



**User Manual**

**Wireless N300 ADSL2+ Modem Router**

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# Preface

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

## Manual Revisions

Revision	Date	Description
1.00	January 04, 2016	• Release for revision A1

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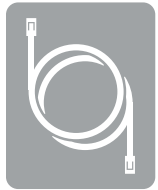
# Package Contents



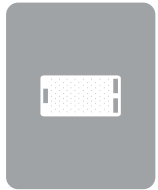
DSL-2790U Wireless N300 ADSL2+ Modem Router



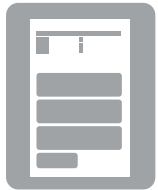
Power Adapter



Ethernet Cable



xDSL Microfilter/Splitter & Cable



Quick Install Guide

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

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

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• Wired 10/100 Ethernet Devices/Computers or Wireless Ethernet 802.11 n/g/b Devices/Computers</li><li>• A DSL enabled Internet Connection with a subscription to an Internet Service Provider</li></ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"><li>• Windows®, Macintosh, or Linux-based operating system</li><li>• An installed Ethernet adapter</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer 9 or higher</li><li>• Firefox 20 or higher</li><li>• Safari 5.1 or higher</li><li>• Chrome 25 or higher</li></ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>

# Introduction

The DSL-2790U Wireless N300 ADSL2+ Modem Router is a versatile, high-performance router for homes and small offices. With integrated ADSL2/2+ supporting up to 24 Mbps download speeds, firewall protection, Quality of Service (QoS), 802.11n wireless LAN and 4 Ethernet switch ports, this router provides all the functions that a home or small office needs to establish a secure and high-speed link to the outside world.

**High-speed ADSL2/2+ Internet Connection** - The latest ADSL2/2+ standards provide Internet transmission of up to 24 Mbps downstream, 1 Mbps upstream.

**High-performance Wireless** - Embedded 802.11n technology for high-speed wireless connection, complete compatibility with 802.11b/g wireless devices

**Ultimate Wireless Connection with Maximum Security** - This router maximizes wireless performance by connecting to computer interfaces and staying connected from virtually anywhere at home and in the office. The router can be used with 802.11b/g/n wireless networks to enable significantly improved reception. It supports WPA/WPA2 and WEP for flexible user access security and data encryption methods.

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

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



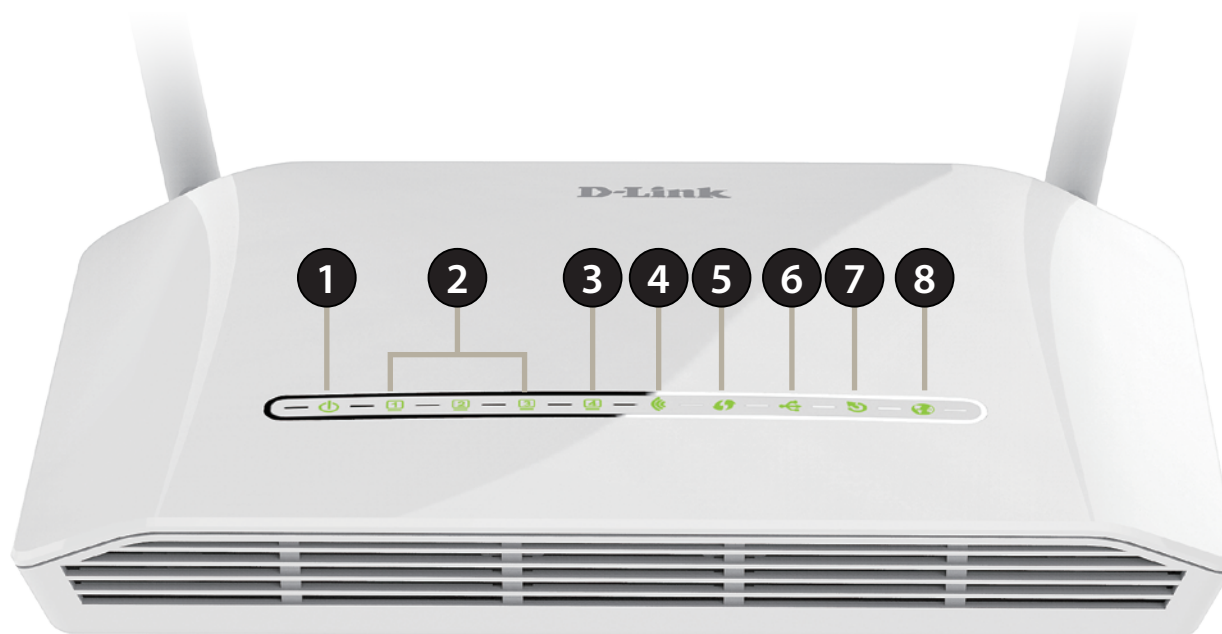
# Features

- **Faster Wireless Networking** - The DSL-2790U provides up to 300 Mbps\* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- **Compatible with 802.11b and 802.11g Devices** - The DSL-2790U is still fully compatible with the IEEE 802.11b and g standards, so you can use keep your existing 802.11b and g devices.
- **Precise ATM Traffic Shaping** - Traffic shaping is a method of controlling the flow rate of ATM data cells. This function helps to establish Quality of Service for ATM data transfer.
- **High Performance** - Very high rates of data transfer are possible with the router-providing up to 24 Mbps downstream for ADSL2+.
- **Full Network Management** - The DSL-2790U incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management via a Telnet connection.
- **Easy Installation** - The DSL-2790U can be configured and managed easily using a web-based UI. Any common web browser software can be used to manage the router.
- **USB Support** - The DSL-2790U provides a USB port for easy file sharing and printer sharing. The DSL-2790U supports USB storage devices to share files through a SAMBA file server. It also supports sharing USB printers to network members. Besides the sharing function, the DSL-2790U also supports connection to the Internet via a USB 3G modem.

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

# Hardware Overview

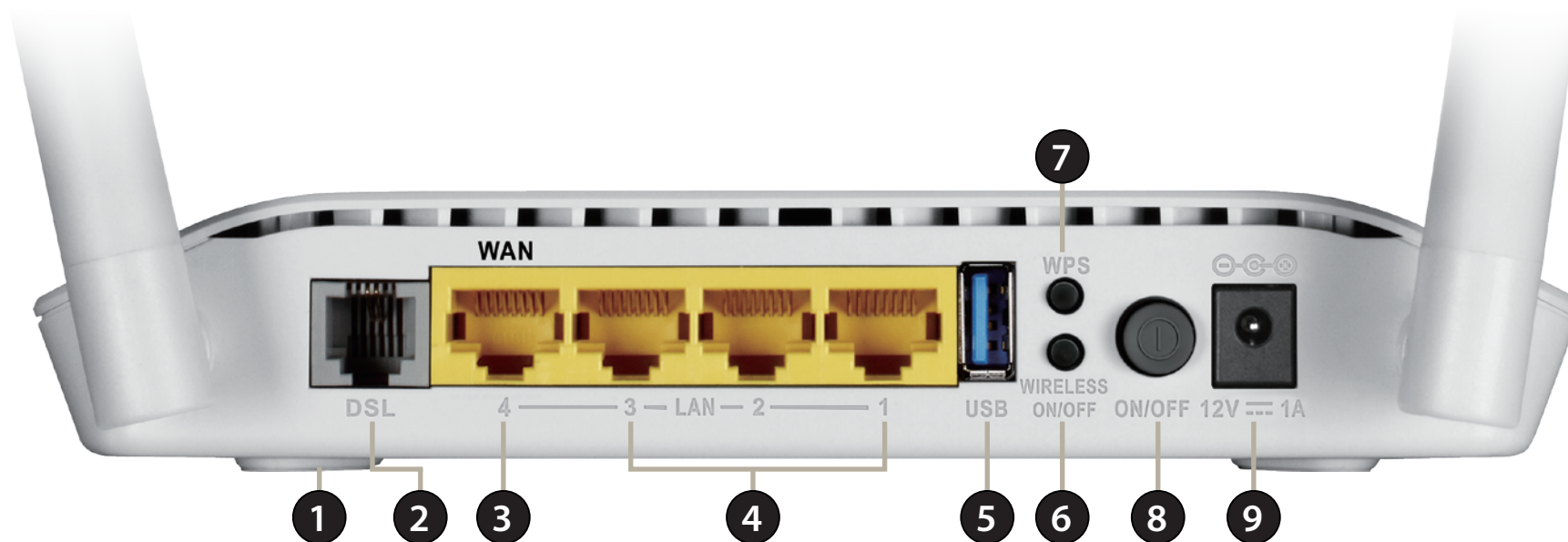
## Front LED Panel



<b>1</b>	Power LED	A solid green light indicates the unit is powered on. A red light indicates device malfunction.
<b>2</b>	LAN LEDs 1-3	A solid green light indicates a connection to a device. The light will blink during data transmission.
<b>3</b>	LAN4/WAN	A solid green light indicates a connection to a device. The light will blink during data transmission.
<b>4</b>	WLAN LED	A solid green light indicates that the Wi-Fi is ready.
<b>5</b>	WPS LED	The light will blink during the WPS process.
<b>6</b>	USB LED	A solid green light indicates a connection to a USB device.
<b>7</b>	DSL LED	A solid green light indicates a proper connection to the ADSL enabled telephone line.
<b>8</b>	Internet	A solid green light indicates a proper connection to a broadband service. A red light indicates that IP assignment has failed.

# Hardware Overview

## Back



1	Reset Button	Insert a paperclip in the hole on the bottom of the device located the serial number sticker and wait for several seconds to reset the router to default settings.
2	DSL Port	Connect to an DSL-enabled telephone line and with the supplied microfilter/splitter.
3	WAN/LAN Port 4	This user-configurable Ethernet port may act as either a LAN Port or WAN port.
4	LAN Ports (1-3)	Connect Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
5	USB Port	Connect a USB storage device to this port to share media to your network.
6	Wireless On/Off	Press and hold this button for about 10 seconds to enable or disable the Wi-Fi network.
7	WPS Button	Press to start the WPS process and automatically create a secure connection to a WPS client.
8	Power Button	Press to power the router on or off.
9	Power Connector	Connector for the supplied power adapter.

# 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, attic, or garage.

**Note:** This installation section is written for users who are setting up their home Internet service with the DSL-2790U Wireless N300 ADSL2+ Modem Router for the first time. If you are replacing an existing DSL modem and/or router, you may need to modify these steps.

## Before you Begin

- Make sure to have your DSL service information provided by your Internet Service Provider handy. This information is likely to include your DSL account's Username and Password. Your ISP may also supply you with additional WAN configuration settings which are necessary to establish a connection. This information may include the connection type (DHCP IP, Static IP, PPPoE, or PPPoA) and/or ATM PVC details.
- If you are connecting a considerable amount of networking equipment, it may be a good idea to take the time to label each cable or take a picture of your existing setup before making any changes.
- We suggest setting up your DSL-2790U from a single device and verifying that it is connected to the Internet before connecting additional devices.
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE connection software such as WinPoET, BroadJump, or EnterNet 300 from your computer as the DSL-2790U will be providing this functionality.

# Wireless Installation Considerations

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

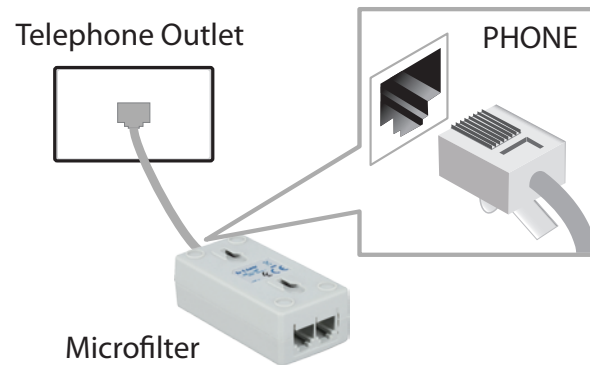
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4 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.

# Manual Setup

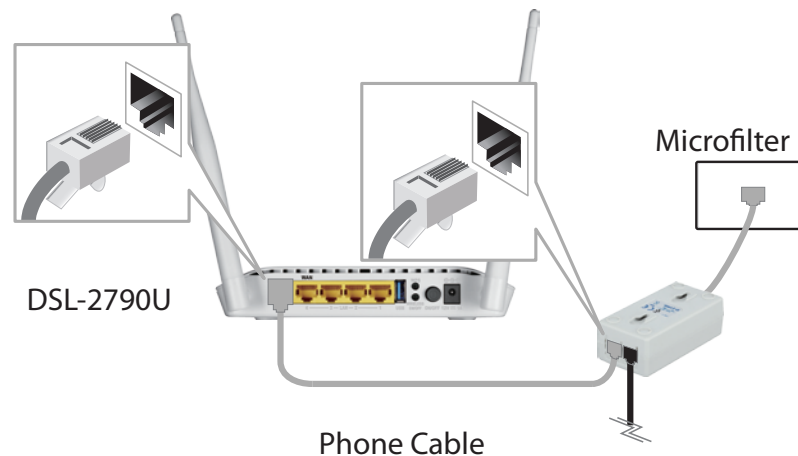
**1** Position your router close to a wall jack which provides DSL service. Place the router in an open area of your intended work area for better wireless coverage.

**2** Connect your existing phone cable from a telephone outlet to the LINE port on the microsplitter and your telephone handset into the PHONE port.

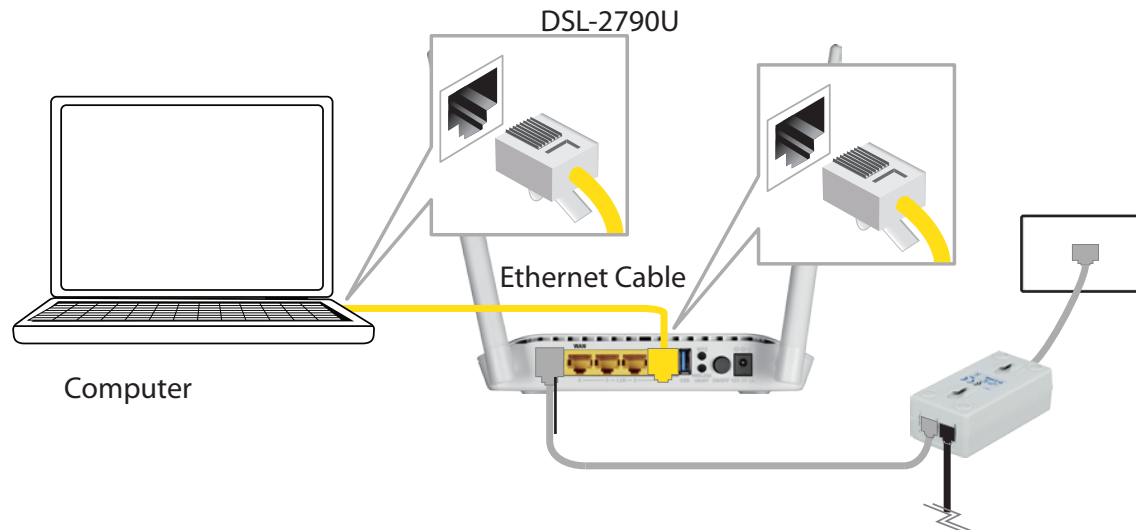
**Caution:** - To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.



**3** Connect the Phone cable from the DSL port on the microsplitter to the DSL port of the modem router.

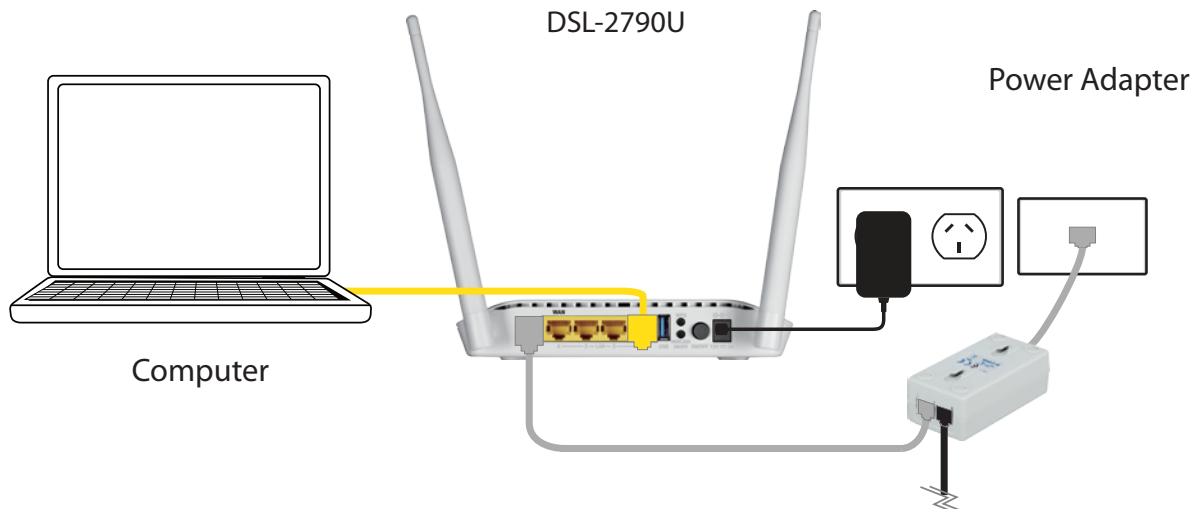


- 4 If you wish to use a wired connection, connect the Ethernet cable from a LAN port of the DSL-2790U to the Ethernet port on your computer.

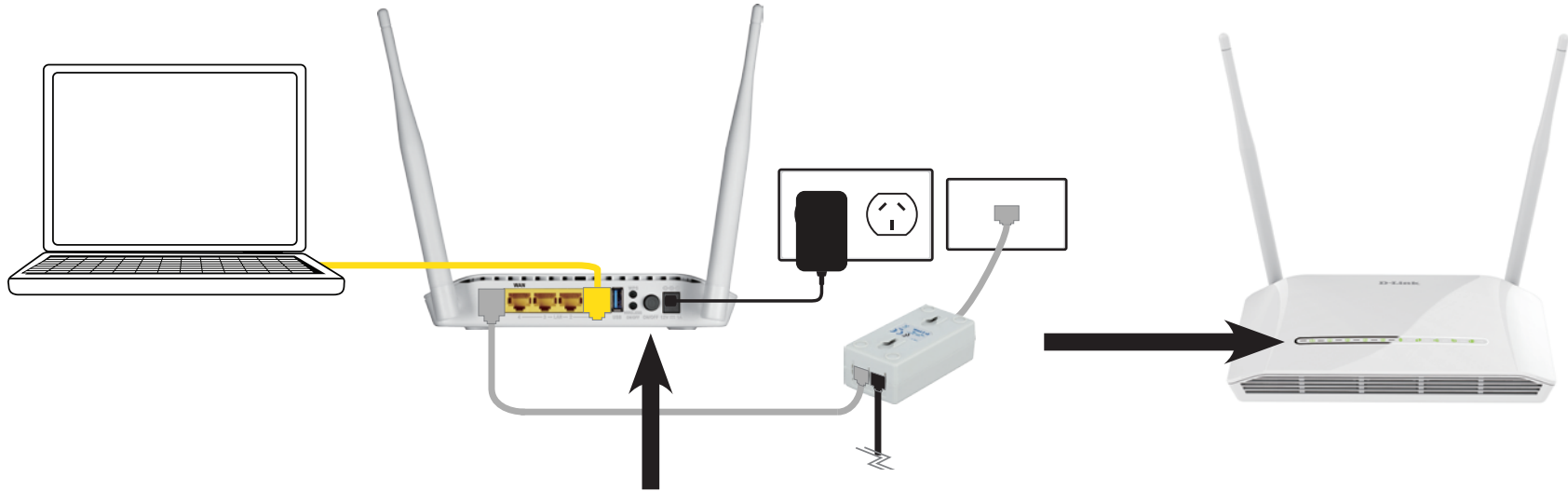


- 5 Plug the power adapter into your modem router and connect to an available power outlet or surge protector.

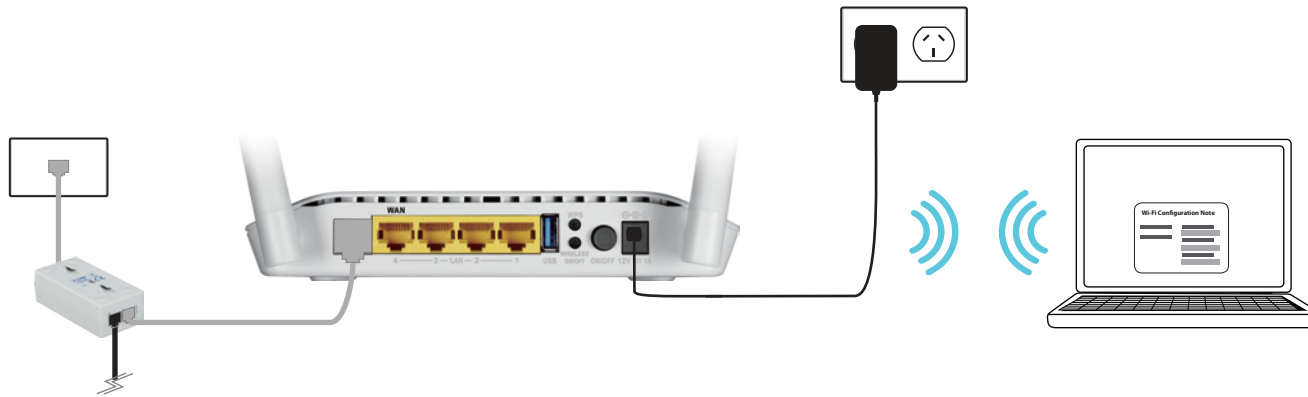
**Caution:** - Use only the included power adapter with this product.



- 6 Press the power button and verify that the power LED is lit. Allow 1 minute for the router to boot up.



- 7 If connecting to the DSL-2790U wirelessly, access the wireless utility on your computer or mobile device. Scan for available Wi-Fi networks (SSID). Select and join a Wi-Fi network and use the password which corresponds to the information printed on the bottom of the device.





# Getting Started

There are three different ways you can configure your router to connect to the Internet and connect to your clients:

- **D-Link One Touch App** - Use your Android device, iPhone, iPad, or iPod touch to configure your modem router. Refer to **One-Touch App Setup on page 13**.
- **Web-based Setup Wizard** - This wizard will launch when you log into the modem router for the first time. Refer to **Web-based Configuration Utility** on page 14.
- **Manual Setup** - Log into the router and manually configure your router. Refer to **Manual Setup** on page 9.

# One-Touch App Setup

**Step 1** - Scan the code below or search “D-Link One-Touch” (App Store or Google Play) to download the D-Link One-Touch app to your iPhone, iPad, or Android device.



iOS



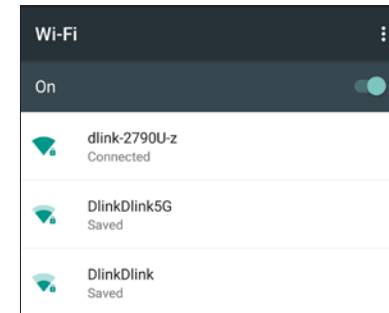
Android



One-Touch App

**Step 2** - Once your app is installed, you may now configure your modem router. Connect to the modem router wirelessly by going to your wireless utility on your device. The default Wi-Fi Network is *dlink-2790U-z*. Connect and then continue to step 3.

**Note:** By default, the DSL-2790U has wireless security enabled. The default password can be found on a label on the under side of the device.



**Step 3** - Once connected via wireless, click on the **D-Link One-Touch** icon from your mobile device, then click Start to continue. Please follow the on-screen instructions to complete the setup.

**Step 4** - Once the Setup Complete screen appears, click **Finish**. You will then be asked if you wish to save the Profile card with all of the details that you have just configured, it is recommended to select **YES** for future reference.

Congratulations! You have completed the modem router installation.

# Web-based Configuration Utility

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

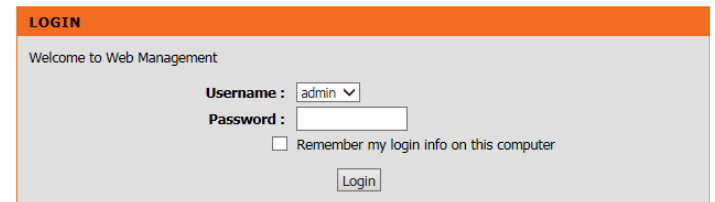
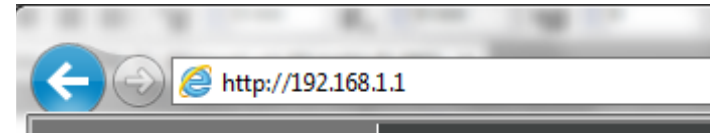
If you wish to change the default settings or adjust the configuration of the DSL-2790U you may use the web-based configuration utility.

To access the configuration utility, open a web browser such as Internet Explorer and enter **http://192.168.1.1** in the address field.

Select **admin** from the drop-down menu and then enter your password. The default password is **admin**.

On your first login you will be directed to the **Setup Wizard** page.

If you want to configure the router manually without running the wizard, skip to **Configuration** on page 22.



# Wizard

Use the **Setup Wizard** to quickly and easily configure the DSL-2790U. This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click the **Setup Wizard** button to continue.

If you want to configure the router manually without running the wizard, skip to **Configuration** on page 22.

## SETUP WIZARD

The Setup Wizard will guide you through the following steps:

Step 1: Change Device Login Password

Step 2: Set Time and Date

Step 3: Setup Internet Connection

Step 4: Configure Wireless Network

Step 5: Completed and Restart

Click **Next** to begin.

### SETTING UP YOUR INTERNET

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

Please make sure you have your ISP's connection settings first if you choose manual setup.

### INTERNET CONNECTION WIZARD

You can use this wizard for assistance and quick connection of your new D-Link Router to the Internet. You will be presented with step-by-step instructions in order to get your Internet connection up and running. Click the button below to begin.

**Note:** Before launching the wizard, please ensure you have correctly followed the steps outlined in the Quick Installation Guide included with the router.

### WELCOME TO D-LINK SETUP WIZARD

This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

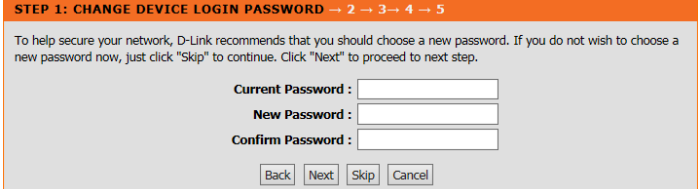
- **Step 1 :** Change Device Login Password
- **Step 2 :** Set Time and Date
- **Step 3 :** Setup Internet Connection
- **Step 4 :** Configure Wireless Network
- **Step 5 :** Completed and Restart

## Step 1: Change Device Login Password

This step of the wizard allows you to configure your password settings.

Enter a new **Password** and **Verify Password** to secure your modem router.

Click **Next** to continue. Otherwise, click **Skip** to leave the password unchanged.



**STEP 1: CHANGE DEVICE LOGIN PASSWORD** → 2 → 3 → 4 → 5

To help secure your network, D-Link recommends that you should choose a new password. If you do not wish to choose a new password now, just click "Skip" to continue. Click "Next" to proceed to next step.

**Current Password :**

**New Password :**

**Confirm Password :**

## Step 2: Set Time and Date

This step of the wizard allows you to configure your Time and Date settings.

Check **Automatically synchronize with Internet time servers** to enable time and date setup, and select your **Time Zone** from the drop-down menu. Daylight saving time will be automatically configured for your time zone. Check **Enable Daylight Saving** only if you want to override the default settings for your time zone.

If necessary, change the Network Time Protocol (NTP) servers.

Click **Next** to continue.

The screenshot shows a configuration page titled "STEP 2: SET TIME AND DATE" with a progress indicator "1 → 3 → 4 → 5". Below the title is a descriptive paragraph: "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 NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed." The page is divided into two main sections: "TIME SETTINGS" and "TIME CONFIGURATION".

**TIME SETTINGS**

- Automatically synchronize with Internet time servers**
- First NTP time server: ntp.dlink.com.tw
- Second NTP time server: ntp1.dlink.com

**TIME CONFIGURATION**

- Current Router Time: Thu Jan 1 04:37:09 1970
- Time Zone: (GMT+10:00) Canberra, Melbourne, Sydney
- Daylight Saving Time rule of Australia have automatically been applied to this time zone
- Enable manual Daylight Saving, overwrite automatic rule
- Daylight Saving Dates: Start (Month: Jan, Week: 2nd, Day: Sun, Time: 12 am), End (Month: Jan, Week: 2nd, Day: Sun, Time: 12 am)

At the bottom of the form are three buttons: "Back", "Next", and "Cancel".

## Step 3: Setup Internet Connection

This step of the wizard allows you to configure your Internet connection type.

If you have an DSL connection, select **DSL**. If you have a cable or NBN Fiber connection and are connecting via the WAN port, select **ETH WAN**.

If you selected **DSL**, choose your **Country** and **Internet Service Provider** (ISP) from the drop down menu. The necessary settings will automatically populate.

If you cannot find your country or ISP, select **Others**. You will need to enter the data provided by your ISP manually. Select the Internet Protocol used by your ISP: **Dynamic IP**, **Static IP**, **PPPoE**, **PPPoA**, or **Bridged**. Also select the **Connection Type**, and input the **VPI** and **VCI** settings.

If you selected **ETH WAN**, select and configure the Internet **Protocol** used by your ISP: **Dynamic IP**, **Static IP**, **PPPoE**, or **Bridged**.

If you selected **Dynamic IP** or **Bridged**, click **Next** to continue.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

If you have an ADSL connection, please select DSL

If you have a Cable, or NBN Fibre connection, please select ETH WAN

WAN Services type:  ETH WAN  DSL

Country:

Internet Service Provider:

Protocol:

Connection Type:

VPI:  (0-255)

VCI:  (32-65535)

**PPPoE**

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Please enter the information exactly as shown taking note of upper and lower cases. Click "Next" to continue.

Username:

Password:

Confirm Password:

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

If you have an ADSL connection, please select DSL

If you have a Cable, or NBN Fibre connection, please select ETH WAN

WAN Services type:  ETH WAN  DSL

Protocol:

## PPPOE/PPPOA

If the router detected or you selected **PPPoE** or **PPPoA**, a box will appear to enter your PPPoE/PPPoA username and password. Once you have entered your PPPoE/PPPoA credentials, click **Next** to continue.

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

## STATIC IP

If you selected **Static IP**, enter your Static IP information as supplied by your ISP. Click **Next** to continue.

**PPPoA**

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Please enter the information exactly as shown taking note of upper and lower cases. Click "Next" to continue.

Username :

Password :

Confirm Password :

**PPPoE**

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Please enter the information exactly as shown taking note of upper and lower cases. Click "Next" to continue.

Username :

Password :

Confirm Password :

**STATIC IP**

You have selected Static IP Internet connection. Please enter the appropriate information below as provided by your ISP.

The Auto PVC Scan feature will not work in all cases so please enter the VPI/VCI numbers if provided by the ISP.

Click Next to continue.

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :

Primary DNS Server :



## Step 4: Configure Wireless Network

This step of the wizard allows you to configure your Wireless network settings.

By default, wireless is enabled. If you want to disable the DSL-2790U's wireless capability, uncheck **Enable Your Wireless Network**.

Under **Wireless Network Name (SSID)** you can change the SSID of your wireless network, for easier identification by wireless clients. If **Visibility Status** is set to **Visible**, this name will show up when a client in range scans for wireless networks. Otherwise, if your network is **Invisible**, clients will have to enter the SSID in order to connect.

Choose the best security level that is compatible with your wireless clients. **WPA2-PSK** is recommended. Unless you chose **None** (this is NOT recommended), you will need to enter a key below. Wireless clients requesting a connection with the network will need to enter this key in order to connect.

Click **Next** to continue.

The screenshot shows the 'STEP 4: CONFIGURE WIRELESS NETWORK' screen. At the top, there are navigation arrows and the step number. The main content area contains the following elements:

- A checkbox labeled 'Enable Your Wireless Network' which is checked.
- A text input field for 'Wireless Network Name (SSID)' containing 'dlink-2790U-z' and a note '(1~32 characters)'.
- Radio buttons for 'Visibility Status' with 'Visible' selected.
- A 'Security Level' section with three options: 'None', 'WEP', and 'WPA2-PSK'. 'WPA2-PSK' is selected and highlighted in red.
- A 'Security Mode' dropdown menu set to 'WPA2-PSK' with a note: 'Select this option if your wireless adapters support WPA2-PSK.'
- A text input field for 'WPA2 Pre-Shared Key' containing '1018010069' and a note: '(8-63 characters, such as a~z, A~Z, or 0~9, i.e. '1234567890123')'.
- A note: 'Note: You will need to enter the same key here into your wireless clients in order to enable proper wireless connection.'
- Buttons for 'Back', 'Next', and 'Cancel' at the bottom.

## Step 5: Save and Completed

Congratulations! You have completed the setup of your modem router. You will see a summary of the settings you chose. It is recommended that you make a note of this information for future reference.

If you are satisfied with these settings, click **Save/Apply** to complete the setup wizard.

Otherwise, click **Back** to return to the previous step(s) or **Cancel** to exit the wizard without saving your changes.

1 < 2 < 3 < 4 **STEP 5: SAVE AND COMPLETED**

Setup complete. Click "Back" to review or modify settings. Click "Save/Apply" to apply current settings.

If your Internet connection does not work after save, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

**SETUP SUMMARY**

Below is a detailed summary of your 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.

<b>Time Settings :</b>	Enabled
<b>NTP Server 1 :</b>	ntp.dlink.com.tw
<b>NTP Server 2 :</b>	ntp1.dlink.com
<b>PVC / VPI / VCI :</b>	0 / 8 / 35
<b>Protocol :</b>	PPPoE
<b>Connection Type :</b>	LLC
<b>Username :</b>	test
<b>Password :</b>	1234
<b>Wireless Network Name (SSID) :</b>	dlink-2790U-z
<b>Network Name (SSID) Broadcast Status :</b>	Visible
<b>Encryption :</b>	WPA2-PSK/AES (also known as WPA2 Personal)
<b>Pre-Shared Key :</b>	cc186ab9bc

# Configuration

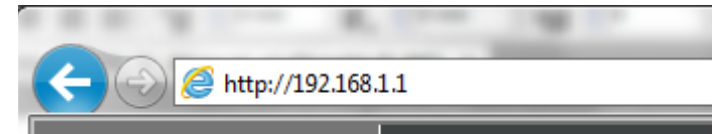
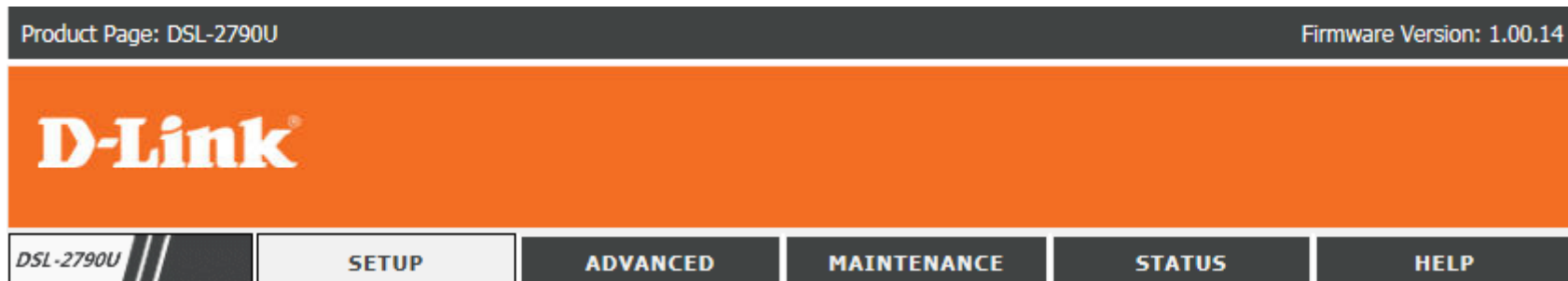
This section will show you how to configure your D-Link wireless router using the web-based configuration utility.

If you wish to change the default settings or adjust the configuration of the DSL-2790U you may use the web-based configuration utility.

To access the configuration utility, open a web browser such as Internet Explorer and enter **http://192.168.1.1** in the address field.

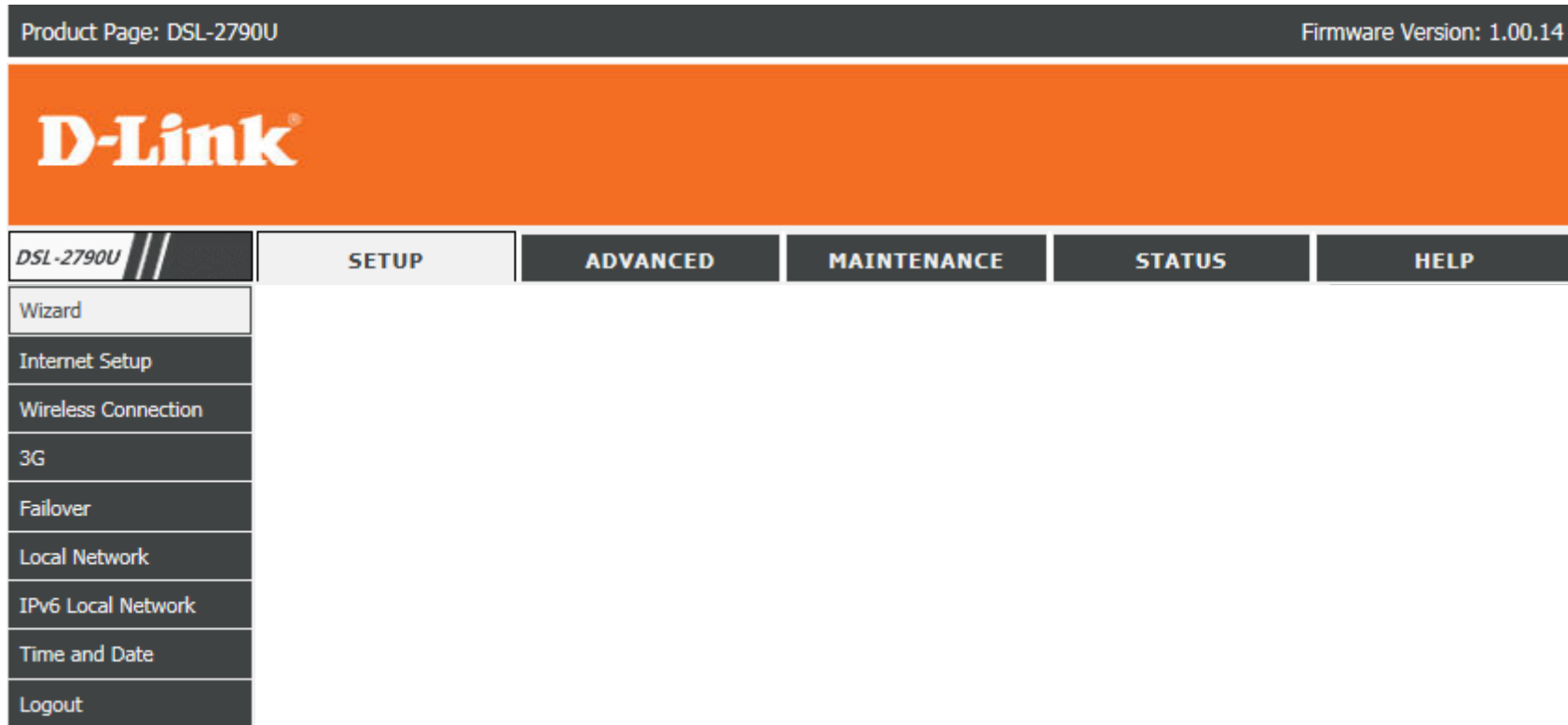
Select **admin** from the drop-down menu and then enter your password. The default password is **admin**.

Once logged in you will see that the user interface is divided into five horizontal tabs, each with a vertical menu bar running along the left side.

A screenshot of the login page for the D-Link web management utility. The page has an orange header with the word "LOGIN" in white. Below the header, it says "Welcome to Web Management". There are two input fields: "Username:" with a dropdown menu showing "admin" and "Password:" with a text box. Below these fields is a checkbox labeled "Remember my login info on this computer" and a "Login" button.

# Setup

The Setup Tab provides access to configure the most commonly used settings of your DSL-2790U.



## Wizard

If you wish to configure the router using the wizard, refer to **Wizard** on page 15.

## Internet Setup

Click **Internet Setup** on the left menu to configure your connection manually. This section is only recommended for advanced users. It is recommended to use the **Setup Wizard** to set up your Internet connection.

Select whether to use an Ethernet WAN connection or DSL connection.

Click the **Add** button to reveal the DSL/Ethernet WAN configuration options, or click **Edit** to change an existing configuration. Click **Delete** to remove a connection.

For instructions on adding an Ethernet WAN connection refer to **Add an Ethernet WAN Connection** on page 25.

For instructions on adding a DSL connection refer to **Add a DSL WAN Connection** on page 30.

**INTERNET SETUP**

ATM Interface Setup  
Choose "Add", "Edit", or "Delete" to configure WAN interface. A maximum of 8 entries can be configured.

If you want to change WAN services type, Please select ETH or DSL.

WAN Services type:  ETH WAN  DSL

**WAN SETUP**

	VPI/VCI	VLAN Mux	Service Name	Protocol	IGMP	NAT	IPv6	Status	Action
<input type="checkbox"/>	0/35	-1	br_0_0_35	Bridge	Disabled	Disabled	Disabled	Unconfigured	

## Add an Ethernet WAN Connection

If you are adding an Ethernet WAN connection you will be presented with the following configuration options.

### CONNECTION TYPE

**Protocol:** Select the protocol type **MAC Encapsulation Routing (MER)**, **PPP over Ethernet (PPPoE)**, or **Bridging** from the dropdown menu.

**Multiple Vlan:** If you wish to Enable Multiple Vlan Over One Connection, check the box.

**802.1P Priority [0-7]:** Enter the 802.1P priority number.

**802.1Q VLAN ID [0-4094]:** Enter the VLAN ID.

**INTERNET SETUP**

Wide Area Network (WAN) Service Setup

**CONNECTION TYPE**

Protocol: Bridging

Enable Multiple Vlan Over One Connection:

802.1P Priority [0-7]: -1

802.1Q VLAN ID [0-4094]: -1

## PPP USERNAME AND PASSWORD

If you selected **PPP over Ethernet (PPPoE)**, enter your PPP details and proceed to the **Network Address Translation Settings**.

## NETWORK ADDRESS TRANSLATION SETTINGS

**Enable NAT:** Check this to enable the router to use NAT to assign IP addresses for your devices.

**Enable Firewall:** Check to enable the firewall.

**Enable IGMP Multicast:** Check to enable IGMP Multicast.

**Enable MLD Proxy:** Check to enable the MLD proxy.

**Service Name:** Enter the service name.

Click **Next** to continue.

## PPP USERNAME AND PASSWORD

PPP Username:

PPP Password:

Confirm PPP Password:

Authentication Method:  ▼

Dial On Demand (With Idle Timeout Timer):

Inactivity Timeout:  (minutes [1-4320])

Dial On Manual:

PPPoE pass-through:

MTU Size:  (576-1492)

MRU Size:  (576-1492)

PPP IP Extension:

**IPV4 Setting**

Use Static IP Address:

IP Address:

**IPV6 Setting**

Enable IPv6 for this service:

Request IPv6 Address:

Request Prefix Delegation:

## NETWORK ADDRESS TRANSLATION SETTINGS

Enable NAT:

Enable Firewall:

Enable IGMP Multicast:

Enable MLD Proxy:

Service Name:

## WAN IP SETTINGS

If you selected **MAC Encapsulation Routing (MER)**, enter your IPv4 and/or IPv6 details and proceed to the **Network Address Translation Settings**.

## NETWORK ADDRESS TRANSLATION SETTINGS

**Enable NAT:** Check this to enable the router to use NAT to assign IP addresses for your devices.

**Enable Firewall:** Check to enable the firewall.

**Enable IGMP Multicast:** Check to enable IGMP Multicast.

**Enable MLD Proxy:** Check to enable the MLD proxy.

**Service Name:** Enter the service name.

Click **Next** to continue.

### WAN IP SETTINGS

#### IPv4 Setting

- Obtain an IP address automatically
- Use the following IP address:
  - WAN IP Address:
  - WAN Subnet Mask:
  - Default Gateway:
- Obtain DNS info automatically from WAN interface
- Use the following Static DNS IP address:
  - Primary DNS server:
  - Secondary DNS server:

#### IPv6 Setting

- Enable IPv6 for this service.
- Obtain an IPv6 address automatically:
  - Request IPv6 Address:
  - Request Prefix Delegation:
- Use the following Static IPv6 address:
  - WAN IPv6 Address/Prefix Length:
  - Wan Gateway IPv6 Address:
  - Primary IPv6 Dns:
  - Secondary IPv6 Dns:

### NETWORK ADDRESS TRANSLATION SETTINGS

- Enable NAT:
- Enable Firewall:
- Enable IGMP Multicast:
- Enable MLD Proxy:
- Service Name:



## BRIDGE SETTINGS

If you selected **Bridging**, confirm the **Service Name** and click **Next** to continue.

## BRIDGE SETTINGS

Service Name:

Click **Next** to continue.

## Add Ethernet WAN Summary

Once you have input your Ethernet WAN settings, you will be presented with a summary screen. Click **Apply** to apply your Ethernet WAN settings or **Back** to make adjustments.

**WAN**

Make sure that the settings below match the settings provided by your ISP.

Click "Apply" to save these settings. Click "Back" to make any modifications.  
NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

**SETUP - SUMMARY**

<b>PORT :</b>	LAN4
<b>Connection Type:</b>	PPPoE
<b>Service Name:</b>	pppoe_eth0_1
<b>Service Category:</b>	UBR
<b>IP Address:</b>	Not Applicable
<b>Service State:</b>	Enabled
<b>NAT:</b>	Enabled
<b>Firewall:</b>	Enabled
<b>IGMP Multicast:</b>	Disabled
<b>Quality Of Service:</b>	Disabled

## Add a DSL WAN Connection

If you are adding a DSL WAN connection you will be presented with the following configuration options.

### ATM PVC CONFIGURATION

- VPI:** Virtual path identifier (VPI) is the virtual path between two points in an ATM network. Its valid value is between 0 and 255. Enter the correct VPI provided by your ISP. By default, VPI is set to 8.
- VCI:** Virtual channel identifier (VCI) is the virtual channel between two points in an ATM network. Its valid value is between 1 and 65535. Enter the correct VCI provided by your ISP. By default, VCI is set to 8.

**Service Category:** Select the Quality of Service types for this Virtual Circuit. The ATM QoS types include CBR (Constant Bit Rate), VBR (Variable Bit Rate) and UBR (Unspecified Bit Rate). These QoS types are all controlled by the parameters specified below, including PCR, SCR and MBS.

**Peak Cell Rate:** Peak cell rate (PCR) is the maximum rate at which cells can be transmitted along a connection in the ATM network.

**Sustainable Cell Rate:** Sustainable cell rate (SCR) is the maximum rate that traffic can pass over PVC without the risk of cell loss.

**Maximum Burst Size:** Maximum burst size (MBS) is the maximum number of cells that can be transmitted at the PCR.

**INTERNET SETUP**

Wide Area Network (WAN) Service Setup

**ATM PVC CONFIGURATION**

**VPI:**  (0-255)

**VCI:**  (32-65535)

**Service Category:**  ▾

**Peak Cell Rate:**  (cells/s)

**Sustainable Cell Rate:**  (cells/s)

**Maximum Burst Size:**  (cells)

**IP QOS SCHEDULER ALGORITHM**

**Strict Priority**

Precedence of queue:  (lowest)

**Weighted Fair Queuing**

**Weight Value of queue:**  (1-63)

**MPAAL Group Precedence:**  ▾

**CONNECTION TYPE**

**Protocol:**  ▾

**Encapsulation Mode:**  ▾

**Enable Multiple Vlan Over One Connection:**

**802.1P Priority [0-7]:**

**802.1Q VLAN ID [0-4094]:**

## IP QOS SCHEDULER ALGORITHM

Select whether to use **Strict Priority** or **Weighted Fair Queuing**.

If you selected **Strict Priority**, enter the **precedence of the queue** (0-8).

If you selected **Weighted Fair Queuing**, enter the **Weight Value of the queue** and the **MPAAL Group Precedence**.

## CONNECTION TYPE

**Protocol:** Select the protocol type **MAC Encapsulation Routing (MER)**, **PPP over Ethernet (PPPoE)**, or **Bridging** from the dropdown menu.

**Multiple Vlan:** If you wish to Enable Multiple Vlan Over One Connection, check the box.

**802.1P Priority [0-7]:** Enter the 802.1P priority number.

**802.1Q VLAN ID [0-4094]:** Enter the VLAN ID.

### IP QOS SCHEDULER ALGORITHM

- Strict Priority**  
 Precedence of queue:  (lowest)
- Weighted Fair Queuing**  
 Weight Value of queue:  (1-63)  
 MPAAL Group Precedence:

### CONNECTION TYPE

**Protocol:**

**Encapsulation Mode:**

**Enable Multiple Vlan Over One Connection:**

**802.1P Priority [0-7]:**

**802.1Q VLAN ID [0-4094]:**

## PPP USERNAME AND PASSWORD

If you selected **PPP over Ethernet (PPPoE)**, enter your PPP details and proceed to the **Network Address Translation Settings**.

## NETWORK ADDRESS TRANSLATION SETTINGS

**Enable NAT:** Check this to enable the router to use NAT to assign IP addresses for your devices.

**Enable Firewall:** Check to enable the firewall.

**Enable IGMP Multicast:** Check to enable IGMP Multicast.

**Enable MLD Proxy:** Check to enable the MLD proxy.

**Service Name:** Enter the service name.

Click **Next** to continue.

**PPP USERNAME AND PASSWORD**

PPP Username:

PPP Password:

Confirm PPP Password:

Authentication Method: AUTO ▼

Dial On Demand (With Idle Timeout Timer):

Inactivity Timeout:  (minutes [1-4320])

Dial On Manual:

PPPoE pass-through:

MTU Size:  (576-1492)

MRU Size:  (576-1492)

PPP IP Extension:

**IPV4 Setting**

Use Static IP Address:

IP Address:

**IPV6 Setting**

Enable IPv6 for this service:

Request IPv6 Address:

Request Prefix Delegation:

**NETWORK ADDRESS TRANSLATION SETTINGS**

Enable NAT:

Enable Firewall:

Enable IGMP Multicast:

Enable MLD Proxy:

Service Name:

## Add DSL WAN Summary

Once you have input your DSL WAN settings, you will be presented with a summary screen. Click **Apply** to apply your Ethernet WAN settings or **Back** to make adjustments.

**WAN**

Make sure that the settings below match the settings provided by your ISP.

Click "Apply" to save these settings. Click "Back" to make any modifications.

NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

**SETUP - SUMMARY**

<b>PVC / VPI / VCI :</b>	0 / 8 / 35
<b>Connection Type:</b>	PPPoE
<b>Service Name:</b>	pppoe_0_8_35
<b>Service Category:</b>	UBR
<b>IP Address:</b>	Automatically Assigned
<b>Service State:</b>	Enabled
<b>NAT:</b>	Disabled
<b>Firewall:</b>	Disabled
<b>IGMP Multicast:</b>	Disabled
<b>Quality Of Service:</b>	Enabled

# Wireless Connection

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

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

If you want to manually configure the wireless settings on your router, click **Manual Wireless Connection Setup**. Refer to **Wireless Basics** on page 48.

Finally, to reset the wireless configuration to the default settings, click **Reset to Unconfigured**.

The screenshot shows a web-based configuration wizard for wireless connections. It is divided into several sections, each with a title bar and a main content area. The first section, 'WIRELESS CONNECTION', provides an overview and a note about duplicating changes. The second section, 'WIRELESS CONNECTION SETUP WIZARD', offers a guided setup option with a 'Wireless Connection Setup Wizard' button and a note about following the Quick Installation Guide. The third section, 'ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD', provides a step-by-step guide for connecting devices with a 'Add Wireless Device with WPS' button. The fourth section, 'MANUAL WIRELESS CONNECTION OPTIONS', offers a manual setup option with a 'Manual Wireless Connection Setup' button. The final section, 'WPS RESET TO UNCONFIGURED', provides a 'Reset to Unconfigured' button to return settings to factory defaults.

**WIRELESS CONNECTION**

There are two ways to setup your wireless connection. You can use the Wireless Connection Setup Wizard or you can manually configure the connection.

Please note that changes made on this section will also need to duplicated to your wireless clients and PC.

**WIRELESS CONNECTION SETUP WIZARD**

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

Wireless Connection Setup Wizard

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

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

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

Add Wireless Device with WPS

**MANUAL WIRELESS CONNECTION OPTIONS**

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

Manual Wireless Connection Setup

**WPS RESET TO UNCONFIGURED**

Wps reset to unconfigured, the "wireless settings" will be reset to factory default, other settings will remain unchanged.

Reset to Unconfigured

## Wireless Connection Setup Wizard

If you clicked **Wireless Connection Setup Wizard**, the opening screen of the wizard will be displayed.

Enter a unique **Network Name (SSID)** to identify your network.

Choose either **Automatically assign a network key** and **Manually assign a network key**. Automatic is recommended.

Unless your clients do not support WPA encryption, it is recommended that you check **Use WPA encryption instead of WEP** as WPA encryption is more robust.

Click **Next** when you are done.

If you selected **Manually assign a network key**, you will be prompted to enter your own network key.

Enter a **Network Key** that adheres to the stated guidelines and click **Next**.

Finally, you will see a summary of your chosen wireless configuration.

If you are satisfied with these settings, click **Save**, or click **Prev** to go back and amend your choices.

**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 key (also called WEP or WPA key) to your network

Manually assign a network key

Use this option if you prefer to create your own key

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

**WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD**

The WPA (Wi-Fi Protected Access) key must meet one of following guidelines.

- Between 8 and 63 characters (A longer WPA key is more secure than a short one)
- Exactly 64 characters using 0-9 and A-F

Network Key :

**WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD**

Please enter the following settings in the wireless device that you are adding to your wireless network and keep a note of it for future reference

Network Name (SSID) : **dlink-2790U-z**

Wireless Security Mode : **WPA-PSK TKIP**

Network Key: **Wq1S6z8Bou500YPa**



## Add Wireless Device with WPS

If you clicked **Add Wireless Device with WPS**, the opening screen of the Wi-Fi Protected Setup (WPS) wizard will be displayed.

To connect a WPS client, select **Auto**.

If you select **Manual**, you will see a summary of your current wireless security settings. Clients will need to input these settings manually if they wish to connect to your wireless network.

Click **Next** to continue.

If you selected **Auto**, then if WPS is not already enabled you will be prompted to enable it. Click **Yes** to enable WPS.

Choose whether you want to connect via Personal Identification Number (**PIN**) or Push Button Configuration (**PBC**).

If you selected **PIN**, simply enter your PIN of your wireless device.

Click **Connect** to proceed to the next step.

Press the button on your wireless client device within the indicated time period and wait for the connection to be established.

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

Please select one of the following configuration methods and click next to continue.

- Auto -- Select this option if your wireless device supports WPS ( Wi-Fi Protected Setup )
- Manual -- Select this option will display the current wireless setting for you to configure the wireless device manually

Prev Next Cancel

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

The WPS currently set to disable. click "Yes" to change it to configured status or "No" to leave the wizard

Yes No

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

There are two ways to add wireless device to your wireless network:

- PIN (Personal Identification Number)
- PBC (Push Button Configuration)

PIN :

Please enter the PIN from your wireless device and click the bellow "Connect" button

PBC :

Please press the push button on your wireless device and press the "Connect" button bellow within 120 seconds

Prev Connect

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

Please enter the following settings in the wireless device that you are adding to your wireless network and keep a note of it for future reference

Network Name (SSID) : **dlink-2790U-z**

Wireless Security Mode : **WPA2-PSK AES**

Network Key: **1018010069**

Prev Ok

# 3G Network

This page is used to configure a 3G connection. If you want to access the Internet using a 3G connection, a 3G USB dongle is required. Refer to **Connecting a 3G/4G USB Dongle** on page 39 for more information.

## 3G/4G SETTINGS

**Enable:** Check the box to enable a 3G connection.

## ISP SETTINGS

**Country:** Select the country you are operating the DSL-2790U in.

**ISP:** Select your mobile Internet Service Provider.

**Default APN:** Select whether to use the default APN.

**Telephone:** Enter the telephone number if applicable.

**APN:** Enter the APN.

**Username:** Enter your username if applicable.

**Password:** Enter your password if applicable.

## 3G/4G NETWORK

This section allows you to configure 3g network settings of your router. Please note that this section is optional and you should not need to change any of the settings here to get your network up and running.

## 3G/4G SETTINGS

Current WAN failover priority from high to low is 3G/4G. If you want to change WAN priority, you can click [SETUP->WAN Failover Priority Setup](#)

Enable  (Click this box to enable a 3G connection.)

## ISP SETTING

Country:

ISP:

Default APN:  YES  NO

Telephone:

APN:

Username:

Password:

## CONNECTION SETTINGS

Connection  Always On (Recommended)  
 Connect On-Demand (Close if idle for  minutes)  
 Connect Manually

PPP Authentication

Default Route  Yes  No

NAT Enable

MTU:

## CONNECTION SETTINGS

**Connection:** Select either **Always-on**, **On-Demand** and set the idle time, or **Connect Manually**. Mobile data charges may apply.

**PPP Authentication:** Select a proper authentication method in the drop-down list. You can select **Auto**, **PAP**, or **CHAP**.

**Default Route:** Select to use the **Default Route**.

**NAT Enable:** Check this to enable the router to use NAT to assign IP addresses for your devices.

**MTU:** If you experience connection issues, you may need to change the MTU setting for optimal performance with your specific ISP. 1492 is the default MTU.

## CONNECTION SETTINGS

Connection

Always On (Recommended)  
 Connect On-Demand (Close if idle for  minutes)  
 Connect Manually

PPP Authentication  
Auto ▾

Default Route  
 Yes  No

NAT Enable

MTU:

Save/Apply

Click **Save/Apply** when you are done.

## Connecting a 3G/4G USB Dongle

If you want to connect to the Internet using a 3G/4G connection on your DSL-2790U, a 3G/4G USB dongle and SIM card with a subscription to a mobile ISP is required. The following 3G/4G USB dongles have been tested to work with firmware 1.00.14. Refer to [www.dlink.com](http://www.dlink.com) for the latest available firmware and information on compatible 3/4G USB dongles.

Manufacturer	Compatible USB Dongle Models			
ZTE	EVO AC2746	AC5730	AR 910-A	MF823
Huawei	E8372	E8372	K5150	

## 3G/4G Dongle Installation and Configuration

**Step 1** - Refer to your USB dongle's documentation for SIM card installation instructions.

**Step 2** - Connect your compatible 3G/4G USB dongle to the USB port on the DSL-2790U. Confirm the USB light on the display panel is lit solid green.



**Step 3** - Using the information provided by your ISP, navigate to **Setup > 3G** in the web configuration utility to configure your connection. Refer to **3G Network** on page 37 for more information.

**Step 4** - Navigate to **Status > Device Info > Internet Info > Enabled WAN Connections** to confirm your 3G/4G dongle is properly installed, configured, and connected to the Internet.

**Step 5** - Navigate to **Setup > Failover** to configure your 3G/4G connection as either the primary link or backup connection. Refer to **Failover** on page 40 for more information.

**Step 6** - Congratulations. Your 3G/4G USB dongle is now configured to work with your DSL-2790U.

# Failover

This section will allow you to configure your Internet failover priority. In the event that your primary Internet connection method fails, this device can automatically fall back to using a secondary connection in order to maintain Internet connectivity.

## FAILOVER SETTINGS

- Primary Uplink:** Select the primary Internet connection.
- Backup Uplink:** Select the backup Internet connection.
- Enable Fallback:** Check this box to enable Internet connection failover. The following options will appear:
- Probe Criterion:** Enable fallback to the backup connection after the allotted number of failures.
- Probe Cycle:** Test for Internet connectivity for the following interval.
- Probe Rule:** Select the method of testing for Internet connectivity.

## FAILOVER

Use this section to configure 3G dongle settings for your D-Link router.

### FAILOVER SETTING

Primary Uplink:

Backup Uplink:

### Backup Mechanism

- Enable Fallback
- Probe Criterion: Probing failed after  consecutive times
- Probe Cycle: Every  seconds
- Probe Rule :  ping gateway  
 ping DNS  
 ping host

Click **Save/Apply** when you are done.

# Local Network

This optional section allows you to configure the local network and DHCP settings of your device. The DHCP service supplies IP settings to clients configured to automatically obtain IP settings that are connected to the device through the Ethernet port.

## ROUTER SETTINGS

**Interface Group:** Select the interface group used locally by the router. Leave this as the default if you are not sure.

**Router IP Address:** Enter the IP address of the router. The default IP address is **192.168.1.1**.  
**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**.

**Configure the second IP Address...:** If you wish to add another IP address to use to configure the router, check this box and enter the IP address and subnet mask.

## DHCP SERVER SETTINGS (OPTIONAL)

**Enable/Disable DHCP Server:** By default, DHCP is enabled. You can disable DHCP if required.

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

**DHCP Lease Time:** 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.

Click **Apply** when you are done.

## LOCAL NETWORK

This section allows you to configure the local network settings of your router. Please note that this section is optional and you should not need to change any of the settings here to get your network up and running.

## ROUTER SETTINGS

Use this section to configure the local network settings of your router. The Router 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.

Configure the DSL Router IP Address and Subnet Mask for LAN interface. GroupName

Router IP Address :

Subnet Mask :

Configure the second IP Address and Subnet Mask for LAN interface

IP Address :

Subnet Mask :

## DHCP SERVER SETTINGS (OPTIONAL)

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

Enable DHCP Server

DHCP IP Address Range :  to

DHCP Lease Time :  (hour)

## CONNECTED CLIENT LIST

Hostname	MAC Address	IP Address
08203PCWIN7	00:e0:4c:36:00:31	192.168.1.2

## DHCP RESERVATIONS LIST

MAC Address	IP Address	Remove
-------------	------------	--------

### CONNECTED CLIENT LIST

This table lists each DHCP client, including its hostname, MAC address, IP address, and expiration time.

### DHCP RESERVATIONS LIST

A list of DHCP reservations is displayed. Click **Remove Entries** to delete the selected reservation(s) and **Add Entries** to bring up the Add DHCP Reservation panel.

### ADD DHCP RESERVATIONS (OPTIONAL)

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

Click **Apply** when you are done.

CONNECTED CLIENT LIST		
Hostname	MAC Address	IP Address
08203PCWIN7	00:e0:4c:36:00:31	192.168.1.2

DHCP RESERVATIONS LIST		
MAC Address	IP Address	Remove
<input type="button" value="Add Entries"/> <input type="button" value="Remove Entries"/>		

ADD DHCP RESERVATION (OPTIONAL)	
IP Address :	<input type="text" value="0.0.0.0"/>
MAC Address :	<input type="text" value="00:00:00:00:00:00"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

# IPv6 Local Network

This section enables you to specify various IPv6 settings.

## STATIC LAN IPV6 ADDRESS CONFIGURATION

**Interface Address:** Use this option to specify a static IPv6 Address.

## STATIC LAN IPV6 ADDRESS CONFIGURATION

**Enable DHCPv6 Server:** Enable or disable the DHCPv6 server function.

**LAN Address Config Mode:** Select either stateless (host requests) or stateful (server provisions) LAN IPv6 addressing.

**Start/End Interface ID:** Enter the range of IP addresses the DHCPv6 server can issue from.

**Leased Time:** The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.

## SITE PREFIX CONFIGURATION

**Enable RADVD:** Enable or disable the Router Advertisement Daemon.

**Enable ULA Prefix Advertisement:** Select whether to enable ULA Prefix advertisement. If selected, choose to either **Randomly Generate** the ULA Prefix or **Statically Configure** the ULA Prefix by inputting the **Prefix**, **Preferred Life Time** in hours, and **Valid Life Time** in hours.

**Enable MLD Snooping:** Select to enable Multicast Listener Discovery.

Click **Save/Apply** when you are done.

### IPV6 LAN AUTO CONFIGURATION

Note: Stateful DHCPv6 is supported based on the assumption of prefix length less than 64. Interface ID does NOT support ZERO COMPRESSION "::.". Please enter the complete information. For example: Please enter "0:0:0:2" instead of "::2".

### STATIC LAN IPV6 ADDRESS CONFIGURATION

Interface Address (prefix length is required):

### IPV6 LAN APPLICATIONS

Enable DHCPv6 Server  
 Stateless  
 Stateful  
 Start interface ID:   
 End interface ID:   
 Leased Time (hour):

### SITE PREFIX CONFIGURATION

Enable RADVD  
 Enable ULA Prefix Advertisement  
 Randomly Generate  
 Statically Configure  
 Prefix:   
 Preferred Life Time (hour):   
 Valid Life Time (hour):   
 Enable MLD Snooping

Save/Apply



# Time and Date

This section enables you to use an international time server to set the internal time and date for the router.

## TIME SETTINGS

**Automatically Synchronize:** Enable or disable automatic synchronisation with an Internet Time Server.

**1st NTP Time Server:** Specify an address for the primary Internet Time Server.

**2nd NTP Time Server:** Specify an address for the secondary Internet Time Server.

## TIME CONFIGURATION

**Current Local Time:** Displays the current local time.

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

**Enable Daylight Saving:** Enable or disable daylight saving.

**Daylight Saving Start/End:** Specify the time and date when daylight saving should start/end.

**TIME AND DATE**

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 NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

**TIME SETTINGS**

**Automatically synchronize with Internet time servers**  
**First NTP time server :**   
**Second NTP time server :**

**TIME CONFIGURATION**

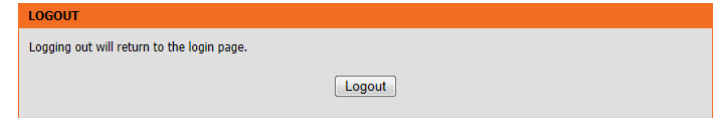
**Current Router Time :** Tue Nov 17 17:06:41 2015  
**Time Zone :**   
 Enable manual Daylight Saving, overwrite automatic rule  

	Month	Week	Day	Time
<b>Daylight Saving Dates : Start</b>	<input type="text" value="Jan"/>	<input type="text" value="2nd"/>	<input type="text" value="Sun"/>	<input type="text" value="12 am"/>
<b>End</b>	<input type="text" value="Jan"/>	<input type="text" value="2nd"/>	<input type="text" value="Sun"/>	<input type="text" value="12 am"/>

Click **Apply** when you are done.

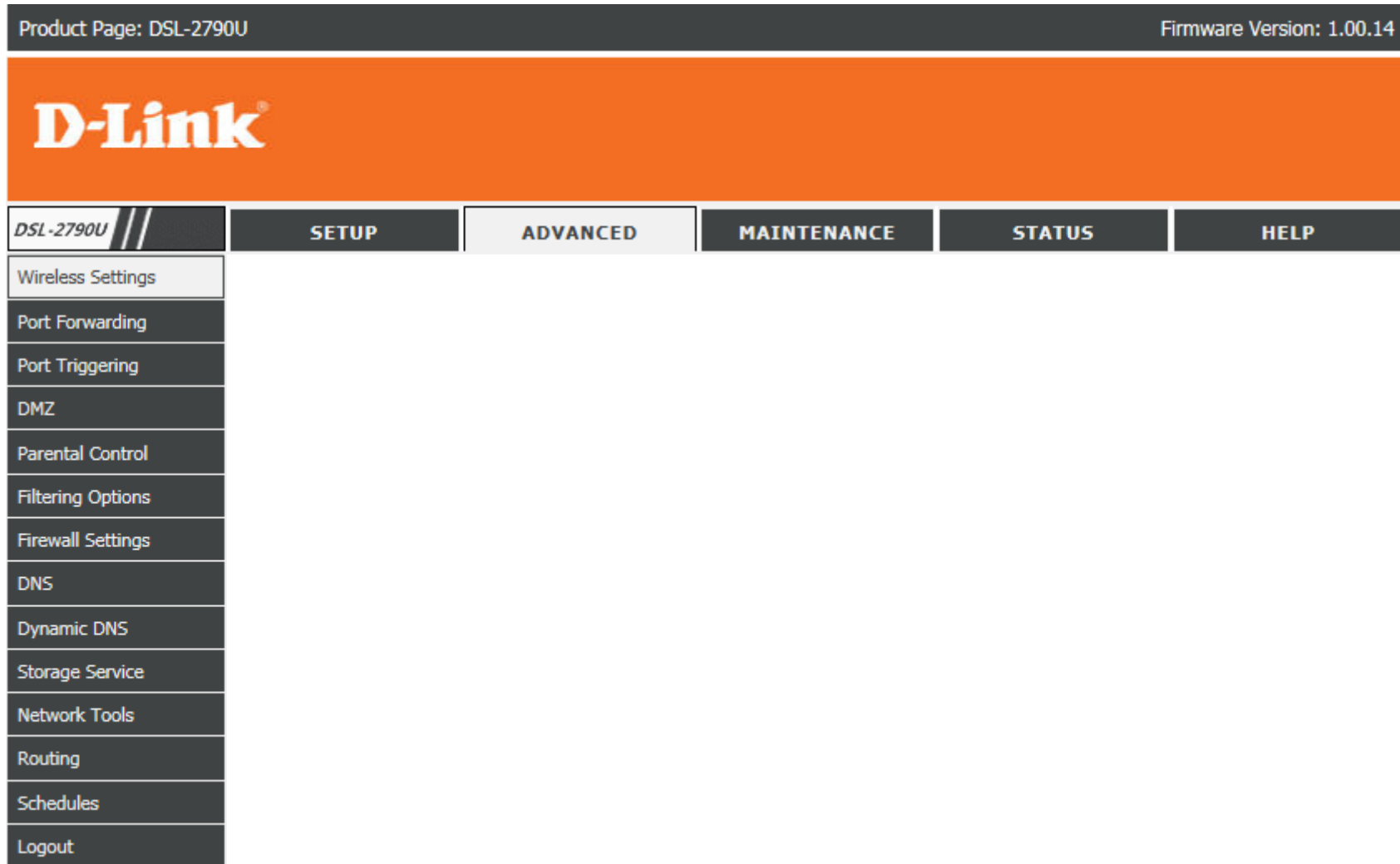
# Logout

Click **Logout** when you are done configuring your router.



# Advanced

The Advanced tab provides access to configure the less commonly used settings of your DSL-2790U.



# Wireless Settings

This page allows you to manually configure the router's wireless connectivity and security. For details, see **Wireless Connection** on page 34.

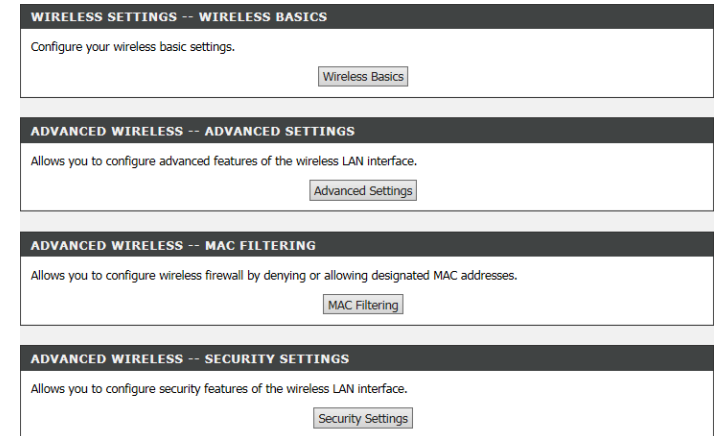
This page allows you to manually configure the router's wireless connectivity and security.

For basic wireless settings, click **Wireless Basics**.

For advanced wireless settings, click **Advanced Settings**.

To configure MAC address filtering, click **MAC Filtering**.

To configure the router's wireless security, click **Security Settings**.



## Wireless Basics

### WIRELESS NETWORK SETTINGS

**Enable Wireless:** Check this box to enable the router's wireless functionality. The **Wireless On/Off** button on the back of the DSL-2790U performs the same function.

**Wireless Network Name (SSID):** Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive. Choose something for easy identification by wireless clients.

**Visibility Status:** **Visible** networks conveniently advertise their existence to devices looking for Wi-Fi networks to join. **Invisible**, or hidden, networks do not. To join an invisible network users must manually input its SSID.  
**Note:** Making a network **Invisible** is not a form of security alone.

**Country:** Select the country in which your router resides. This will automatically configure the transmit power, frequencies, and available channels the router's wireless radios will use. This is based on the regulation provisions set by each country.

**Wireless Channel:** Select the desired channel you wish your wireless network to operate on. **Auto** is the default and recommended setting. The router will automatically select the clearest wireless channel available. The current channel in use is displayed to the right of the selection box. Advanced users may wish to manually select a channel. This is typically for areas with a large number of wireless networks nearby, in order to improve wireless transmission.

**802.11 Mode:** Select from the desired 802.11 mode of operation you desire. **802.11n auto** is the default and recommended setting.

**Bandwidth:** Use the drop-down menu to select the channel bandwidth. **Auto** or **20 MHz** are the default and recommended settings.  
**Note:** Not all wireless devices support 40 MHz bandwidth.

Click **Apply** when you are done.

**WIRELESS BASICS**

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

**WIRELESS NETWORK SETTINGS**

**Enable Wireless**

**Wireless Network Name (SSID):**

**Visibility Status:**  Visible  Invisible

**Country:**

**Wireless Channel:**  (Current: CH 1)

**802.11 Mode:**

**Bandwidth:**

Please take note of your SSID as you will need to duplicate the same settings to your wireless devices and PC.

## Advanced Settings

### ADVANCED WIRELESS SETTINGS

**Multicast Rate:** **Auto** is the default and recommended setting.

**Fragmentation Threshold:** **2346** is the default and recommended setting. Packets exceeding this threshold, in bytes, will be fragmented before transmission. Advanced users may wish to adjust this value to improve performance in the presence of radio frequency (RF) interference.

**RTS Threshold:** **2347** is the default and recommended setting. Advanced users may wish to make minor adjustments if data flow problems exist.

**DTIM Interval:** **1** is the default and recommended setting. Delivery traffic indication messages inform wireless clients of how often to listen for buffered multicast or broadcast data.

**Beacon Interval:** **100** is the default and recommended setting. Specify a value for the beacon interval. Beacons are packets sent to synchronize a wireless network.

**Global Max Clients:** **16** is the default and recommended setting. Specify the maximum number of wireless clients allowed to connect.

**Transmit Power:** **100%** is the default and recommended setting. You may set the transmit power from 20-100% in 20% increments.

**WMM(Wi-Fi Multimedia):** WMM (Wi-Fi Multimedia) is a QoS (Quality of Service) system for improving the quality of video and voice applications on your wireless network. **Enable** is the default and recommended setting.

#### ADVANCED SETTINGS

These options are for users that wish to change the behaviour of their 802.11n wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

#### ADVANCED WIRELESS SETTINGS

**Multicast Rate:** Auto

**Fragmentation Threshold:** 2346

**RTS Threshold:** 2347

**DTIM Interval:** 1

**Beacon Interval:** 100

**Global Max Clients:** 16

**Transmit Power:** 100%

**WMM(Wi-Fi Multimedia):** Enabled

#### SSID

**Enable Wireless:**

**Wireless Network Name (SSID):** dlink-2790U-z

**Visibility Status:**  Visible  Invisible

**User Isolation:** Off

**Disable WMM Advertise:** Off

**Enable Wireless Multicast Forwarding (WMMF):** Off

**Max Clients:** 16 (1 ~ 128)

#### GUEST/VIRTUAL ACCESS POINT-1

**Enable Wireless Guest Network:**

**Guest SSID:** D-Link GUEST1

**Visibility Status:**  Visible  Invisible

**User Isolation:** Off

**Disable WMM Advertise:** Off

**Enable Wireless Multicast Forwarding (WMMF):** Off

**Max Clients:** 16 (1 ~ 128)

#### GUEST/VIRTUAL ACCESS POINT-2

**Enable Wireless Guest Network:**

**Guest SSID:** D-Link GUEST2

**Visibility Status:**  Visible  Invisible

**User Isolation:** Off

**Disable WMM Advertise:** Off

**Enable Wireless Multicast Forwarding (WMMF):** Off

**Max Clients:** 16 (1 ~ 128)

## SSID

**Enable Wireless:** Check this box to enable the router's wireless functionality. The **Wireless On/Off** button on the back of the DSL-2790U performs the same function.

**Wireless Network Name (SSID):** Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive. Choose something for easy identification by wireless clients.

**Visibility Status:** **Visible** networks conveniently advertise their existence to devices looking for Wi-Fi networks to join. **Invisible**, or hidden, networks do not. To join an invisible network users must manually input its SSID.  
**Note:** Making a network **Invisible** is not a form of security alone.

**User Isolation:** **Off** is the default and recommended setting. Turning on user isolation will prevent wireless clients from communicating with each other. This may be desired if the DSL-2790U will be used in a public setting.

**Disable WMM Advertise:** WMM (Wi-Fi Multimedia) is a QoS (Quality of Service) system for improving the quality of video and voice applications on your wireless network.

**Enable Wireless Multicast Forwarding (WMF):** Enable or Disable Wi-Fi Wireless Multicast Forwarding (WMF). The transmission quality of video service such as IPTV may be improved with this option enabled.

**Global Max Clients:** **16** is the default and recommended setting. Specify the maximum number of wireless clients allowed to connect.

**SSID**

**Enable Wireless**

Wireless Network Name (SSID):

Visibility Status:  Visible  Invisible

User Isolation:

Disable WMM Advertise:

Enable Wireless Multicast Forwarding (WMF):

Max Clients:  (1 ~ 128)

---

**GUEST/VIRTUAL ACCESS POINT-1**

**Enable Wireless Guest Network:**

Guest SSID:

Visibility Status:  Visible  Invisible

User Isolation:

Disable WMM Advertise:

Enable Wireless Multicast Forwarding (WMF):

Max Clients:  (1 ~ 128)

---

**GUEST/VIRTUAL ACCESS POINT-2**

**Enable Wireless Guest Network:**

Guest SSID:

Visibility Status:  Visible  Invisible

User Isolation:

Disable WMM Advertise:

Enable Wireless Multicast Forwarding (WMF):

Max Clients:  (1 ~ 128)

---

**GUEST/VIRTUAL ACCESS POINT-3**

**Enable Wireless Guest Network:**

Guest SSID:

Visibility Status:  Visible  Invisible

User Isolation:

Disable WMM Advertise:

Enable Wireless Multicast Forwarding (WMF):

Max Clients:  (1 ~ 128)

Click **Apply** when you are done.

## GUEST/VIRTUAL ACCESS POINT 1-3

**Enable Wireless Guest Network:** Check **Enable** to create a guest wireless network. This network will be separate from your main wireless network.

**Guest (SSID):** Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive. Choose something for easy identification by wireless clients.

**Visibility Status:** **Visible** networks conveniently advertise their existence to devices looking for Wi-Fi networks to join. **Invisible**, or hidden, networks do not. To join an invisible network users must manually input its SSID.  
**Note:** Making a network **Invisible** is not a form of security alone.

**User Isolation:** **Off** is the default and recommended setting. Turning on user isolation will prevent wireless clients from communicating with each other. This may be desired if the DSL-2790U will be used in a public setting.

**Disable WMM Advertise:** WMM (Wi-Fi Multimedia) is a QoS (Quality of Service) system for improving the quality of video and voice applications on your wireless network.

**Enable Wireless Multicast Forwarding (WMF):** Enable or Disable Wi-Fi Wireless Multicast Forwarding (WMF). The transmission quality of video service such as IPTV may be improved with this option enabled.

**Global Max Clients:** **16** is the default and recommended setting. Specify the maximum number of wireless clients allowed to connect.

Click **Apply** when you are done.

The image shows three identical configuration panels for Guest/Virtual Access Points. Each panel has the following settings:

- Enable Wireless Guest Network:**
- Guest SSID:** D-Link GUEST1 (for AP-1), D-Link GUEST2 (for AP-2), D-Link GUEST3 (for AP-3)
- Visibility Status:**  Visible  Invisible
- User Isolation:** Off
- Disable WMM Advertise:** Off
- Enable Wireless Multicast Forwarding (WMF):** Off
- Max Clients:** 16 (range 1 ~ 128)

At the bottom of the configuration area, there are **Apply** and **Cancel** buttons.



## MAC Filtering

Check **Enable Wireless MAC Filtering Policy** to begin denying or allowing wireless access to a specific list of devices based on their MAC address.

### WIRELESS MAC FILTERING LIST

This list displays the current devices allowed or denied access (based on your selection above) to the specified wireless network.

Click **Add** to add a device to the list.

### MAC FILTERING

Enter the **MAC Address** of the device you wish to add to the list along with the SSID you wish to apply the rule to. You may specify the SSID from the drop down box.

Click **Apply** to add the rule to the list.

The screenshot displays the configuration interface for MAC filtering, divided into two main sections. The top section, titled "MAC FILTERING", contains instructions to enter a MAC address and click "Apply". It also features a "Wireless MAC Filtering Policy" section with three radio button options: "Enable Wireless MAC Filtering" (unchecked), "Only ALLOW computers listed to access wireless network" (selected), and "Only DENY computers listed will be blocked to access wireless network" (unchecked). Below these are "Apply" and "Cancel" buttons. The bottom section, titled "WIRELESS MAC FILTERING LIST", shows a table with two columns: "MAC Address" and "SSID". Below the table is an "Add" button. At the bottom of the interface, there is a "MAC FILTERING" section with input fields for "MAC Address" and "SSID" (set to "dlink-2790U-z"), and "Apply" and "Cancel" buttons.

## Security Settings

This page allows you to manually configure the router's wireless security settings. The page will change depending on the selected authentication type.

### WPS SETUP

**Enable WPS:** If you want to enable Wi-Fi Protected Setup (WPS), select **Enable** from the drop-down menu.

**Add Client:** Select the desired WPS connection method, and click **Add Enrollee** to add a new device using WPS. See **Add Wireless Device with WPS** on page 36 for more details.

**Set WPS AP Mode:** Select the desired WPS AP mode.

**Device PIN:** If applicable, enter the WPS PIN.

### WIRELESS SSID

**Select SSID:** Select your wireless SSID.

### WIRELESS SECURITY MODE

**Network Authentication:** Select the desired security type. The remaining settings on the page will change depending on the type you select. Fill out these settings as required.

Click **Apply** when you are done.

#### SECURITY SETTINGS

This page allows you to configure security features of the wireless LAN interface. You can set the network authentication method, select data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength OR setup wireless security through WiFi Protected Setup(WPS). Click "Apply" to configure the wireless security options.

#### WPS SETUP

Enable WPS:

Add Client (This feature is available only in WPA-Personal or Open mode)

Push-Button  PIN

[Help](#)

WPS AP Mode:

Setup AP (Configure all security settings with an external registrar)

Push-Button  PIN

Device PIN:  [Help](#)

#### WIRELESS SSID

Select SSID:

#### WIRELESS SECURITY MODE

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2. WEP is the original wireless encryption standard. WPA and WPA2 provides a higher level of security.

Security Mode:

#### WIRELESS SECURITY MODE

WPA Mode:

WPA passphrase:

WPA Group Rekey Interval:

WPA/WAPI Encryption:

Please take note of your SSID and security Key as you will need to duplicate the same settings to your wireless devices and PC.

# Port Forwarding

This page allows you to manually configure the router's Port Forwarding settings.

This function is used to open ports in your device and re-direct data through those ports to a single PC on your network (WAN-to-LAN traffic). It allows remote users to access services on your LAN, such as FTP for file transfers or SMTP and POP3 for e-mail. The device accepts remote requests for these services at your global IP address. It uses the specified TCP or UDP protocol and port number, and redirects these requests to the server on your LAN with the LAN IP address you specify. Note that the specified private IP address must be within range.

On this page you will see a list of current port forwarding configurations. Click **Add** to add a virtual server.

## PORT FORWARDING SETUP

This list displays the currently forwarded ports.

Click **Add** to add a new rule or **edit** to edit an existing rule.

**PORT FORWARDING**

Port Forwarding allows you to direct incoming traffic from the WAN side (identified by protocol and external port) to the internal server with a private IP address on the LAN side. The internal port is required only if the external port needs to be converted to a different port number used by the server on the LAN side. A maximum of 28 entries can be configured.

Select the service name, and enter the server IP address and click "Apply" to forward IP packets for this service to the specified server.

**PORT FORWARDING SETUP**

Service Name	External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End	Local Lan IP Address	Schedule Rule

## PORT TRIGGERING

- WAN Connection:** Select the interface to use with the rule.
- Select a Service:** Select an service for a preset application or enter a name in Custom Server.
- Schedule:** Select a schedule or choose **Always**.
- Server IP Address:** Enter an IP address to appoint the corresponding client to receive forwarded packets.
- External Port Start/End:** Enter the external port(s).
- Protocol:** Select **TCP** or **UDP**.
- Internal Port Start/End:** Enter the internal port(s).
- LAN Loopback:** Check the box to enable the LAN loopback feature.

### PORT FORWARDING SETUP

Remaining number of entries that can be configured: 28

WAN Connection(s) : 3G dongle/eth4 ▾

Select a Service : (Click to Select) ▾

Custom Service : \_\_\_\_\_

Enable Lan Loopback

Schedule : Always ▾ [View Available Schedules](#)

Local LAN IP Address : 192.168.1. \_\_\_\_\_

External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		
		TCP ▾		

Click **Apply** when you are done.

# Port Triggering

This page allows you to manually configure the router's Port Triggering settings.

## PORT TRIGGERING

On this page you will see a list of current port forwarding configurations. Click **Add** to add a port trigger

**Use Interface:** Select the interface to use with the rule.

**Select an application:** Select an application you want to setup for port triggering or enter a name in Custom application.

**Schedule:** Select a schedule or choose Always.

**Trigger Port Start/End:** Enter the trigger port(s).

**Trigger Protocol:** Select TCP or UDP.

**Open Port Start/End:** Enter the port(s) to open.

Click **Apply** when you are done.

### PORT TRIGGERING

Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Port Trigger dynamically opens up the "Open Ports" in the firewall when an application on the LAN initiates a TCP/UDP connection to a remote party using the "Triggering Ports". The Router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the "Open Ports".

Some applications such as games, video conferencing, remote access applications and others require that specific ports in the Router's firewall be opened for access by the applications. You can configure the port settings from this screen by selecting an existing application or creating your own (Custom application) and click "Apply" to add it.

A maximum of 32 entries can be configured.

### PORT TRIGGERING

Application	Trigger		Open		Use Interface
Name	Protocol	Port Range	Protocol	Port Range	
		Start End		Start End	

Add

### PORT TRIGGERING

Remaining number of entries that can be configured :32

Use Interface : 3G dongle/eth4

Select an application : (Click to Select)

Custom application :

Trigger Port Start	Trigger Port End	Trigger Protocol	Open Port Start	Open Port End	Open Protocol
		TCP			TCP
		TCP			TCP
		TCP			TCP
		TCP			TCP
		TCP			TCP
		TCP			TCP
		TCP			TCP
		TCP			TCP

Apply Cancel

# DMZ

This page allows you to manually configure the router's DMZ settings.

To configure a DMZ host, enter the **DMZ Host IP Address**. If the field is blank, then no DMZ will be configured.

Click **Apply** when you are done.

The screenshot shows a web interface for configuring DMZ settings. It features an orange header with the title "DMZ". Below the header, there is a grey box containing explanatory text: "The DSL Router will forward IP packets from the WAN that do not belong to any of the applications configured in the Port Forwarding table to the DMZ host computer." followed by instructions: "Enter the computer's IP address and click 'Apply' to activate the DMZ host." and "Clear the IP address field and click 'Apply' to deactivate the DMZ host." Below this is a dark grey header with the title "DMZ HOST". Underneath, there is a label "DMZ Host IP Address:" followed by a text input field. At the bottom of the form, there are two buttons: "Apply" and "Cancel".

# Parental Control

This page allows you to manually configure the router's Parental Control settings.

This page provides two useful tools for restricting the Internet access. **Block Websites** allows you to quickly create a list of all websites that you wish to stop users from accessing. **Block MAC Address** allows you to control when clients or PCs connected to the device are allowed to access the Internet.

To set controls based on URL, click **Block Website**.

To set controls based on MAC address, click **Block MAC Address**.

## Block Website

### BLOCK WEBSITE

Displays a list of currently blocked URLs and their schedule.

Click **Add** to add a website to the blocked list.

### BLOCK WEBSITE

Enter the website to be blocked in the **URL** field. Select the **Schedule** from the drop-down list, or select **Manual Schedule** and input the desired schedule.

Click **Apply** to add the website to the blocked list.

**PARENTAL CONTROL -- BLOCK WEBSITE**

Uses URL (i.e. www.yahoo.com) to implement filtering.

**PARENTAL CONTROL -- BLOCK MAC ADDRESS**

Uses MAC address to implement filtering.

**BLOCK WEBSITE**

This page allows you to block websites. If enabled, the websites listed here will be denied access to clients trying to browse that website. Choose "Add", "Edit", or "Delete" to configure block websites.

**BLOCK WEBSITE**

URL	Schedule

**BLOCK WEBSITE**

**Schedule**  
 **Manual Schedule**

**URL :**

**Always**

**Day(s) :**  All Week  Select Day(s)
   
 Sun  Mon  Tue  Wed
   
 Thu  Fri  Sat

**All Day - 24 hrs :**

**Start Time :**  :  (hour:minute, 24 hour time)

**End Time :**  :  (hour:minute, 24 hour time)

## Block MAC Address

### BLOCK MAC ADDRESS

Displays a list of currently blocked MAC Addresses and their schedule.

Click **Add** to add a new restriction.

### TIME OF DAY RESTRICTION

Enter a **User Name** for the blocked user. Select either the **Current PC's MAC Address** or an **Other MAC Address** (which you will need to input into the text field). Enter the desired schedule for the restriction below.

Click **Apply** to add the MAC Address to the blocked list.

#### BLOCK MAC ADDRESS

Time of Day Restrictions -- A maximum of 16 entries can be configured

This page adds a time of day restriction to a special LAN device connected to the router. The "Current PC's MAC Address" automatically displays the MAC address of the LAN device where the browser is running. To restrict another LAN device, click the "Other MAC Address" button and enter the MAC address of the other LAN device. To find out the MAC address of a Windows-based PC, open a command prompt window and type "ipconfig /all".

#### BLOCK MAC ADDRESS

Username	MAC	Schedule

Add Edit Delete

#### TIME OF DAY RESTRICTION

User Name :

**Current PC's MAC Address** :

**Other MAC Address** :

**Schedule Rule** :  [View Available Schedules](#)

**Manual Schedule** :
   
 Day(s) :  All Week  Select Day(s)
   
 Sun  Mon  Tue  Wed
   
 Thu  Fri  Sat

**All Day - 24 hrs** :

**Start Time** :  :  (hour:minute, 24 hour time)

**End Time** :  :  (hour:minute, 24 hour time)

Apply Cancel



## Filtering Options

This page allows you to manually configure the router's Filtering settings.

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). The Filtering Options section is an advanced option that lets you configure what kind of traffic is allowed to pass through the network.

<b>FILTERING OPTIONS -- INBOUND IP FILTERING</b>
Manage incoming traffic.
<a href="#">Inbound IP Filtering</a>
<b>FILTERING OPTIONS -- OUTBOUND IP FILTERING</b>
Manage outgoing traffic.
<a href="#">Outbound IP Filtering</a>
<b>FILTERING OPTIONS -- BRIDGE FILTERING</b>
Uses MAC address to implement filtering. Usefull only in bridge mode.
<a href="#">Bridge Filtering</a>

## Incoming IP Filtering

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

By default, all incoming IP traffic from WAN is blocked when the firewall is enabled, but some IP traffic can be ACCEPTED by setting up filters.

### ACTIVE INBOUND IP FILTERING.

The current active inbound IP filters will be listed here.

Click **Add** to add a new rule to the inbound filter list.

### INCOMING IP FILTERING.

Enter the incoming IP filter rules.

Click **Apply** when you are done.

**INCOMING IP FILTERING**

The screen allows you to create a filter rule to identify incoming IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click "Apply" to save and activate the filter.

By default, all incoming IP traffic from WAN is blocked when the firewall is enabled, but some IP traffic can be **ACCEPTED** by setting up filters.

**ACTIVE INBOUND FILTER**

Name	VPI/VCI	Protocol	Source Address	Source Port	Dest. Address	Dest. Port	Schedule Rule
Add							

**INCOMING IP FILTERING**

Filter Name :

Protocol : Any

Source IP Type : Any

Source IP Address :

Source Subnet Mask :

Start Source IP Address :

End Source IP Address :

Source Port Type : Any

Source Port :  (port or port:port)

Destination IP Type : Any

Destination IP Address :

Destination Subnet Mask :

Start Destination IP Address :

End Destination IP Address :

Destination Port Type : Any

Destination Port :  (port or port:port)

Schedule : Always  [View Available Schedules](#)

**WAN Interfaces (Configured in Routing mode and with firewall enabled only)**  
Select at least one or multiple WAN interfaces displayed below to apply this rule.

Select All

br0/br0

Apply Cancel

## Outgoing IP Filtering

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

By default, all outgoing IP traffic from LAN is allowed, but some IP traffic can be **BLOCKED** by setting up filters.

### ACTIVE OUTGOING IP FILTERING.

The current active outgoing IP filters will be listed here.

Click **Add** to add a new rule to the outgoing filter list.

### OUTGOING IP FILTERING.

Enter the outgoing IP filter rules.

Click **Apply** when you are done.

**OUTGOING IP FILTERING**

This screen allows you to create a filter rule to identify outgoing IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click "Apply" to save and activate the filter.

By default, all outgoing IP traffic from LAN is allowed, but some IP traffic can be **BLOCKED** by setting up filters.

**ACTIVE OUTGOING IP FILTER**

Name	Protocol	Source Address	Source Port	Dest. Address	Dest. Port	Schedule Rule
<input type="button" value="Add"/>						

**OUTGOING IP FILTERING**

**Filter Name :**

**Protocol :** Any ▼

**Source IP Type :** Any ▼

**Source IP Address :**

**Source Subnet Mask :**

**Start Source IP Address :**

**End Source IP Address :**

**Source Port Type :** Any ▼

**Source Port :**  (port or port:port)

**Destination IP Type :** Any ▼

**Destination IP Address :**

**Destination Subnet Mask :**

**Start Destination IP Address :**

**End Destination IP Address :**

**Destination Port Type :** Any ▼

**Destination Port :**  (port or port:port)

**Schedule :** Always ▼ [View Available Schedules](#)

## Bridge Filtering

Bridge Filtering only effects ATM PVCs configured for Bridge mode. ALLOW means that all MAC layer frames will be ALLOWED except those matching with any of the specified rules in the following table. DENY means that all MAC layer frames will be DENIED except those matching with any of the specified rules in the following table.

Set the Bridge Filtering Global Policy to either **ALLOW** or **DENY** the following rules. Click **Apply** after changing the setting.

### BRIDGE FILTER SETUP

The current active bridge filters will be listed here.

Click **Add** to add a new rule to the bridge filter list.

### ADD BRIDGE FILTER

Enter the Bridge Filter rules.

Click **Apply** when you are done.

**BRIDGE FILTERING**

Bridge Filtering is only effective on ATM PVCs configured in Bridge mode. **ALLOW** means that all MAC layer frames will be **ALLOWED** except those matching with any of the specified rules in the following table. **DENY** means that all MAC layer frames will be **DENIED** except those matching with any of the specified rules in the following table.

Create a filter to identify the MAC layer frames by specifying at least one condition below. If multiple conditions are specified, all of them take effect. Click "Apply" to save and activate the filter.

**WARNING : Changing from one global policy to another will cause all defined rules to be REMOVED AUTOMATICALLY! You will need to create new rules for the new policy.**

**Bridge Filtering Global Policy:**

**ALLOW** all packets but **DENY** those matching any of specific rules listed

**DENY** all packets but **ALLOW** those matching any of specific rules listed

Apply Cancel

**BRIDGE FILTER SETUP**

VPI/VCI	Protocol	Destination MAC	Source MAC	Frame Direction	Schedule Rule
Add					

**ADD BRIDGE FILTER**

Protocol Type :

Destination MAC Address :

Source MAC Address :

Frame Direction :

Schedule :  [View Available Schedules](#)

WAN Connection(s):

Apply Cancel

# Firewall Settings

The router's firewall protects your network from malicious Denial of Service (DoS) attacks over the Internet. If you suspect your network to be the target of a DoS attack you may enable these.

## FIREWALL CONFIGURATION

**Enable Attack Prevent:** Select the interface to use with the rule.

**ICMP Echo:** Check to enable ICMP echo protection.

**Fraggle:** Check to enable UDP echo (port 7) protection.

**Echo Chargers:** Check to enable UDP character generator (port 19) protection.

**IP Land:** Check to enable Local Area Network Denial attack protection.

**Port Scan:** Check to enable Port Scan protection.

**TCP Flags: "SYN FIN":** Check to enable SYN FIN protection.

**TCP Flags: "SYN RST":** Check to enable SYN RST protection.

**TCP Flags: "FIN RST":** Check to enable FIN RST protection.

**TCP DoS** Check to enable TCP DoS protection.

**TCP DoS Max Rate:** Enter the maximum number of packets per second to prevent DoS attacks.

**FIREWALL SETTINGS**

Click "Apply" button to make the changes effective after reboot the device.

**FIREWALL CONFIGURATION**

Enable Attack Prevent :

Icmp Echo :

Fraggle :

Echo Chargen :

IP Land :

Port Scan :

TCP Flags: Set "SYN FIN" :

TCP Flags: Set "SYN RST" :

TCP Flags: Set "FIN RST" :

TCP DoS :

TCP DoS Max Rate :  (packets/second)

Apply Cancel

Click **Apply** when you are done.

# DNS

This page allows you to manually configure the router's DNS settings.

Domain Name System (DNS) is an Internet service that translates domain names into IP addresses. Because domain names are alphanumeric, they are easier to remember. The Internet, however, is actually based on IP addresses. Each time you use a domain name, a DNS service must translate the name into the corresponding IP address. For example, the domain name `www.example.com` might be translated to `198.105.232.4`.

The DNS system is, in fact, its own network. If one DNS server does not know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

If you are using the device for DHCP service on the LAN or if you are using DNS servers on the ISP network, select **Obtain DNS Info from a WAN interface**.

If you have DNS IP addresses provided by your ISP, select **Use the following DNS server addresses** and enter these IP addresses in the available entry fields of the **Preferred DNS server** and the **Alternate DNS server**.

Click **Apply** when you are done.

The screenshot shows the DNS configuration page with an orange header. A message at the top states: "Click 'Apply' button to save the new configuration. You must reboot the router to make the new configuration effective." Below this, there are two radio button options. The first option is "Select DNS Server Interface from available WAN interfaces:", which is currently unselected. It features a "Selected DNS Server Interfaces" box on the left and an "Available WAN Interfaces" box on the right containing the text "eth0", "eth4", and "ppp7". Between these boxes are two buttons: "->" and "<-. The second option is "Use the following Static DNS IP address:", which is selected. It includes two input fields labeled "Primary DNS server:" and "Secondary DNS server:". An "Apply/Save" button is located at the bottom right of the form.

# Dynamic DNS

This page allows you to manually configure the router's Dynamic DNS settings.

The DDNS (Dynamic Domain Name System) feature allows you to host a server (e.g. a Web, FTP, or game server) 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 domain name to connect to your server no matter what your IP address is.

## DYNAMIC DNS

This list displays the current dynamic DNS settings including the hostname, username, DNS service provider, and the interface the account is associated to.

Click **Add** to add a Dynamic DNS account.

## ADD DYNAMIC DNS

**DDNS provider:** Select one of the Dynamic DNS organizations from the menu.

**Hostname:** Enter the hostname you registered with the Dynamic DNS provider.

**Interface:** Select the appropriate interface.

**Username:** Enter the username for your Dynamic DNS account.

Click **Apply** when you are done.

**DYNAMIC DNS**

The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (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](http://www.DLinkDDNS.com)

**DYNAMIC DNS**

Hostname	Username	Service	Interface
<input type="button" value="Add"/>			

**ADD DYNAMIC DNS**

**DDNS provider :**

**Hostname :**

**Interface :**

**Username :**

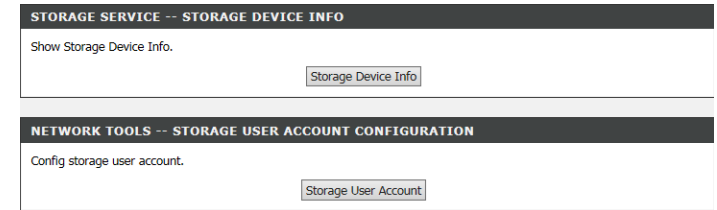
**Password :**

## Storage Device Information

The Storage Service allows you to remotely access storage devices connected to your router.

To view information about connected storages, click **Storage Device Info**.

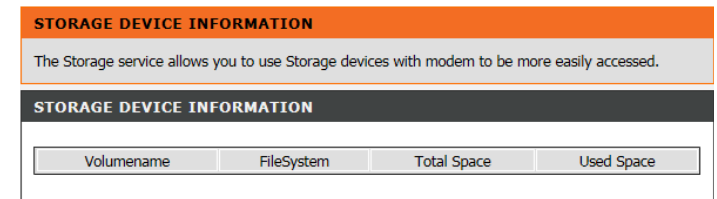
To configure user accounts to manage storage, click **Storage User Account**.



## Storage Device Information

### STORAGE DEVICE INFORMATION

**Storage Device Info** displays a detailed list of connected storage devices.

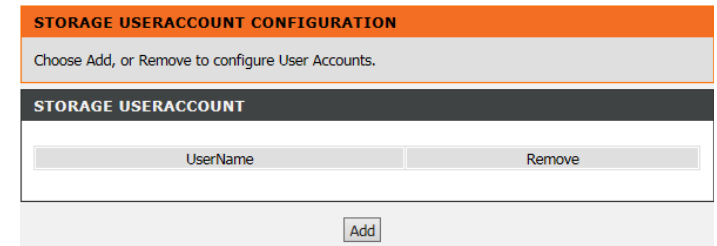


## Storage User Account

### STORAGE USER ACCOUNT

**Storage User Account** allows you to add or remove an account.

Click **Add** to add a Storage User Account.



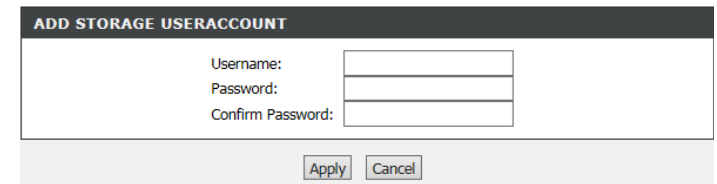
### ADD STORAGE USER ACCOUNT

**Username:** Enter the username for your Storage User Account.

**Password:** Enter the password for your Storage User Account.

**Confirm Password:** Re-enter the password for your Storage User Account.

Click **Apply** to add the Storage User Account.





# Network Tools

This page allows you to configure the device's routing settings. Clicking each button will take you to a new page to configure the relevant network tools category.

**NETWORK TOOLS -- PORT MAPPING**

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

[Port Mapping](#)**NETWORK TOOLS -- IGMP**

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

[IGMP](#)**NETWORK TOOLS -- QUALITY OF SERVICE**

Allows you to enable or disable QoS function.

[Quality of Service](#)**NETWORK TOOLS -- QUEUE CONFIG**

Allows you to add Classification Queue precedence for QoS.

[Queue Config](#)**NETWORK TOOLS -- QoS CLASSIFICATION**

Allows you to edit configure different priority to different interfaces.

[QoS Classification](#)**NETWORK TOOLS -- UPnP**

Allows you to enable or disable UPnP.

[UPnP](#)**NETWORK TOOLS -- ADSL**

Allows you to configure advanced settings for ADSL.

[ADSL Settings](#)**NETWORK TOOLS -- SNMP**

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

[SNMP](#)**NETWORK TOOLS -- TR-069**

Allows you to configure TR-069 protocol.

[TR-069](#)**NETWORK TOOLS -- CERTIFICATES**

Allows you to manage certificates used with TR-069.

[Certificates](#)

## Port Mapping

### PORT MAPPING SETUP

To configure WAN and LAN interfaces groupings, click **Port Mapping**.

A list of the currently-configured groups will appear. Click **Add** to bring up the Add Port Mapping panel.

#### PORT MAPPING

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

#### PORT MAPPING SETUP

Group Name	WAN Interfaces	LAN Interfaces	DHCP Vendor IDs
Default	eth0	LAN3, LAN2, LAN1	

Add

## PORT MAPPING CONFIGURATION

Enter the **Group Name**. Next, select a **WAN Interface** you wish to use for the group. Finally, from the **Available LAN Interfaces** box, click the left arrow to move any LAN interfaces you want to include in the group into the **Grouped LAN Interfaces** box.

Click **Apply** when you are done.

### ADD PORT MAPPING

To create a new mapping group:

1. Enter the Group name and the group name must be unique and select either 2. (dynamic) or 3. (static) below:
2. If you like to automatically add LAN clients to a WAN Interface in the new group add the DHCP vendor ID string. By configuring a DHCP vendor ID string any DHCP client request with the specified vendor ID (DHCP option 60) will be denied an IP address from the local DHCP server.
3. Select interfaces from the available interface list and add it to the grouped interface list using the arrow buttons to create the required mapping of the ports. **Note that these clients may obtain public IP addresses**
4. Click Apply/Save button to make the changes effective immediately

**IMPORTANT** If a vendor ID is configured for a specific client device, please **REBOOT** the client device attached to the modem to allow it to obtain an appropriate IP address.

### PORT MAPPING CONFIGURATION

Group Name:

WAN Interface used in the grouping

Grouped LAN Interfaces

Available LAN Interfaces

LAN3  
LAN2  
LAN1

->

<-

Automatically Add Clients With the following DHCP Vendor IDs

## IGMP

### IGMP SETUP

Check the box to enable Internet Group Management Protocol (IGMP) snooping for extra network traffic security.

Click **Apply** when you are done.

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

**IGMP SETUP**

**Enable IGMP Snooping**

Apply Cancel

## Quality of Service

### QOS SETUP

To enable Quality of Service (QoS), click Quality of Service.

Under Select Default DSCP Mark, select the required DSCP mark or leave the default setting in place.

Click **Apply** when you are done.

#### QOS -- QUEUE MANAGEMENT CONFIGURATION

If Enable QoS checkbox is selected, choose a default DSCP mark to automatically mark incoming traffic without reference to a particular classifier. Click 'Save/Apply' button to save it.

**Note: If Enable QoS checkbox is not selected, all QoS will be disabled for all interfaces.**

**Note: The default DSCP mark is used to mark all egress packets that do not match any classification rules.**

#### QOS SETUP

Enable QoS

Select Default DSCP Mark No Change(-1) ▾

Save/Apply

Cancel

## Queue Config

### QoS SETUP

To set up the QoS queue, click **Queue Config**.

A list of the currently-configured queues will appear. Click **Add** to add a new queue, **Enable** to enable the selected queues, or **Remove** to remove the selected queues.

### ADD QUEUE CONFIG

If you clicked **Add**, the following page will be displayed.

Enter a name for your queue under **Queue Name**, **Enable** or **Disable** it, and choose the **Interface** that the queue will use.

Click **Save/Apply** when you are done.

**QUEUE CONFIG**

QoS Queue Setup -- A maximum 8 entries can be configured.

If you disable WMM function in Wireless Page, queues related to wireless will not take effects. SP and WFQ can not be enabled at the same time. The QoS function has been disabled. Queues would not take effects.

---

**QUEUE CONFIG LIST**

Name	Key	Interface	Precedence	Enable	Remove
<input type="button" value="Add"/> <input type="button" value="Enable"/> <input type="button" value="Remove"/>					

---

**QoS QUEUE CONFIGURATION**

This screen allows you to configure a QoS queue and assign it to a specific layer2 interface. The scheduler algorithm is defined by the layer2 interface. Click 'Save/Apply' to save and activate the queue.

**Note: For SP scheduling, queues assigned to the same layer2 interface shall have unique precedence. Lower precedence value implies higher priority for this queue relative to others.**

---

**ADD QUEUE CONFIG**

Queue Name:

Enable:

Interface:

Precedence:

Queue Weight: [1-63]

## QoS Classification

### QOS CLASSIFICATION SETUP

To set up network traffic classes, click **QoS Classification**.

A list of the currently-configured classes will appear. Click **Add** to add a new class, **Enable** to enable the selected classes, **Edit** to edit an existing class, or **Remove** to remove the selected classes.

**QOS CLASSIFICATION**

QoS Classification Setup -- A maximum 32 entries can be configured.

Choose Add or Remove to configure network traffic classes.  
If you disable WMM function in Wireless Page, classification related to wireless will not take effects  
The QoS function has been disabled. Classification rules would not take effects.

**QOS CLASSIFICATION SETUP**

CLASSIFICATION CRITERIA													
Class Name	Order	Class Intf	Ether Type	SrcMAC/ Mask	DstMAC/ Mask	SrcIP/ PrefixLength	DstIP/ PrefixLength	Proto	SrcPort	DstPort	DSCP Check	TOS Check	80 Ch
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>&lt;</span> <div style="flex-grow: 1; border: 1px solid #ccc; height: 15px;"></div> <span>&gt;</span> </div>													

## ADD NETWORK TRAFFIC CLASS RULE

If you clicked **Add**, the following page will be displayed.

Under **Traffic Class Name** enter the name of your class. Choose one or more criteria for the classification and configure it accordingly.

## SPECIFY CLASSIFICATION CRITERIA

Define your QoS Criteria here.

## NETWORK TRAFFIC CLASSIFICATION RESULTS

Enter your classification results.

Click **Apply/Save** when you are done.

### QUALITY OF SERVICE

The screen creates a traffic class rule to classify the upstream traffic, assign queue which defines the precedence and the interface and optionally overwrite the IP header DSCP byte. A rule consists of a class name and at least one condition below. All of the specified conditions in this classification rule must be satisfied for the rule to take effect. Click "Apply" to save and activate the rule.

#### Assign ATM Priority and/or DSCP Mark for the class

If non-blank value is selected for "Assign Differentiated Services Code Point (DSCP) Mark", the corresponding DSCP byte in the IP header of the upstream packet is overwritten by the selected value.

### ADD NETWORK TRAFFIC CLASS RULE

**Traffic Class Name:**

**Rule Order:** Last

**Rule Status:** Disable

### SPECIFY TRAFFIC CLASSIFICATION RULES

Enter the following "Ether Type" conditions either for IP level, or for ARP, or for IEEE 802.1p and so on.

### SPECIFY CLASSIFICATION CRITERIA

A blank criterion indicates it is not used for classification.

**Class Interface:** LAN

**Ether Type:**

**Source MAC Address:**

**Source MAC Mask:**

**Destination MAC Address:**

**Destination MAC Mask:**

### NETWORK TRAFFIC CLASSIFICATION RESULTS

Must select a classification queue. A blank mark or tag value means no change.

**Assign Classification Queue:**

**Mark Differentiated Service Code Point (DSCP):**

**Mark 802.1p priority:**

**Tag VLAN ID [0-4094]:**



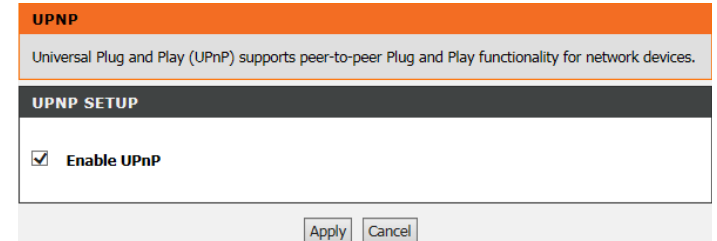
## UPNP

### UPNP SETUP

To enable or disable Universal Plug and Play (UPnP), click **UPnP**.

Check the box to **Enable UPnP**.

Click **Apply** when you are done.



The screenshot shows a web interface for UPnP configuration. At the top, there is an orange header with the text "UPNP". Below this, a light gray box contains the text: "Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices." Underneath is a dark gray header with the text "UPNP SETUP". The main content area is white and contains a single checkbox labeled "Enable UPnP", which is checked. At the bottom right of the form, there are two buttons: "Apply" and "Cancel".

## ADSL

### ADSL SETTINGS

To configure the ADSL-VDSL modulation, click **DSL Settings**.

In most cases you can leave the settings at their default values.

Click **Apply** when you are done.

**ADSL**

This page allows you to configure the modem's ADSL modulation.  
Select the modulation below.

**ADSL SETTINGS**

- G.Dmt Enabled
- T1.413 Enabled
- ADSL2 Enabled
- AnnexL Enabled
- ADSL2+ Enabled
- AnnexM Enabled

Select the phone line pair below.

- Inner pair
- Outer pair

Capability

- Bitswap Enable
- SRA Enable

Apply Cancel

## SNMP

### SNMP CONFIGURATION

To configure the Simple Network Management Protocol, click **SNMP**.

Check the box to **Enable SNMP Agent**. This will unlock the SNMP configuration options.

Click **Apply** when you are done.

**SNMP**

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

Select the desired values and click "Apply" to configure the SNMP options.

**SNMP -- CONFIGURATION**

**Enable SNMP Agent**

Read Community : public

Set Community : private

System Name : Broadcom

System Location : unknown

System Contact : unknown

Trap Manager IP : 0.0.0.0

Apply Cancel

## TR-069

### TR-069 CLIENT CONFIGURATION

To configure the WAN management protocol (TR-069), click **TR-069**.

TR-069 allows an Auto-Configuration Server (ACS) to perform auto-configuration, provision, collection, and diagnostics on this device.

Check the box to **Enable WAN Management Protocol (TR-069)**. This will unlock the TR-069 configuration options.

Click **Apply** when you are done.

**TR-069**

WAN Management Protocol (TR-069) allows a Auto-Configuration Server (ACS) to perform auto-configuration, provision, collection, and diagnostics to this device.

Select the desired values and click "Apply" to configure the TR-069 client options.

---

**TR-069 CLIENT -- CONFIGURATION**

**Inform:**  Disable  Enable

**Inform Interval:**

**ACS URL:**

**ACS User Name:**

**ACS Password:**

**WAN Interface used by TR-069 client:**

**Display SOAP messages on serial console**  Disable  Enable

**Connection Request Authentication**

**Connection Request User Name:**

**Connection Request Password:**

## Certificates

To configure the certificates, click **Certificates**.

Click **Local Cert** to import local certificates that are used by peers to verify your identity.

Click **Trusted CA** to import the CA certificates used by you to verify peers' identities.

### Local Cert

#### LOCAL CERTIFICATES

On this page, you can acquire the local certificate by creating a certificate request or importing a certificate. You may also create or remove a certificate.

Click **Create a New Certificate Request** to bring up the Create New Certificate Request page.

Click **Import Certificate** to import a local certificate.

#### CREATE NEW CERTIFICATE REQUEST

If you clicked **Create a New Certificate Request**, you will see the following page.

The **Common Name** is the "fully qualified domain name," (or FQDN) used for DNS lookups of your server (for example, www.mydomain.com). Browsers use this information to identify your web site. Some browsers will refuse to establish a secure connection with your site if the server name does not match the common name in the certificate. Please do not include the protocol symbol "http://", port numbers, or pathnames in the common name. Do not use wildcard characters such as "\*" or "?", and do not use an IP address.

Click **Apply** when you are done. You will see the generated certificate request.

The screenshot shows two sections. The first section, titled "CERTIFICATES -- LOCAL", contains the text "Local certificates are used by peers to verify your identity." and a button labeled "Local Cert". The second section, titled "CERTIFICATES -- TRUSTED CA", contains the text "Trusted CA certificates are used by you to verify peers' certificates." and a button labeled "Trusted CA".

The screenshot shows the "LOCAL CERTIFICATES" section. It features a table with the following columns: Name, In Use, Subject, Type, and Action. Below the table are two buttons: "Create Certificate Request" and "Import Certificate".

The screenshot shows the "CREATE NEW CERTIFICATE REQUEST" form. It includes a header "LOCAL CERTIFICATES" and a sub-header "CREATE NEW CERTIFICATE REQUEST". The form contains the following fields: Certificate Name, Common Name, Organization Name, State/Province Name, and Country/Region Name (with a dropdown menu showing "US (United States)"). At the bottom of the form are three buttons: "Back", "Apply", and "Cancel".

## LOCAL CERTIFICATES

The certificate request needs to be submitted to a certification authority to sign the request.

Once you have a signed request click **Load Signed Certificate** to bring up the Load Certificate page.

**CERTIFICATES -- LOCAL**

**Certificate signing request**

Certificate signing request successfully created. Note a request is not yet functional - have it signed by a Certificate Authority and load the signed certificate to this device.

**LOCAL CERTIFICATES**

<b>Name</b>	test
<b>Type</b>	request
<b>Subject</b>	CN=test/O=test/ST=test/C=US
<b>Signing Request</b>	<pre>-----BEGIN CERTIFICATE REQUEST----- MIIBeTCB4wIBADA6MQQwCwYDVQQDEwR0ZXN0MQQwCwYDVQQKEwR0ZXN0MQQwCwYD VQIQIEwR0ZXN0MQswCQYDVQQGEwJVUzCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkC gYEArc7SylUeEK7uAxPLB1yoNOoQhWaboiB9uyGebUYghOjxnUFPFbIo/mdx/9 4ghV3Z9T9ySp58kyolxEoLHF7ZY/RxavhIXZf7DmKCIzKyKfwSd56JOPsMdu QBEMdpl.6xYdPmLnXJ/BZmSPWdP1xulXpF5Kxu+YqPS168kCAwEAaAAMA0GCSq G Sib3DQEBAUAA4GBAFn6XWJHsIIovQIQ7MsXZxedGelQUn3s16vRIOHmgu6/ySti Fex+QgttOBOOn2JT5VzNbnAKIIRPZGjnf6kH+LB7DH9WAXGluMEp3sZGjWGLLmW S7AcWIEMDmKxcrEi+IG9rKv6f9xt030XfVky/oyfAw4d+16SCAHdxNisNotNo -----END CERTIFICATE REQUEST-----</pre>

## LOAD CERTIFICATE

Paste the signed certificate into the **Certificate** field.

To create the new signed certificate, click **Apply**.

**LOCAL CERTIFICATES**

Paste signed certificate.

**LOAD CERTIFICATE**

Certificate Name:

```
-----BEGIN CERTIFICATE-----
<insert certificate here>
-----END CERTIFICATE-----
```

Certificate:

## Trusted CA

### CERTIFICATES - TRUSTED CA

If you clicked **Trusted CA**, you will see the following page.

You will see a list of trusted CA certificates. Click **Import Certificate** to import a CA certificate.

### IMPORT CA CERTIFICATE

If you clicked **Import Certificate**, you will see the following page.

Enter the **Certificate Name**, and paste in the **Certificate**.

Click **Apply** to save the certificate.

**CERTIFICATES -- TRUSTED CA**

Add, View or Remove certificates from this page. CA certificates are used by you to verify peers' certificates.  
Maximum 4 certificates can be stored.

**LOCAL CERTIFICATES**

Name	Subject	Type	Action
<input type="button" value="Import Certificate"/>			

**TRUSTED CA CERTIFICATES**

Enter certificate name and paste certificate content.

**IMPORT CA CERTIFICATE**

Certificate Name:

Certificate: 

```
-----BEGIN CERTIFICATE-----
<insert certificate here>
-----END CERTIFICATE-----
```

# Routing

This page allows you to configure the device's routing settings. Clicking each button will take you to a new page to configure the relevant routing category.

<b>ROUTING -- STATIC ROUTE</b> Allows you to manually configure special routes that your network might need. <a href="#">Static Route</a>
<b>ROUTING -- DEFAULT GATEWAY</b> Allows you to configure Default Gateway used by WAN Interface. <a href="#">Default Gateway</a>
<b>ROUTING -- RIP</b> Allows you to configure RIP (Routing Information Protocol). <a href="#">RIP</a>



## Static Route

### ROUTING - STATIC ROUTE

To configure a static route, click **Static Route**.

You will see a list of current routes. Click **Add** to open the Static Route Add panel.

### STATIC ROUTE ADD

**Destination Network Address:** Enter the destination address.

**Subnet Mask** Enter the subnet mask.

**Use Gateway IP Address:** Enter the Gateway IP address.

**Use Interface** Select the correct interface for the rule.

Click **Apply** when you are done.

#### STATIC ROUTE

Enter the destination network address, subnet mask, gateway AND/OR available WAN interface then click "Apply" to add the entry to the routing table.

A maximum 32 entries can be configured.

#### ROUTING -- STATIC ROUTE

Destination	Subnet Mask	Gateway	Interface

Add Delete

#### STATIC ROUTE ADD

Destination Network Address :

Subnet Mask :

Use Gateway IP Address :

Use Interface :

Apply Cancel

## Default Gateway

If Enable Automatic Assigned Default Gateway checkbox is selected, this router will accept the first received default gateway assignment from one of the PPPoA, PPPoE, or MER/DHCP enabled PVC(s). If the checkbox is not selected, enter the static default gateway OR a WAN interface.

Click the **Apply/Save** button to save your settings.

### DEFAULT GATEWAY

If Enable Automatic Assigned Default Gateway checkbox is selected, this router will accept the first received default gateway assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s). If the checkbox is not selected, enter the static default gateway OR a WAN interface. Click "Apply" button to save it.

Selected Default Gateway Interfaces	Available Routed WAN Interfaces
<div style="border: 1px solid gray; height: 100px; width: 100%;"></div>	<div style="border: 1px solid gray; padding: 5px;">eth0 eth4 ppp7</div>

TODO: IPV6 \*\*\*\*\* Select a preferred wan interface as the system default IPv6 gateway.

Selected WAN Interface NO CONFIGURED INTERFACE ▾

# RIP

From this page advanced users can configure the router to use the Routing Internet Protocol (RIP). RIP is an Internet protocol you can set up to share routing table information with other routing devices on your LAN, at your ISP's location, or on remote networks connected to your network via the ADSL line.

**RIP**

**Routing -- RIP Configuration**

**NOTE: RIP CANNOT BE CONFIGURED on the WAN interface which has NAT enabled (such as PPPoE).**  
To activate RIP for the WAN Interface, select the desired RIP version and operation and place a check in the 'Enabled' checkbox. To stop RIP on the WAN Interface, uncheck the 'Enabled' checkbox. Click the 'Apply/Save' button to star/stop RIP and save the configuration.

**ROUTING -- RIP**

Interface	Version	Operation	Enabled
WAN Interface not exist for RIP.			

# Schedules

## SCHEDULES RULES

This page allows you to define schedules that can be used by certain functions (such as port forwarding, port triggering, etc.). You will see a list of all the currently configured schedules.

To add a new schedule, click **Add** to make the Add Schedule Rule panel appear.

## ADD SCHEDULES RULE

Enter the schedule **Name**, the **Day(s)**, the **Start Time** and the **End Time**.

Click **Apply** to save your settings or **Cancel** to discard them.

**SCHEDULES**

Schedule allows you to create scheduling rules to be applied for your firewall.

**Maximum number of schedule rules: 20**

**SCHEDULE RULES**

Rule Name	Sun	Mon	Tue	Web	Thu	Fri	Sat	Start Time	Stop Time
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>									

**ADD SCHEDULE RULE**

**Name :**

**Day(s) :**  All Week  Select Day(s)  
 Sun  Mon  Tue  Wed  Thu  Fri  Sat

**All Day - 24 hrs :**

**Start Time :**  :  (hour:minute, 24 hour time)

**End Time :**  :  (hour:minute, 24 hour time)

# Maintenance

The Maintenance tab provides access to administration related settings of the DSL-2790U.

Product Page: DSL-2790U Firmware Version: 1.00.14

**D-Link**

DSL-2790U // **SETUP** **ADVANCED** **MAINTENANCE** **STATUS** **HELP**

- System
- Firmware Update
- Access Controls
- Diagnostics
- System Log
- Logout

# System

This page allows you to reboot the device, backup your settings, or restore settings either from a file or to their default values.

## SYSTEM - REBOOT

**Reboot:** Click this button to reboot the device.

## SYSTEM - BACKUP SETTINGS

**Backup Settings:** Click this button to save the current router configuration settings to a file on the hard disk of the computer you are using. You will see a file dialog, where you can select a location and file name for the settings.

## SYSTEM - UPDATE SETTINGS

**Update Settings:** To restore a saved configuration, use the **Browse...** button to find the previously saved configuration file. Then, click the **Update Settings** button to transfer those settings to the device.

## RESTORE ROUTER SETTINGS TO THE FACTORY DEFAULTS.

**Restore Default Settings:** Click this button to restore all configuration settings back to the settings that were in effect at the time the device was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created.

Warning: Do not turn off your device or press the Reset button while an operation in this page is in progress.

### SYSTEM -- REBOOT

Click the button below to reboot the router.

### SYSTEM -- BACKUP SETTINGS

Back up Router configurations. You may save your router configurations to a file on your PC.

Note: Please always save configuration file first before viewing it.

### SYSTEM -- UPDATE SETTINGS

Update Router settings. You may update your router settings using your saved files.

Settings File Name:

### RESTORE ROUTER SETTINGS TO THE FACTORY DEFAULTS.

Restore Router settings to the factory defaults.

# Firmware Update

This page allows you to upgrade the firmware of your router. Make sure the firmware you want to use is on the local hard drive of the computer and then click Browse to upload the file.

## FIRMWARE UPDATE

**Current Firmware Version:** Displays your current firmware's version.

**Current Firmware Date:** Displays your current firmware's release date.

**Firmware File Name:** After you have downloaded a new firmware, click **Browse...** and locate the firmware on your computer. To begin the firmware update process, click **Update Firmware**. The update process takes about two minutes to complete.

**Warning:** You must use a computer with a wired connection to the device to upload the firmware file; do not use a wireless client. During the upgrade process, do not power off your computer or router, and do not refresh the browser window until the upgrade is complete.

### FIRMWARE UPDATE

**Step 1:** Obtain an updated firmware image file from your ISP.

**Step 2:** Enter the path to the image file location in the box below or click the "Browse" button to locate the image file.

**Step 3:** Click the "Update Firmware" button once to upload the new image file.

NOTE: The update process takes about 2 minutes to complete, and your DSL Router will reboot. Please DO NOT power off your router before the update is complete.

### FIRMWARE UPDATE

Current Firmware Version : 1.00.14

Current Firmware Date : Sep 18 2015

Select Firmware File :

Browse...

# Access Controls

This page allows you to manage access to your router.

Click the **Account Password**, **Services**, or **IP Address** buttons to reveal the associated configuration options.

The screenshot displays three distinct configuration sections, each with a dark header bar and a light content area. The first section, 'ACCESS CONTROLS -- ACCOUNT PASSWORD', includes the text 'Manage DSL Router user accounts.' and a button labeled 'Account password'. The second section, 'ACCESS CONTROLS -- SERVICES', includes the text 'A Service Control List ("SCL") enables or disables services from being used.' and a button labeled 'Services'. The third section, 'ACCESS CONTROLS -- IP ADDRESS', includes the text 'Permits access to local management services.' and a button labeled 'IP Address'.



## Account Password

### ADMINISTRATOR SETTINGS

To change an account's password, click **Account Password**. Select the username (**admin** or **user**), and enter the password details below.

### WEB IDLE TIME OUT SETTINGS

You can also set the **Web Idle Time Out** in minutes. This will automatically log the user or administrator out if they are idle for the specified amount of time.

Click **Apply** when you are done.

### ACCOUNT PASSWORD

Access to your DSL Router is controlled through two user accounts: admin and user.

The user name "user" can access the DSL Router, view configuration settings and statistics, as well as update the router's firmware.

Use the fields below to enter up to 16 characters and click "Apply" to change or create passwords. Note: Password cannot contain a space.

### ADMINISTRATOR SETTINGS

Username :

Current Password :

New Password :

Confirm Password :

### WEB IDLE TIME OUT SETTINGS

Web Idle Time Out :  (5 ~ 30 minutes)

## Services

To configure the Service Control List (SCL) to control access to specific services, click **Services**.

On this page, for both **LAN** and **WAN** access, you can enable or disable the services that can be used by the remote host, as well as specify the **Port**. For example, if the TELNET service is enabled and the port is set to 23, the remote host can access the device via TELNET through port 23. These can usually be left at their default values.

Click **Apply/Save** when you are done.

### SERVICES

A Service Control List ("SCL") enables or disables services from being used.

#### ACCESS CONTROL -- SERVICES

Services	LAN	WAN	WAN Port
FTP	<input type="checkbox"/> Enable	<input type="checkbox"/> Enable	21
HTTP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	80
ICMP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	
SNMP	<input type="checkbox"/> Enable	<input type="checkbox"/> Enable	
SSH	<input type="checkbox"/> Enable	<input type="checkbox"/> Enable	
TELNET	<input type="checkbox"/> Enable	<input type="checkbox"/> Enable	23
TFTP	<input type="checkbox"/> Enable	<input type="checkbox"/> Enable	

Save/Apply

## IP Address

From this page you can limit access to the router management services to the following list of IP addresses.

### ACCESS CONTROL -- IP ADDRESSES

**Enable Access Control Mode:** Check to enable access to local management services.

**Add:** Pressing this button will make the IP Address dialog box appear.

**Delete:** Check the check box next to an IP address and press the delete button to remove an IP from the **Access Control List**.

**Warning:** If the last IP Address is **Deleted** from the Access Control List and still have Access Control enabled, you will be unable to access the web configuration utility and will need to reset the router.

### IP ADDRESSES

**IP Address:** Enter a desired IP Address to add to the Access Control List.

**IP ADDRESS**

The IP Address Access Control mode, if enabled, permits access to local management services from IP addresses contained in the Access Control List. If the Access Control mode is disabled, the system will not validate IP addresses for incoming packets. The services are the system applications listed in the Service Control List.

Enter the IP address of the management station permitted to access the local management services, and click "Apply".

**ACCESS CONTROL -- IP ADDRESSES**

**Enable Access Control Mode**

	IP Address
<input type="checkbox"/>	192.168.1.150

**IP ADDRESS**

IP Address :

Click **Apply** to add the IP Address to the **Access Control List**.

## Diagnostics

This page is used to test the connection to your local network, the connection to your DSL service provider, and the connection to your Internet service provider. Select your **WAN Connection**. Next, click **Rerun Diagnostics Tests** to run the diagnostics tests.

**DIAGNOSTICS**

The DSL router can test your DSL connection. The individual tests are listed below. If a test displays a fail status, click the "Run Diagnostic Test" button again to make sure the fail status is consistent.

**WAN Connection**

**TEST THE CONNECTION TO YOUR LOCAL NETWORK**

Test your eth0 Connection:	<b>FAIL</b>
Test your eth1 Connection:	<b>FAIL</b>
Test your eth2 Connection:	<b>FAIL</b>
Test your eth3 Connection:	<b>PASS</b>
Test your Wireless Connection:	<b>PASS</b>

**TEST THE CONNECTION TO YOUR DSL SERVICE PROVIDER**

Test XDSL Synchronization:	<b>FAIL</b>
Test ATM OAM F5 segment ping:	<b>DISABLED</b>
Test ATM OAM F5 end-to-end ping:	<b>DISABLED</b>

**TEST THE CONNECTION TO YOUR INTERNET SERVICE PROVIDER**

Ping default gateway:	<b>FAIL</b>
Ping primary Domain Name Server:	<b>FAIL</b>

## System Log

This table shows the system log for the device. Select **Enable Log** to switch on the router's logging function.

You can set the levels to log and display by choosing a **Log Level** and **Display Level** from the respective drop-down menus. All events above or equal to the selected level will be logged/displayed.

By default, the router saves the logs locally. If you want to send the logs to a remote server, under **Mode** select **Remote** and enter the **Server IP Address** and **Server UDP Port** below.

Click **Apply** when you are done, or **Cancel** to discard your changes. Click **View System Log** to view the log.

### SYSTEM LOG

If the log mode is enabled, the system will begin to log all the selected events. For the Log Level, all events above or equal to the selected level will be logged. For the Display Level, all logged events above or equal to the selected level will be displayed. If the selected mode is "Remote" or "Both", events will be sent to the specified IP address and UDP port of the remote syslog server. If the selected mode is "Local" or "Both", events will be recorded in the local memory.

Select the desired values and click "Apply" to configure the system log options.

Note: This will not work correctly if modem time is not properly set! Please set it in "Setup/Time and Date"

### SYSTEM LOG -- CONFIGURATION

**Enable Log**

Log Level :

Display Level :

Mode :

Server IP Address :

Server UDP Port :

# Status

The Status tab provides information about the DSL-2790U's current status.

The screenshot displays the web interface for the D-Link DSL-2790U. At the top, a dark grey header bar contains the text "Product Page: DSL-2790U" on the left and "Firmware Version: 1.00.14" on the right. Below this is a large orange banner with the "D-Link" logo in white. Underneath the banner is a navigation menu with several tabs: "DSL-2790U" (with a double-slash icon), "SETUP", "ADVANCED", "MAINTENANCE", "STATUS" (which is highlighted in light grey), and "HELP". To the left of the main content area is a vertical sidebar menu with the following items: "Device Info" (highlighted in light grey), "Wireless Clients", "DHCP Clients", "Logs", "Statistics", "Route Info", and "Logout".

# Device Info

This page displays the current information for the DSL-2790U, such as LAN and wireless LAN information and statistics.

## SYSTEM INFO

This section displays a summary of the system settings

## INTERNET INFO

This section displays of the Internet connection settings.

## WIRELESS INFO

This section displays a summary of the wireless network settings.

## LOCAL NETWORK INFO

This section displays a summary of the local network settings.

## STORAGE DEVICE INFORMATION

This section displays a summary of the storage device and its settings.

### DEVICE INFO

This information reflects the current status of your DSL connection.

#### SYSTEM INFO

<b>Model Name:</b>	DSL-2790U
<b>Time and Date:</b>	Thu Jan 1 04:12:04 1970
<b>Firmware Version:</b>	1.00.14

#### INTERNET INFO

<b>Default Gateway:</b>	0.0.0.0
<b>Preferred DNS Server:</b>	0.0.0.0
<b>Alternate DNS Server:</b>	0.0.0.0

#### Enabled WAN Connections:

Interface	Description	Connection Status	IPv4 Address	IPv6 Address
eWAN	ipoe_eth0	Unconfigured	0.0.0.0	

#### WIRELESS INFO:

**Wireless Network Name (SSID):**  ▼

<b>MAC Address:</b>	02:10:18:01:00:6A
<b>Status:</b>	Enabled
<b>Visibility:</b>	Visibility
<b>Security Mode:</b>	WPA2

#### LOCAL NETWORK INFO

<b>MAC Address:</b>	02:10:18:01:00:69
<b>IP Address:</b>	192.168.1.1
<b>Subnet Mask:</b>	255.255.255.0
<b>DHCP Server:</b>	Enabled

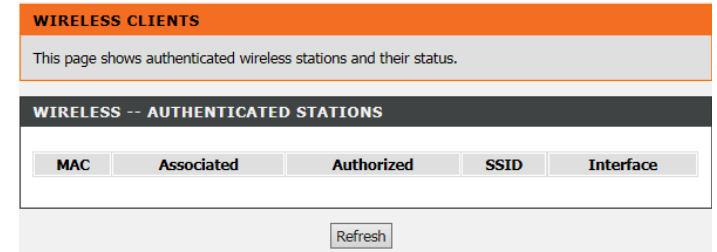
#### STORAGE DEVICE INFORMATION

Volumename	FileSystem	Total Space	Used Space
------------	------------	-------------	------------

## Wireless Clients

This table displays a list of wireless clients that are connected to your wireless router. It also displays the connection time and MAC address of the connected wireless clients.

Click **Refresh** to refresh the list.





# DHCP Clients

This table lists each DHCP client, including its hostname, MAC address, IP address, and expiration time.

Click **Refresh** to refresh the list.

**DHCP CLIENTS**

This information reflects the current DHCP client of your modem.

**DHCP LEASES**

Hostname	MAC Address	IP Address	Expires In
08203PCWIN7	00:e0:4c:36:00:31	192.168.1.2	19 hours, 57 minutes, 0 seconds

# Logs

This table shows the system log for the device.

Click **Refresh** to refresh the list.

The screenshot shows a web interface for viewing system logs. At the top, there is an orange header with the word "LOGS". Below this, a grey box contains the text "This page allows you to view system logs." Underneath is a dark grey header with the text "SYSTEM LOG". The main content area is a table with four columns: "Date/Time", "Facility", "Severity", and "Message". At the bottom right of the interface, there is a "Refresh" button.

# Statistics

Here you can view the packets transmitted and received passing through your router on both WAN and LAN ports, as well as the DSL information. The traffic counter will reset if the device is rebooted.

Click **Reset Statistics** to reset the list.

**STATISTICS**

This information reflects the current status of your DSL connection.

LOCAL NETWORK & WIRELESS

Interface	Received				Transmitted			
	Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
LAN3	0	0	0	0	0	0	0	0
LAN2	0	0	0	0	0	0	0	0
LAN1	1872339	19306	0	0	15869072	18546	0	0
wlan0	0	0	0	0	0	0	0	0

INTERNET

Interface	Description	Received				Transmitted			
		Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
eth0	ipoe_eth0	0	0	0	0	0	0	0	0
eth4	3G dongle	0	0	0	0	0	0	0	0
ppp7	3G dongle	0	0	0	0	0	0	0	0

ADSL

Mode:		
Traffic Type:		
Status:		Disabled
Link Power State:		
	Downstream	Upstream
Line Coding(Trellis):		
SNR Margin (0.1 dB):		
Attenuation (0.1 dB):		
Output Power (0.1 dBm):		
Attainable Rate (Kbps):		
Rate (Kbps):		
Super Frames:		
Super Frame Errors:		
RS Words:		
RS Correctable Errors:		
RS Uncorrectable Errors:		
HEC Errors:		
OCD Errors:		
LCD Errors:		
Total Cells:		
Data Cells:		
Bit Errors:		
Total ES:		
Total SES:		
Total UAS:		

# Route Info

The Route Info page displays a summary of the current route configuration between the router and the WAN.

**ROUTE INFO**

The Routing Info page allows you to check the routing table of your router.  
Flags: U - up, ! - reject, G - gateway, H - host, R - reinstate  
D - dynamic (redirect), M - modified (redirect).

**DEVICE INFO -- ROUTE**

Destination	Gateway	Subnet Mask	Flag	Metric	Service
192.168.1.0	0.0.0.0	255.255.255.0	U	0	

# Help

The Help section provides documentation for each section of the web configuration.

## HELP MENU

- [Setup](#)
- [Advanced](#)
- [Maintenance](#)
- [Status](#)

## SETUP HELP

- [Wizard](#)
- [ATM Interface](#)
- [Wan Service](#)
- [Wireless Settings](#)
- [Local Network](#)
- [Time and Date](#)

## ADVANCED HELP

- [Advanced Wireless](#)
- [Port Forwarding](#)
- [Port Triggering](#)
- [DMZ](#)
- [Parental Control](#)
- [Filtering Options](#)
- [Firewall Settings](#)
- [DNS](#)
- [Dynamic DNS](#)
- [Network Tools](#)
- [Routing](#)

## MAINTENANCE HELP

- [System](#)
- [Firmware Update](#)
- [Access Controls](#)
- [Diagnostics](#)
- [System Log](#)

## STATUS HELP

- [Device Info](#)
- [Wireless Clients](#)
- [DHCP Clients](#)
- [Logs](#)
- [Statistics](#)
- [Route Info](#)

# Connect and Share a USB Device

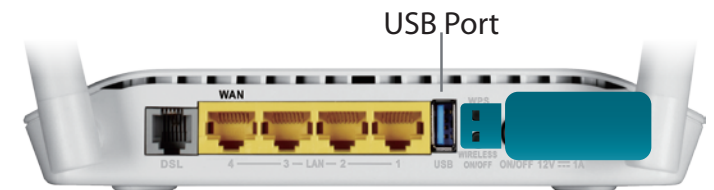
After you have successfully installed and configured your D-Link Modem Router, you are ready to enjoy the benefits of D-Link's USB sharing technology. D-Link's USB sharing technology allows you to quickly and easily share a USB printer or USB storage device with multiple computers on your network.

**Note:** USB printing supported in future firmware update. Refer to manual version 2.00 for installation instructions.

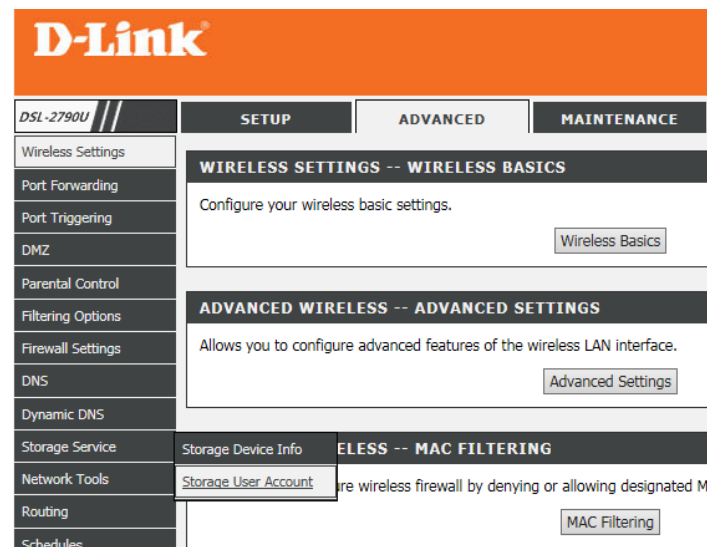
## Connect and Share a USB Storage Device

The DSL-2790U will share a FAT32 or NTFS formatted USB storage device using the Samba file sharing protocol. Once connected, you can copy, move, delete, and edit files like you would with any ordinary drive attached to your computer. You must first create a Storage User Account in order to share a USB storage device. This username and password will be used to securely access your files. This section will guide you through the Storage User Account creation process.

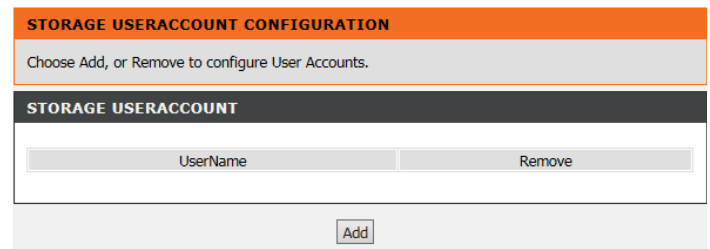
**Step 1** - Connect a USB storage device to the USB Port on the DSL-2790U.  
Confirm the USB light on the display panel is lit solid green.



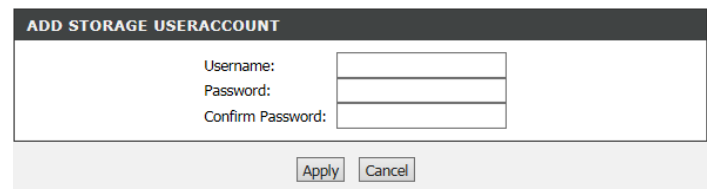
**Step 2** - Connect to the Web Configuration Utility. Navigate to **Advanced > Storage Service > Storage User Account**.



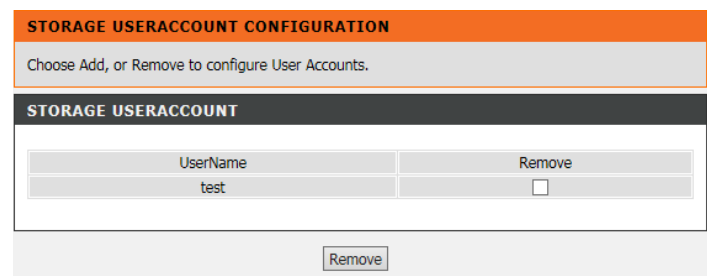
**Step 3** - Once you have arrived at **Storage User Account Configuration** click **Add** to add a Storage User Account. Only one storage user account may be configured.



**Step 4** - The **Add Storage User Account** dialog will appear. Create a username and password for your Storage User Account and click **Apply**.

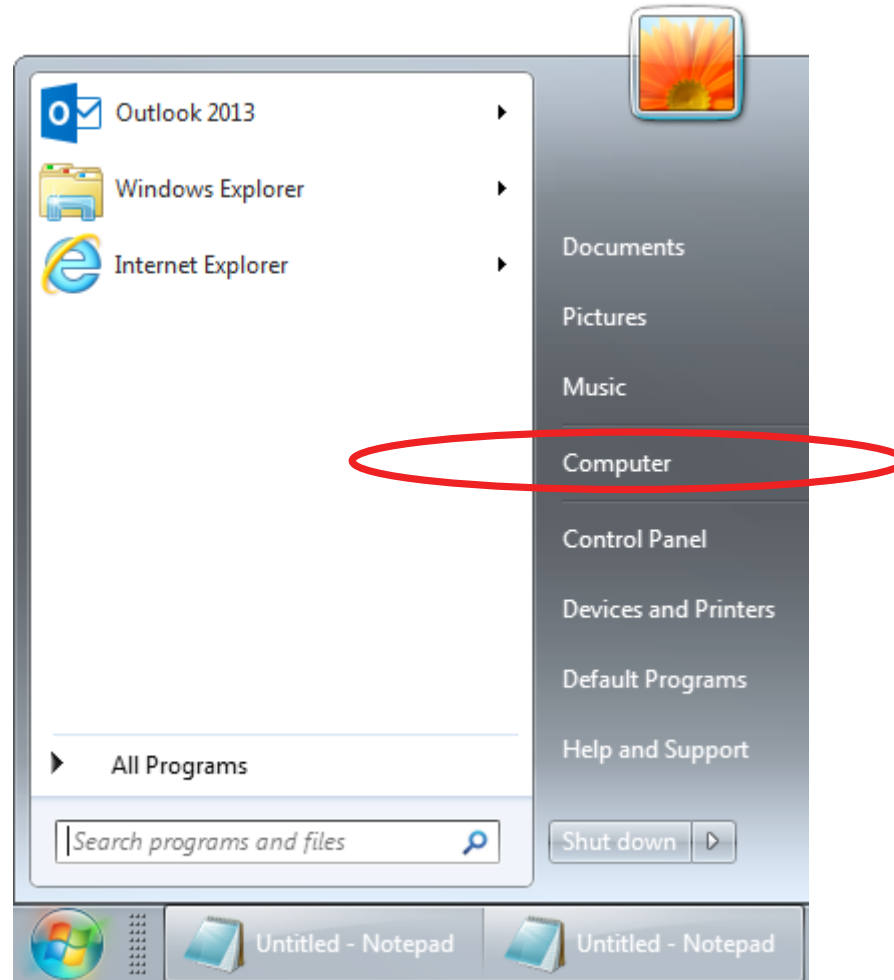


Now that a Storage User Account has been created, you may connect to from devices on your network.



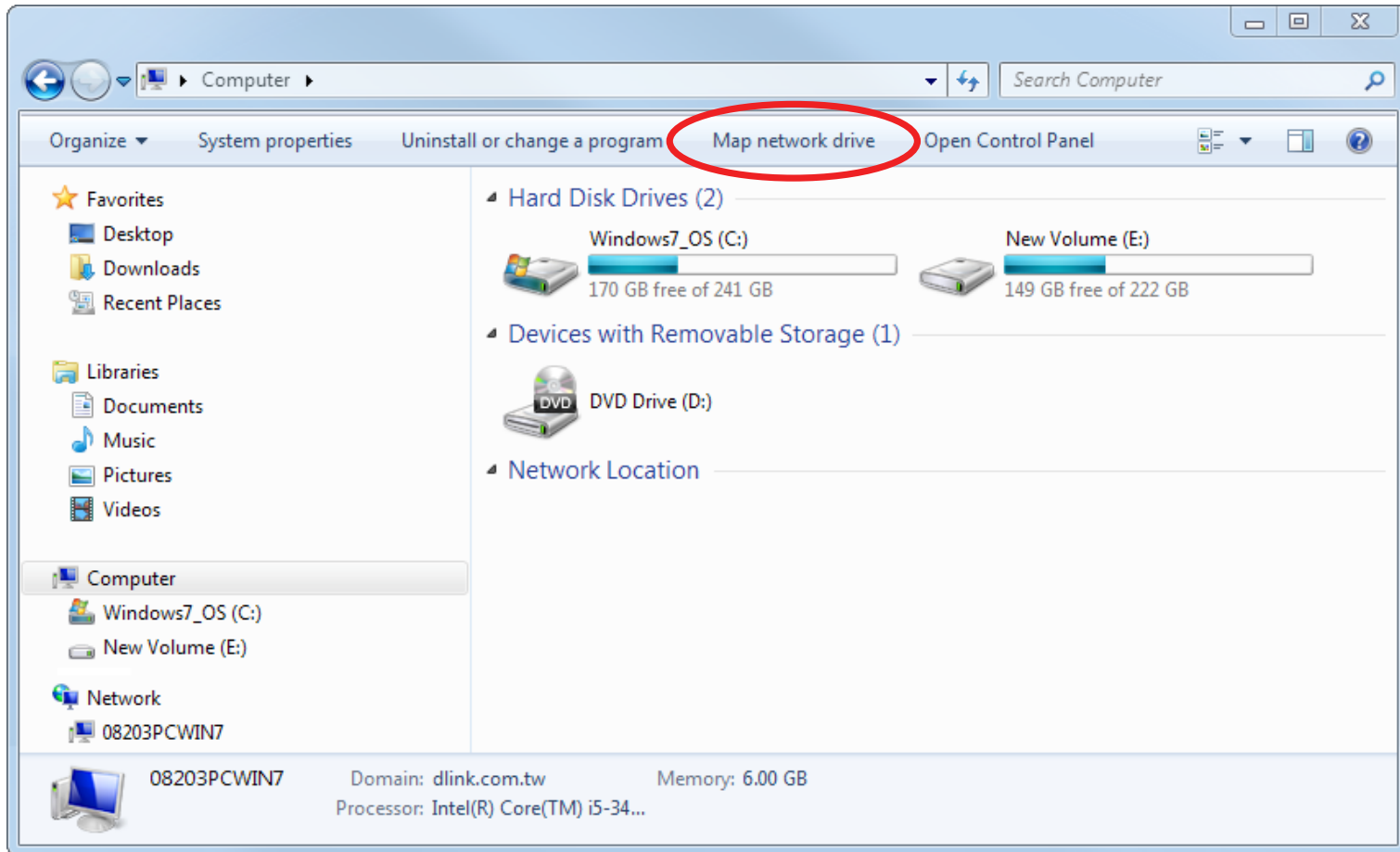
# Connecting from a Windows Based PC

**Step 1** - Click the start menu and select **Computer**.





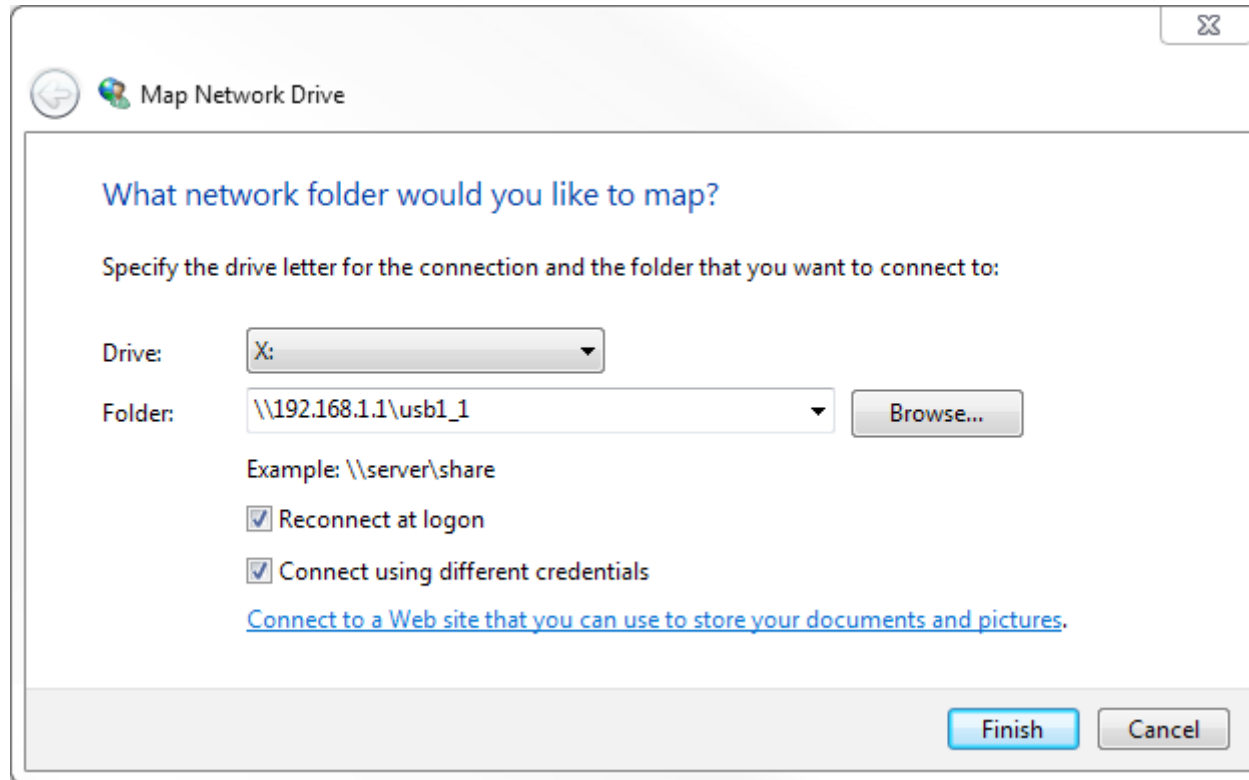
**Step 2 - Click Map network drive.**



**Step 3** - Select the drive letter you wish to map your network drive to. Enter the DSL-2790U's IP address and the name of the USB volume you wish to share. For example `\\192.168.1.1\usb1_1`.

Check the boxes **Reconnect at logon** and **Connect using different credentials**.

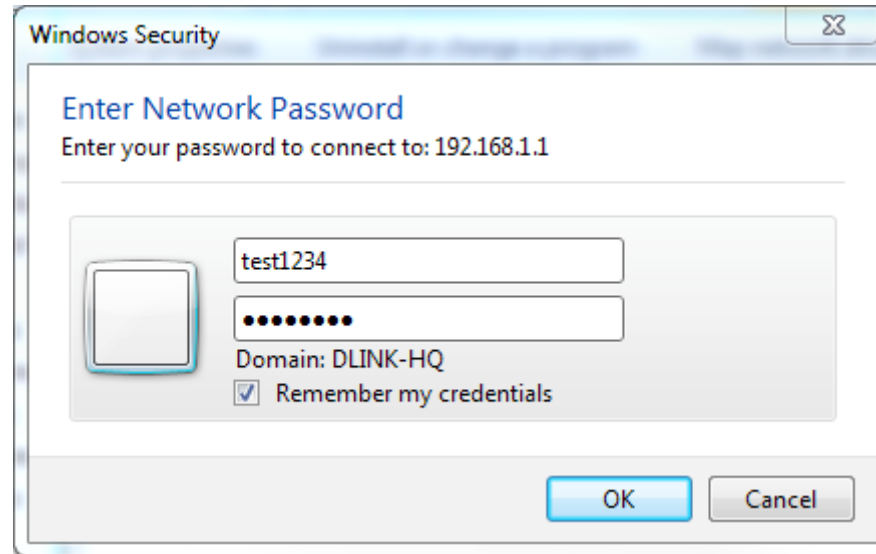
Click **Finish**.



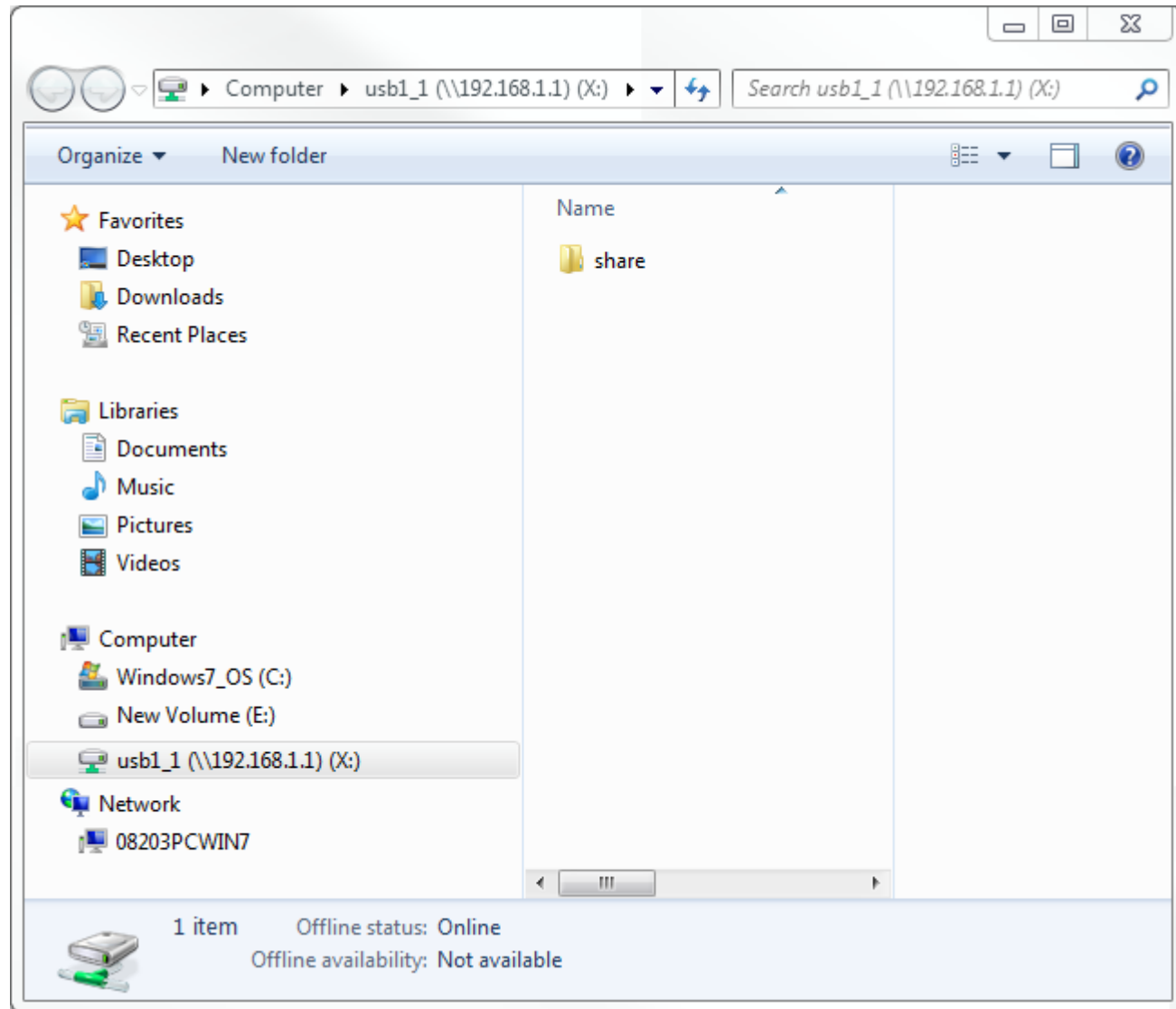
If you have multiple USB storage devices attached via a USB Hub, consult the **Advanced > Storage Service > Storage Device Information** section of the DSL-2790U's Web Configuration utility for a list of available volume names. Refer to **Storage Device Information** on page 67 for more information.

**Step 4** - Enter your Storage User Account Username and Password.

Click **OK**.



**Step 5** - A folder of the shared USB storage device will appear.

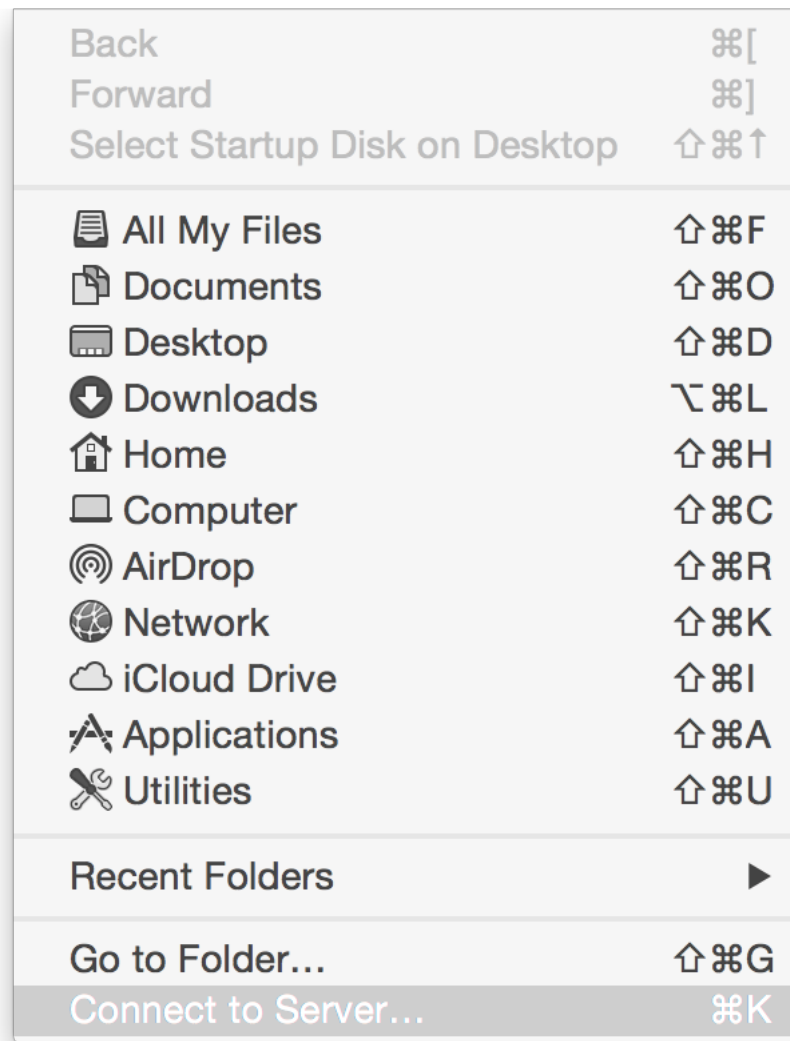


**Congratulations**

Your files are now shared. Repeat this process from each Windows PC you wish to share your USB drive with.

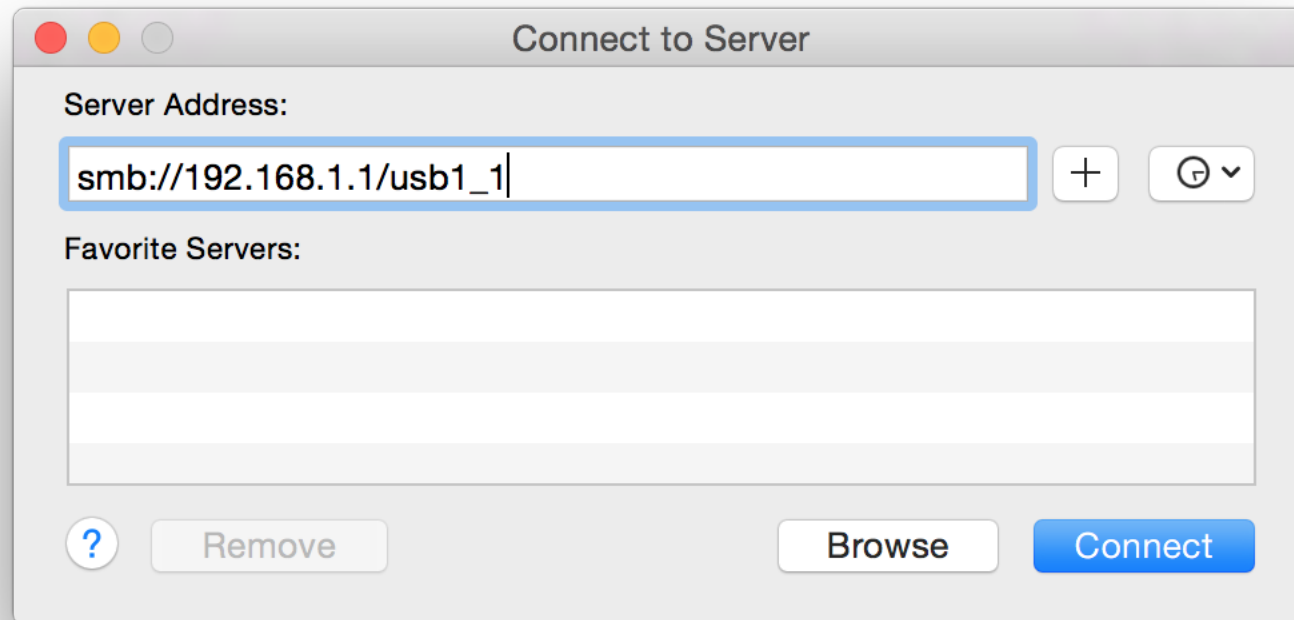
## Connecting from a Mac

**Step 1** - While in Finder, click **Go** menu and select **Connect to Server...**



**Step 2** - Enter the DSL-2790U's IP address and the name of the USB volume you wish to share.  
For example **smb://192.168.1.1/usb1\_1**.

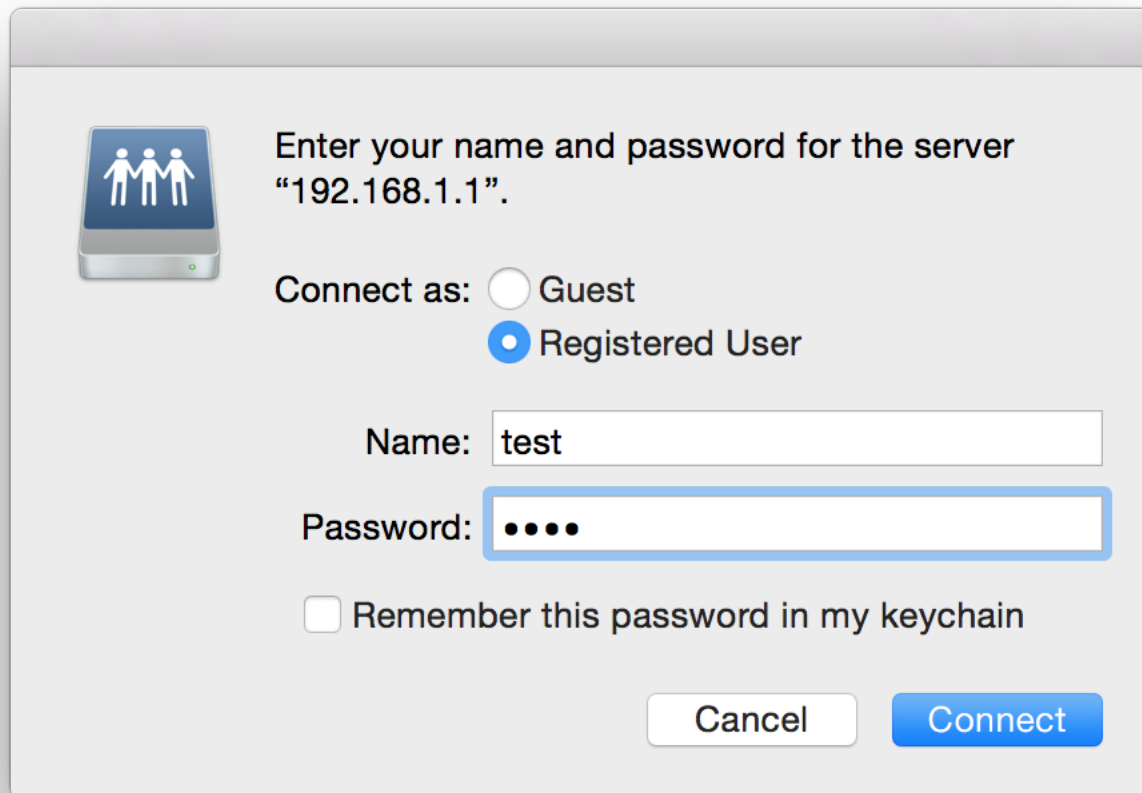
Click **Connect**.



If you have multiple USB storage devices attached via a USB Hub, consult the **Advanced > Storage Service > Storage Device Information** section of the DSL-2790U's Web Configuration utility for a list of available volume names. Refer to **Storage Device Information** on page 67 for more information.

**Step 4** - Enter your Storage User Account Username and Password.

Click **Connect**.



Enter your name and password for the server  
"192.168.1.1".

Connect as:  Guest  
 Registered User

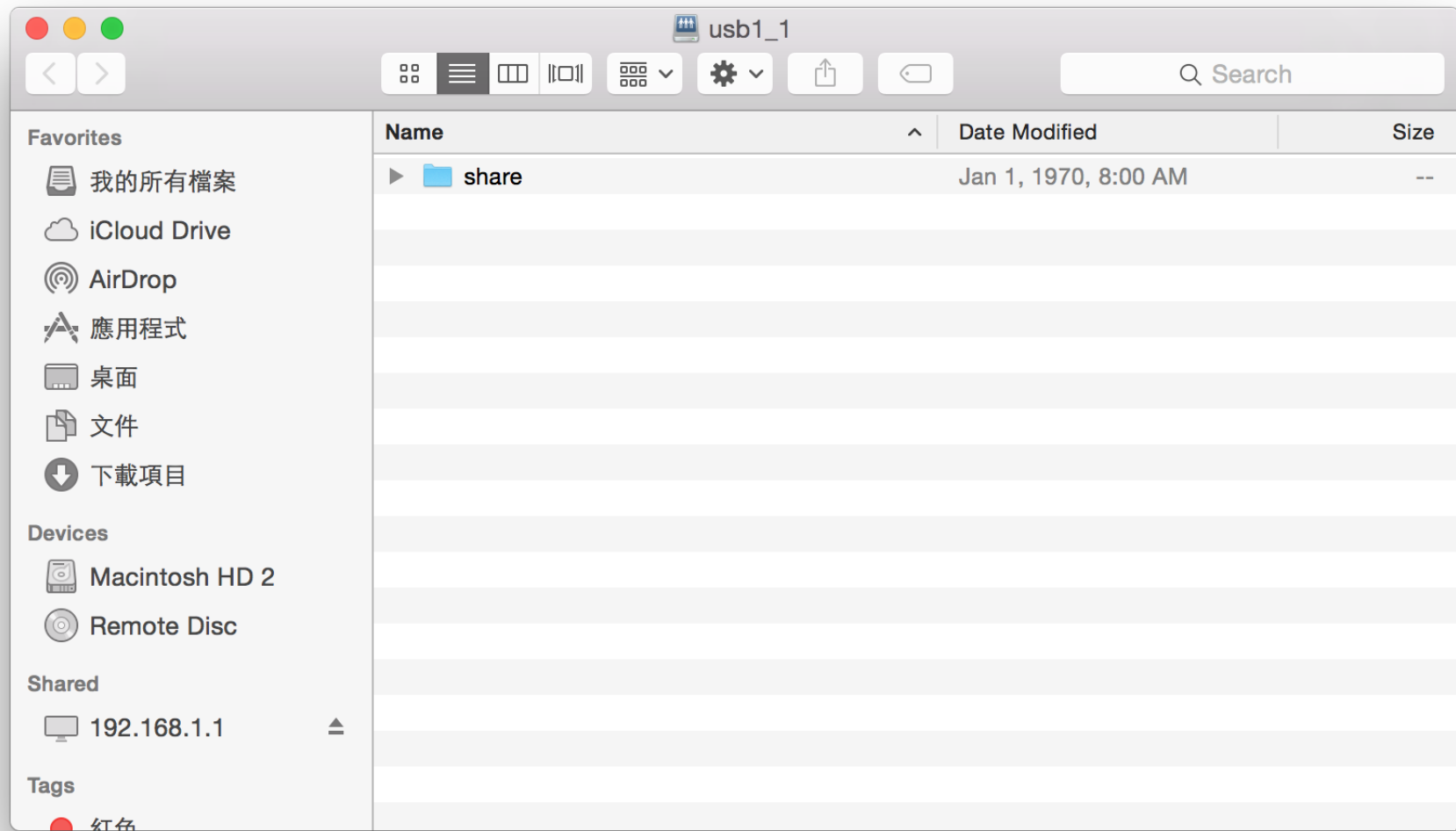
Name: test

Password: ●●●●

Remember this password in my keychain

Cancel Connect

**Step 5** - A folder of the shared USB storage device will appear.



Need to collect better screenshots

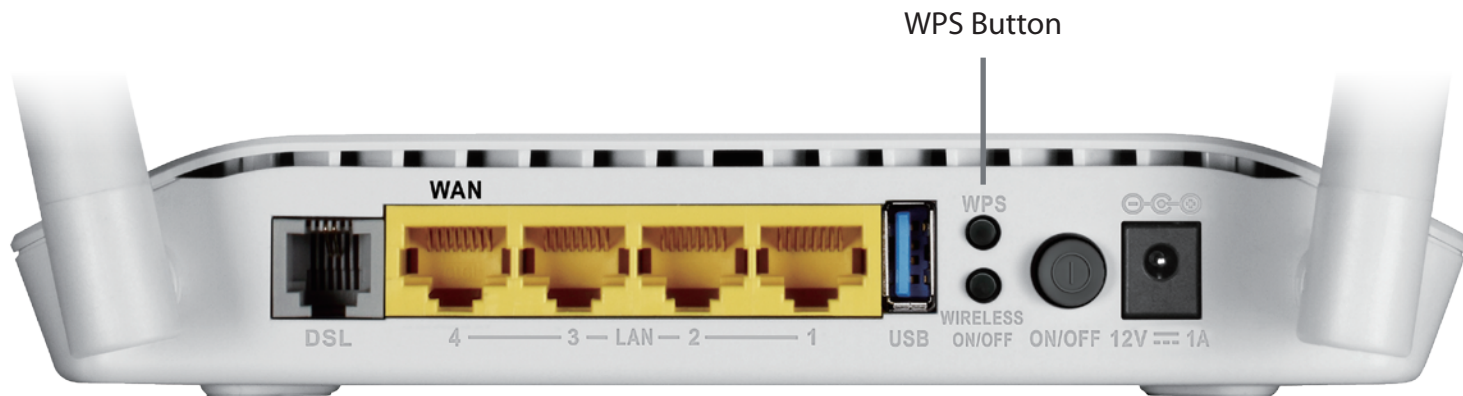


# Connect a Wireless Client to your Router

## WPS Button

The easiest and most secure way to connect your wireless devices to the router is WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DSL-2790U router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

**Step 1** - Press the WPS button on the back of DSL-2790U for about 1 second. The Internet LED on the front will start to blink.



**Step 2** - Within 2 minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

**Step 3** - Allow up to 1 minute to configure. Once the Internet light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

# Windows® 10

When connecting to the DSL-2790U wirelessly for the first time, you will need to input the wireless network name (SSID) and Wi-Fi password (security key) of the device you are connecting to. If your product has a Wi-Fi configuration card, you can find the default network name and Wi-Fi password here. Otherwise refer to the product label for the default Wi-Fi network SSID and password, or enter the Wi-Fi credentials set during the product configuration.

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



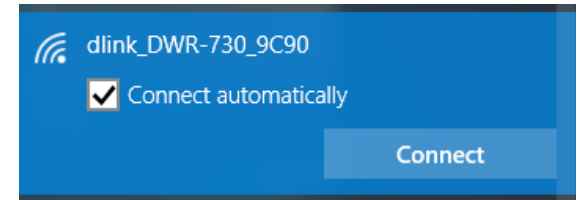
Wireless Icon

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

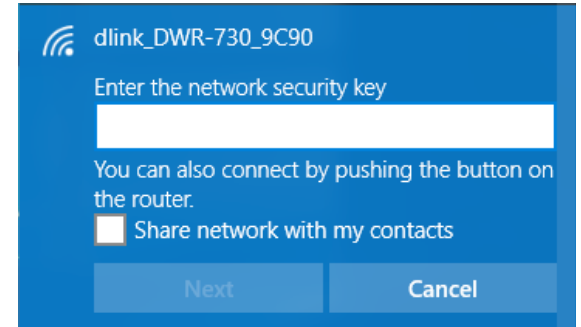


To connect to the SSID, click **Connect**.

To automatically connect with the router when your device next detects the SSID, click the **Connect Automatically** check box.



You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.

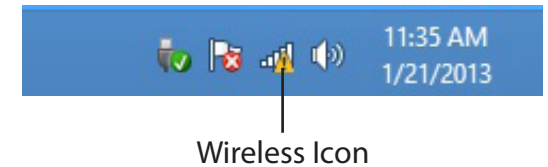


# Windows® 8

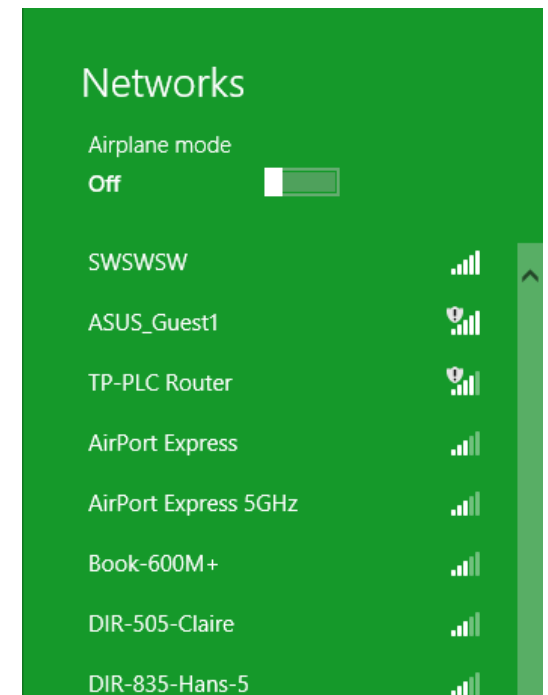
## WPA/WPA2

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.



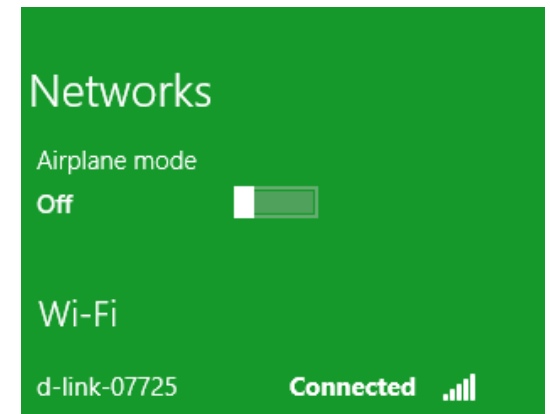
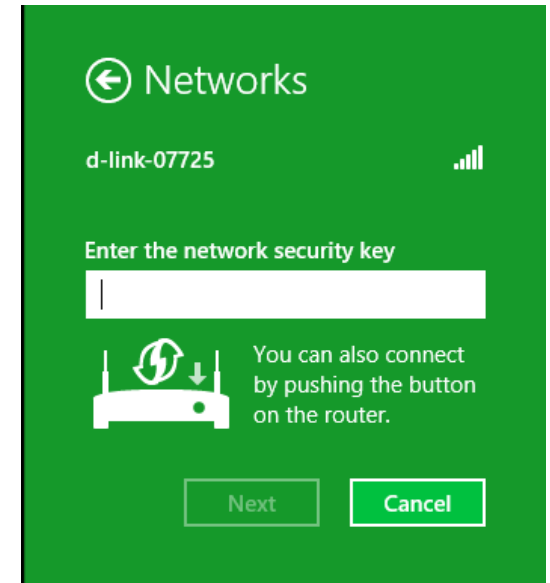
Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the desired network by clicking on the network name.



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 a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.

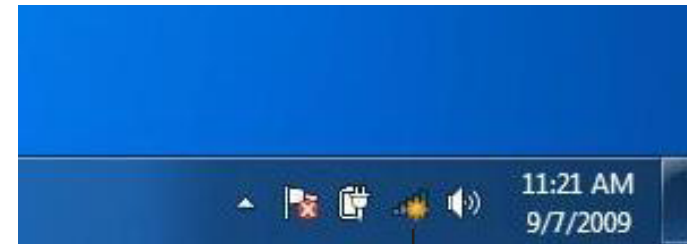


# Windows® 7

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



Wireless Icon

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

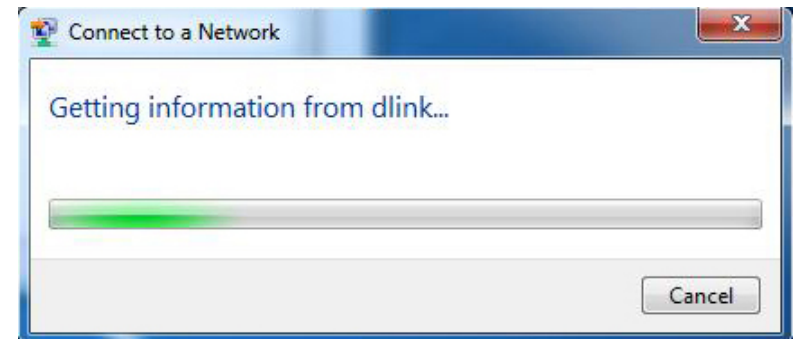


3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

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

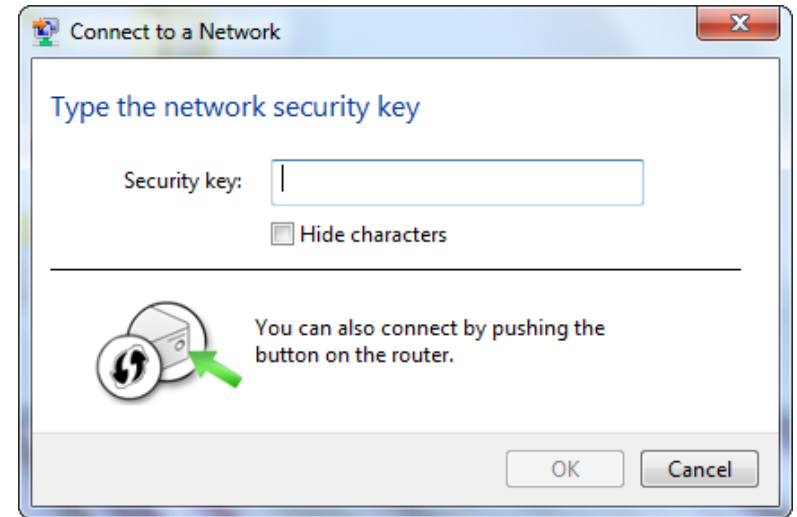


4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase (Wi-Fi password) 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.





# Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility, 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.

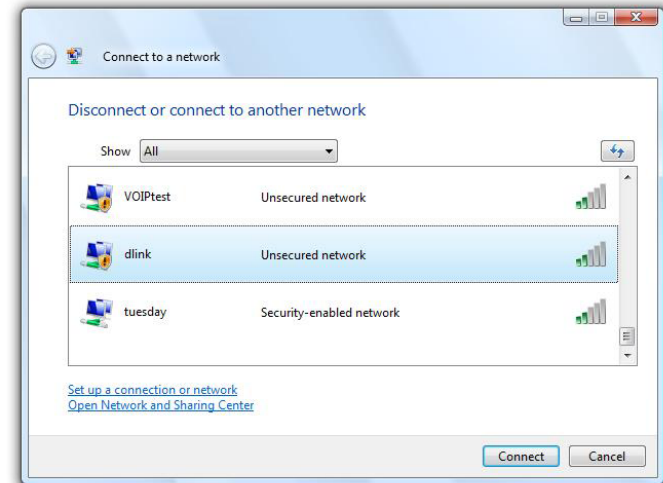
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

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.

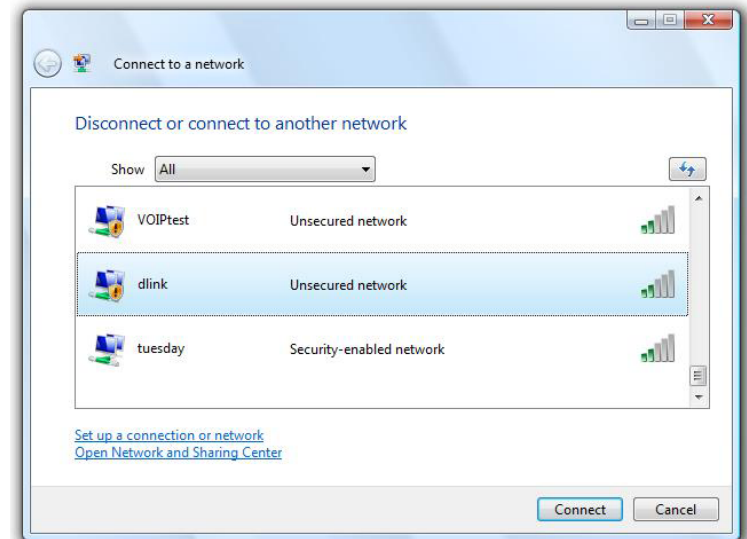
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



## WPA/WPA2

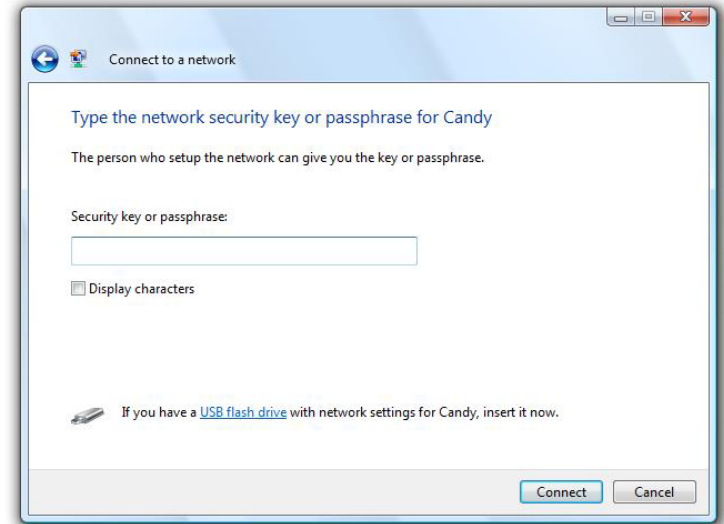
It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

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 Wi-Fi name (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase (Wi-Fi password) 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, 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.

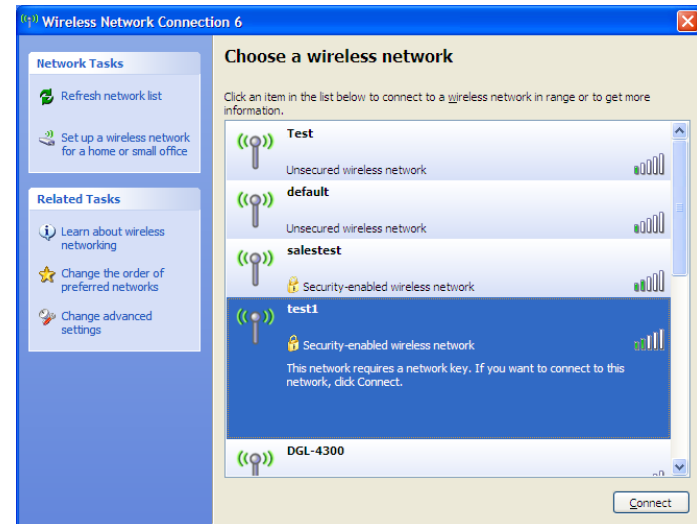
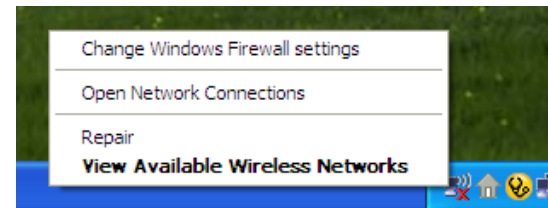
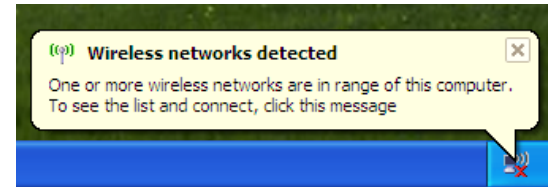
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

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 Wi-Fi network (displayed using the SSID) and click the **Connect** button.

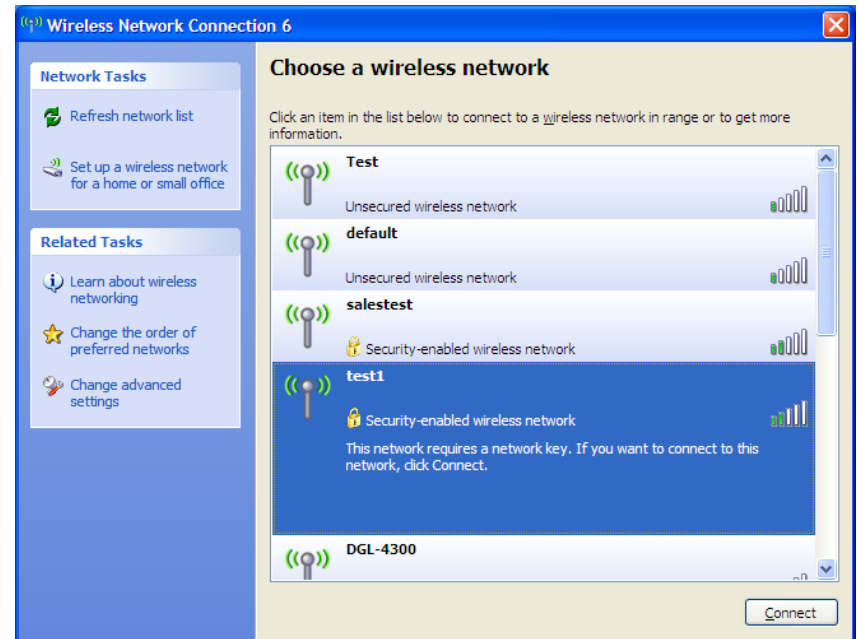
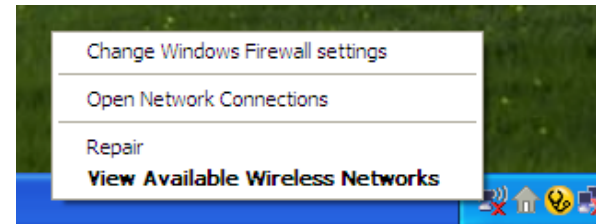
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



## WPA/WPA2

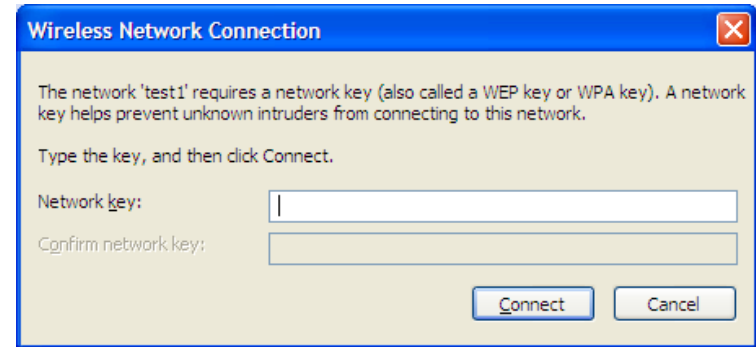
It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

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 Wi-Fi network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK Wi-Fi password 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 Wi-Fi password 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 DSL-2790U. Read the following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

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

When entering the IP address of the D-Link router (**192.168.1.1** for example), you are not connecting to a website nor do you 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:
  - Microsoft Internet Explorer® 7 and higher
  - Mozilla Firefox 3.5 and higher
  - Google™ Chrome 8 and higher
  - Apple Safari 4 and 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.
- 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 web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

## 2. What can I do if I forgot my password?

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

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



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

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

To find the proper MTU Size, you'll 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, XP, Vista®, and 7 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**

```
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:\>
```

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 we're working with ( $1452+28=1480$ ).

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

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

- Open your browser, enter the IP address of your router (192.168.1.1) 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 email. 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 access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

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

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

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

## **What is Wireless?**

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

## **Why D-Link Wireless?**

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

## **How does wireless work?**

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

### **Wireless Local Area Network (WLAN)**

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

## **Wireless Personal Area Network (WPAN)**

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

## **Who uses wireless?**

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

### **Home**

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

### **Small Office and Home Office**

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

## **Where is wireless used?**

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

Using a D-Link CardBus adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: airports, hotels, coffee shops, libraries, restaurants, and convention centers.

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

## **Tips**

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

### **Centralize Your Router or Access Point**

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

### **Eliminate Interference**

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

## Security

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

# Wireless Modes

There are basically two modes of networking:

**Infrastructure** – All wireless clients will connect to an access point or wireless router.

**Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-850L wireless network CardBus adapters.

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

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

# Networking Basics

## Check your IP address

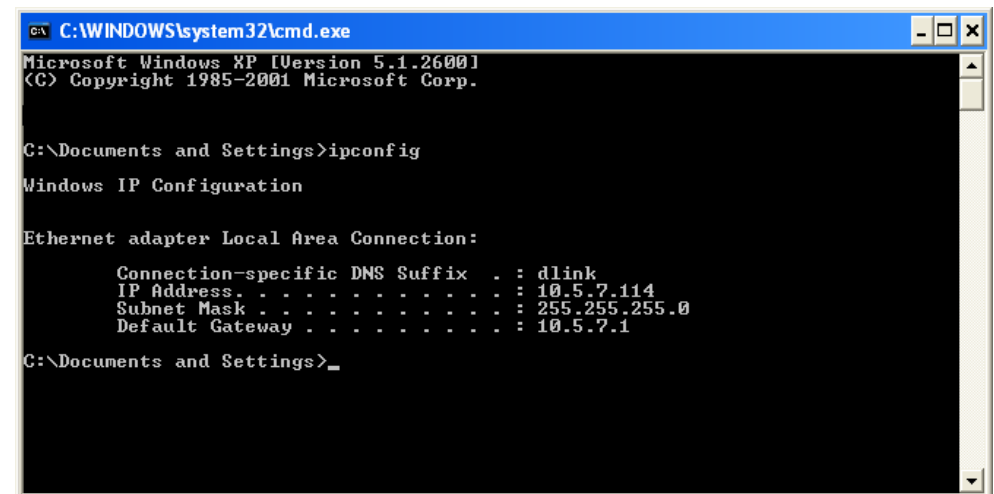
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type **cmd** and click **OK**. (Windows® 7/Vista® users type **cmd** in the **Start Search** box.)

At the prompt, type **ipconfig** and press **Enter**.

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

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



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600.1
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address . . . . . : 10.5.7.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.5.7.1

C:\Documents and Settings>_
```



## Statically assign an IP address

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

- Step 1**
- Windows® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center**.
- Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections**.
- Windows® XP - Click on **Start > Control Panel > Network Connections**.
- Windows® 2000 - From the desktop, right-click **My Network Places > Properties**.

**Step 2**

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

**Step 3**

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

**Step 4**

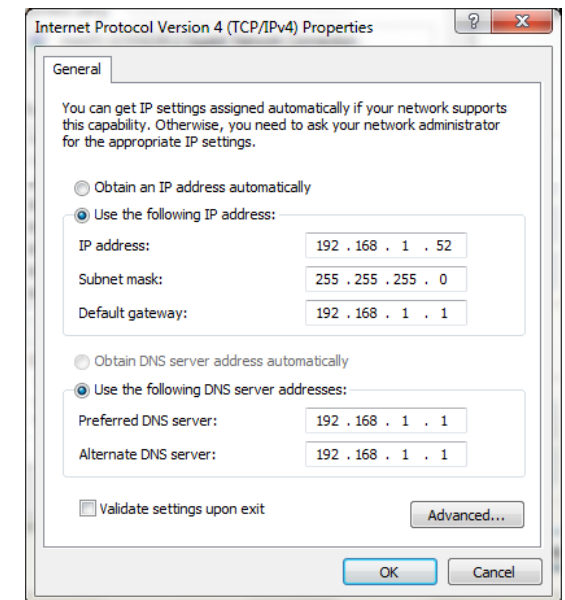
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 192.168.1.1, make your IP address 192.168.1.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 192.168.1.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.1.1). 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

## Hardware Specifications

- RJ-11 ADSL port
- 4 RJ-45 10/100BASE-TX Ethernet ports with auto MDI/MDIX
- Wireless Interface (2.4 GHz): IEEE 802.11n/g/b
- USB 2.0 port

## Operating Voltage

- Input: 100~240 V ( $\pm 20\%$ ), 50~60 Hz
- Output: DC 12 V, 1 A

## Temperature

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

## Humidity

- Operating: 0% - 90% non-condensing
- Non-Operating: 5% - 95% non-condensing

## ADSL Standards

- Multi-mode
- Full-rate ANSI T1.413 Issue 2
- ITU-T G.992.1 (G.dmt) Annex A/C/I
- ITU-T G.992.2 (G.lite) Annex A/C
- ITU-T G.994.1 (G.hs)

## ADSL2 Standards

- ITU-T G.992.3 (G.dmt.bis) Annex A/J/K/L/M
- ITU-T G.992.4 (G.lite.bis) Annex A

## ADSL2+ Standards

- ITU-T G.992.5 Annex A/L/M

## Wireless Bandwidth Rate

- IEEE 802.11b: 11, 5.5, 2, and 1 Mbps
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11n: 6.5 to 150 Mbps  
20 MHz: 150, 130, 117, 104, 78, 52, 39, 26, 13 Mbps  
40 MHz: 300, 270, 243, 216, 162, 108, 81, 54, 27 Mbps

## Antenna Type

- Dual 2x2 built-in MIMO antennas

## Wireless Security

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

## Certifications

- CE

## Dimensions & Weight

- 68 x 42 x 51 mm (2.68 x 1.65 x 2 inches)
- 113.4 grams (4 ounces)