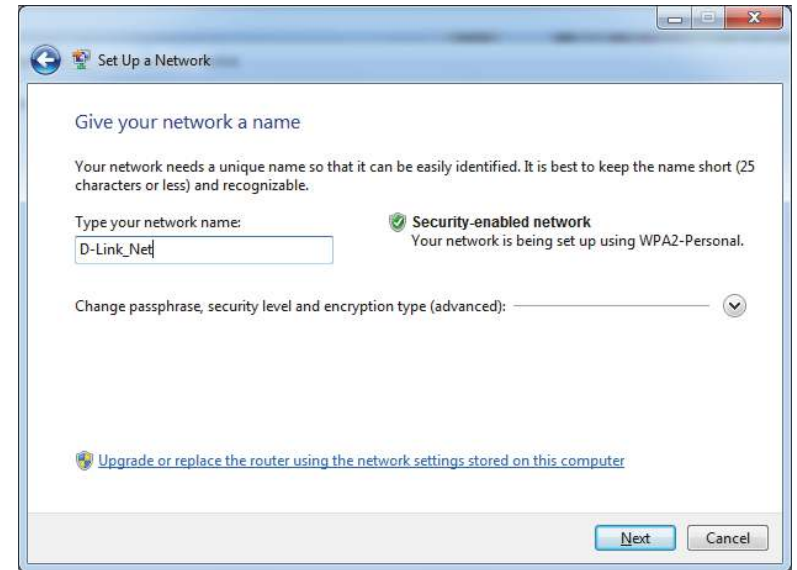
3. Double-click the DIR-615 router.




4. Input the WPS PIN number (displayed on router label or in the **Setup > Wireless Setup** menu in the router's web user interface) and click **Next**.

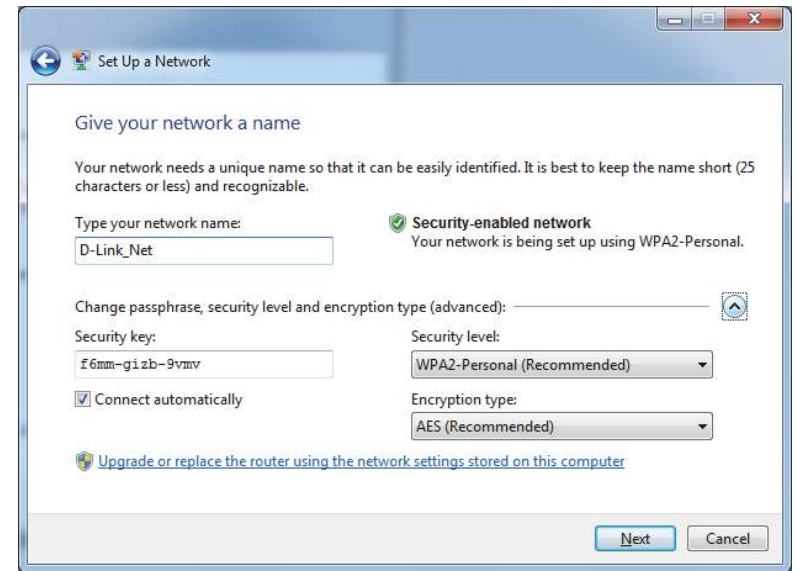


5. Type a name to identify the network.



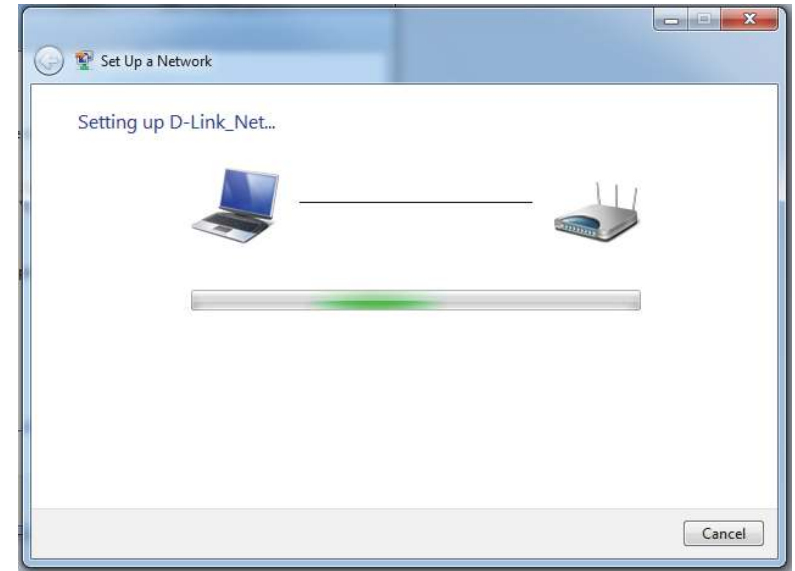
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the router is being configured.

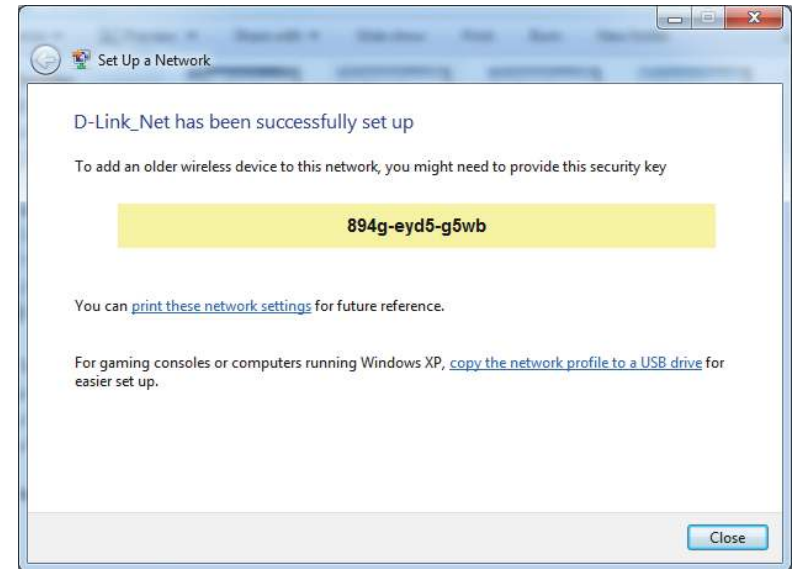
Wait for the configuration to complete.



8. The following window informs you that WPS on the DIR-615 has been setup successfully.

Make a note of the security key as you may need to provide this security key if adding another wireless device to the network in the future.

9. Click **Close** to complete WPS setup.



Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



Configure WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.

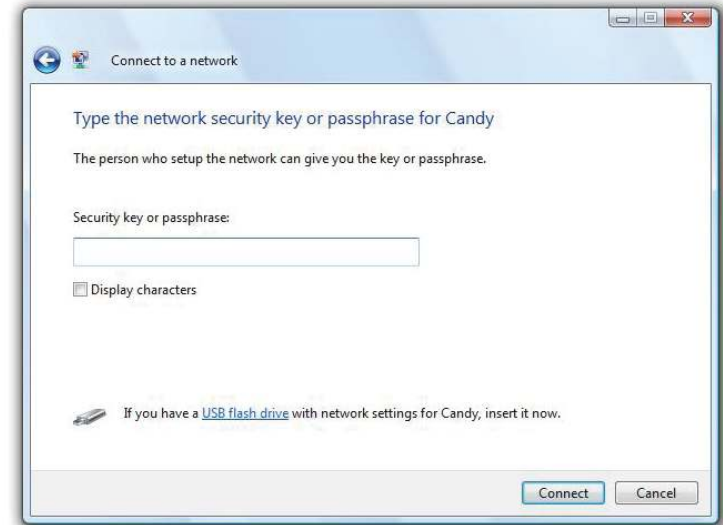


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows XP utility as seen below.

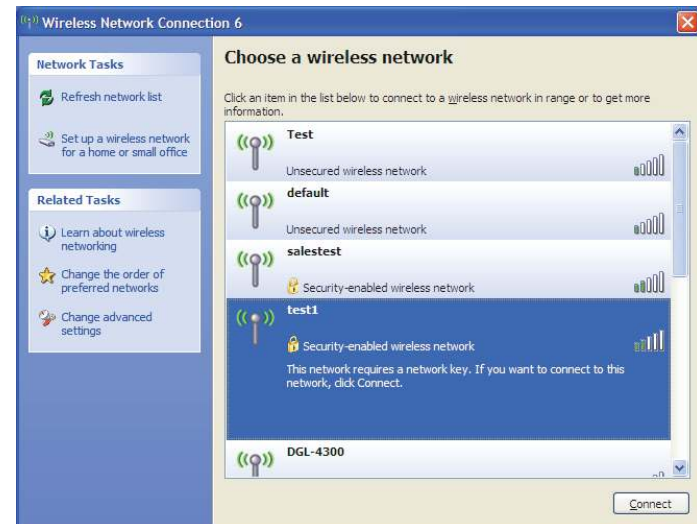
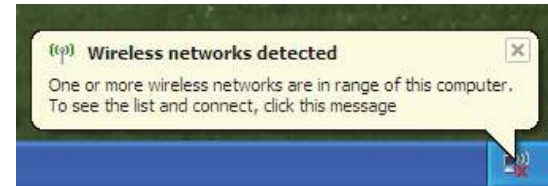
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



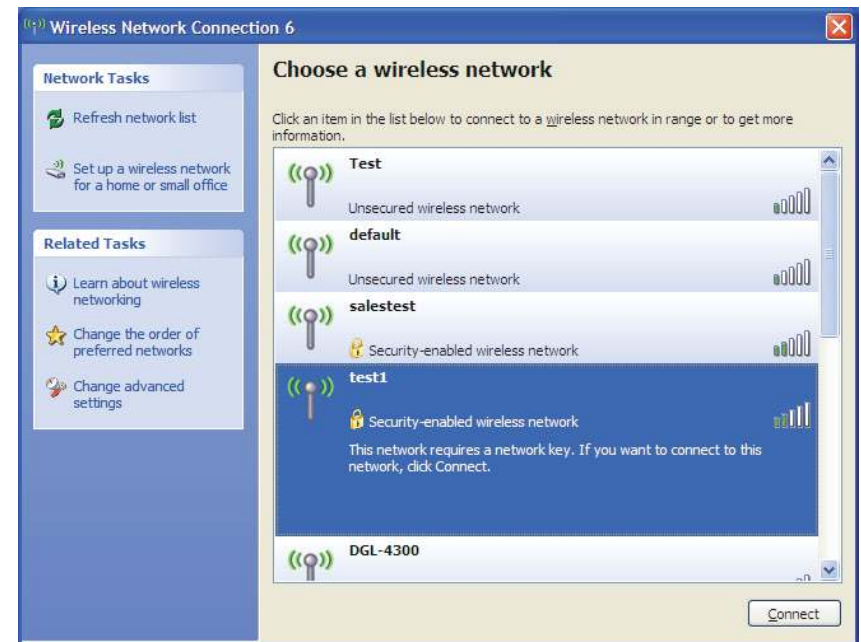
Configure WPA-PSK

It is recommended to enable WEP on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WEP key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

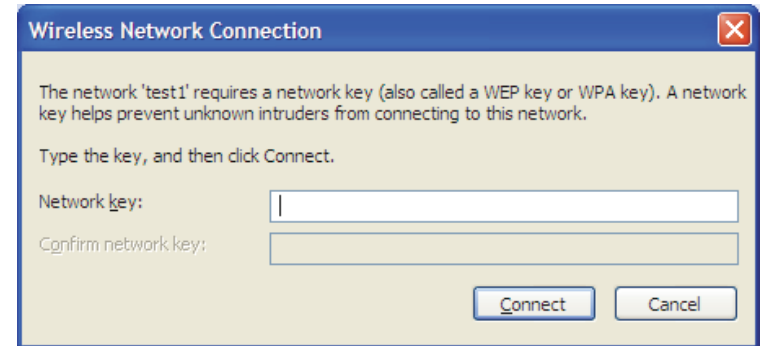


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-615. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screen shots on your computer may look different to the following examples.)

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

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Internet Explorer 6 or higher
 - Firefox 5.0 or higher
 - Safari 3 or higher
 - Chrome 3.0 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as ZoneAlarm, BlackICE, Sygate, Norton Personal Firewall, and Windows XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

• Configure your Internet settings:

- Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
 - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
 - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
 - Close your web browser (if open) and open it again.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.
 - If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What should I do if I forget my password?

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

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, or connecting to secure sites such as eBay, banking sites, and web email, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

Note: AOL DSL+ users must use MTU of 1400.

To find the proper MTU Size, you will have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, and XP users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network current network (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms

C:\>
```

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

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

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

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

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

What is Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

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

Tips

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

Centralize your router or Access Point

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

Eliminate Interference

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

Security

Don't let neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to the relevant section in this manual detailed information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-615 wireless network adapters.

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

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

Networking Basics

Check your MAC and IP address

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

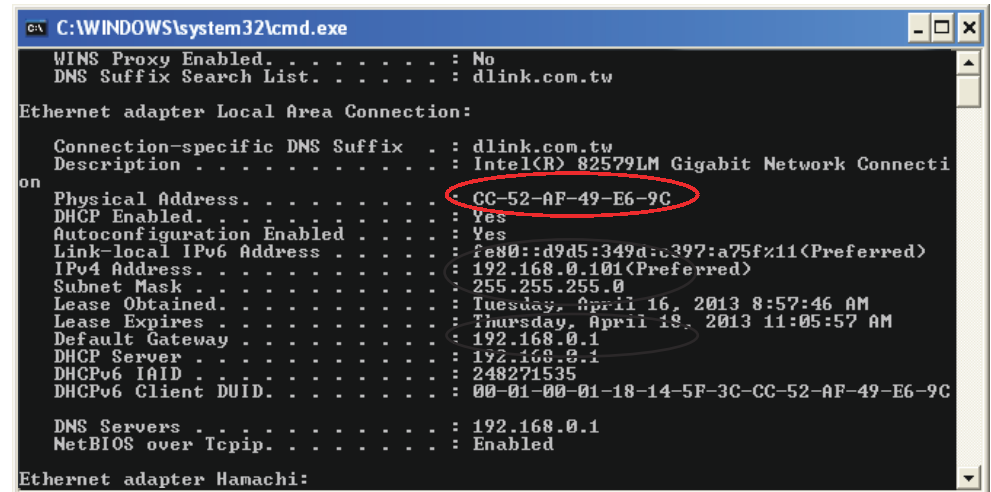
Click on **Start > Run**. In the run box type **cmd** and click **OK**. (Windows Vista® users type **cmd** in the Start Search box.)

At the prompt, type **ipconfig /all** and press **Enter**. Locate the information for the network adapter you are using; in this case “Ethernet adapter Local Area Connection”. (You may need to scroll upwards to view the information that you require).

The address listed next to “Physical Address” is the MAC address of the device you are using.

This will display also the IP address (IPv4), subnet mask, and default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.



```
C:\WINDOWS\system32\cmd.exe
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . : dlink.com.tw

Ethernet adapter Local Area Connection:

Connection-specific DNS Suffix . : dlink.com.tw
Description . . . . . : Intel(R) 82579LM Gigabit Network Connecti
on
Physical Address. . . . . : CC-52-AF-49-E6-9C
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . : Yes
Link-local IPv6 Address . . . . : fe80::d9d5:349d:c397:a75f%11(Preferred)
IPv4 Address. . . . . : 192.168.0.101(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Tuesday, April 16, 2013 8:57:46 AM
Lease Expires . . . . . : Thursday, April 18, 2013 11:05:57 AM
Default Gateway . . . . . : 192.168.0.1
DHCP Server . . . . . : 192.168.0.1
DHCPv6 IAD . . . . . : 248271535
DHCPv6 Client DUID. . . . . : 00-01-00-01-18-14-5F-3C-CC-52-AF-49-E6-9C

DNS Servers . . . . . : 192.168.0.1
NetBIOS over Tcpip. . . . . : Enabled

Ethernet adapter Hamachi:
```

Statically Assign an IP address

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

Step 1

Windows® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Change Adapter Setting.**

Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections.**

Windows XP - Click on **Start > Control Panel > Network Connections.**

Windows 2000 - From the desktop, right-click **My Network Places > Properties.**

Step 2

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

Step 3

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

Step 4

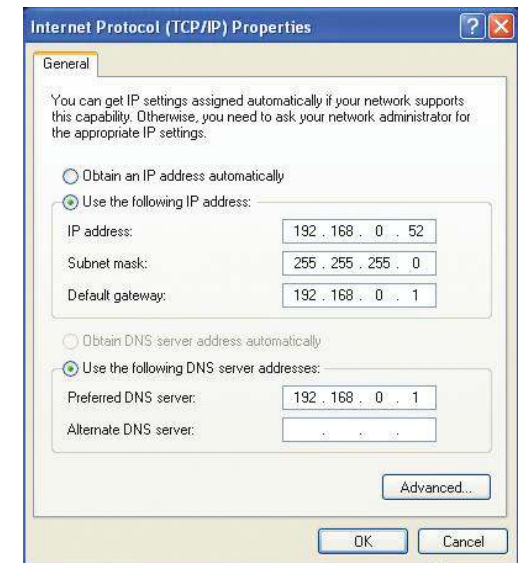
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

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

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

Step 5

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



Technical Specifications

Standards

- IEEE 802.1n
- IEEE 802.1g
- IEEE 802.3
- IEEE 802.3u

Interface

- 1 x 10/100 Base TX RJ-45 WAN Port
- 4 x 10/100 Base TX RJ-45 LAN Ports

Security

- WPA-Personal
- WPA2-Personal
- WPA-Enterprise
- WPA2-Enterprise
- Wi-Fi Protected Setup

Wireless Signal Rates*

- Up to 300 Mbps

Frequency Range

- 2.4 GHz to 2.483 GHz

LEDs

- Power
- Internet
- WLAN
- LAN x 4

Temperature**

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

Humidity

- Operating: 10% to 90% (non-condensing)
- Storage: 5% to 95% (non-condensing)

Dimensions

- 148 x 113 x 32 mm (5.8 x 4.4 x 1.3 inches)

Weight

- 214 grams (.047lbs)

Safety & Emissions

- FCC
- CE

* 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 factors will adversely affect wireless signal range.

** Indoor use only