



# User Manual

## AC1600 VDSL2 VoIP Gigabit Modem Router

DVA-5582

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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	April 10, 2017	• Initial release

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### ErP Power Usage

This device is an Energy Related Product (ErP) that automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. It can also be turned off through a power switch to save energy when it is not needed.

Network Standby: 6.21 watts

Switched Off: 0.17 watts

# Table of Contents

<b>Product Overview</b> .....	<b>1</b>
Package Contents.....	1
System Requirements .....	2
Introduction .....	3
Features.....	3
Hardware Overview.....	4
LEDs .....	4
Rear View .....	6
<b>Installation</b> .....	<b>7</b>
<b>Configuration</b> .....	<b>8</b>
Home .....	9
Configuration Wizard .....	11
Configuration Wizard: Phase 1 .....	11
Physical WAN Interface .....	12
ATM Configuration .....	14
Ethernet Layer Settings (IP Encapsulation)....	15
DSL Line Configuration Wizard .....	16
PTM Configuration .....	16
WAN Ethernet Configuration Wizard .....	17
USB Interface Configuration Wizard .....	18
PPP (USB) .....	19
Pure Bridge.....	20
PPP .....	21
PPP (Cont).....	22
IPv4 Interface (IP over ATM) .....	23
IPv4 Interface.....	24
IPv6 Interface Settings .....	25
Configuration Wizard Phase 1:.....	26
Phase 1 Settings Summary.....	26
Configuration Wizard Phase 2:.....	27
Wi-Fi Configuration .....	27
Wireless Access Point.....	28
Configuration Wizard Summary .....	30
Settings .....	31
Physical Interfaces .....	33
Network Connections .....	34
Bridge and VLAN .....	35
Bridge List.....	36
Bridge Filters.....	37
DHCP Server and Relay.....	38
DNS Client and Relay.....	39
DNS Client.....	40
DNS Relay.....	41
Hostnames .....	42
Routing and QoS.....	43
Routing Policy .....	44
Traffic Classification.....	45
ALG Flows .....	46
Policers.....	47
Queues.....	48
ALG.....	49

---

NAT and Port Mapping .....	50	Home Network .....	78
NAT Interface Settings.....	51	System .....	79
Port Mapping .....	52	Logging .....	80
Public Addresses .....	53	Reboot .....	81
Proxies.....	54	Factory Reset .....	82
IGMP Proxy .....	55	Save Configuration.....	83
RTSP Proxy .....	56	Backup Configuration File .....	84
PPPoE Proxy .....	57	Load Configuration File .....	85
VPN.....	58	Firmware Upgrade.....	86
PPTP / L2TP Server.....	59	Diagnostic .....	87
IPsec .....	60	UDP Echo .....	88
Dynamic DNS .....	61	Ping .....	89
Date / Time .....	62	Download .....	90
Management.....	63	Upload .....	91
UPnP Agent .....	64	Traceroute.....	92
Telnet Server.....	65	Interfaces Summary.....	93
SSH Server .....	66	CPU Load Memory Usage .....	94
Users .....	67	Active Connections .....	95
VoIP Service.....	68	Security.....	96
IPv6 .....	69	Firewall.....	97
Global Settings.....	70	DMZ .....	98
Autosense Failover .....	71	Captive Portal.....	99
Storage Service.....	72	Modem .....	100
Storage Device.....	73	SIM Card .....	101
Network File Sharing .....	74	USB Modem .....	102
User Accounts .....	75	Operator.....	103
FTP Server.....	76	WiFi-1.1 (2.4 GHz) .....	104
DLNA Media Sharing .....	77	WiFi-2.1 (5 GHz) .....	105

## Table of Contents

---

<b>Connect a Wireless Client to your Router .....</b>	<b>106</b>
WPS Button.....	106
Windows® 8.....	107
WPA/WPA2 .....	107
Windows® 7.....	109
WPA/WPA2 .....	109
WPS.....	112
Windows Vista® .....	116
WPA/WPA2 .....	117
Windows® XP.....	119
WPA/WPA2 .....	120
<b>Troubleshooting .....</b>	<b>122</b>
<b>Wireless Basics .....</b>	<b>126</b>
What is Wireless?.....	127
Tips.....	129
Wireless Modes.....	130
<b>Networking Basics .....</b>	<b>131</b>
Check your IP address .....	131
Statically Assign an IP address .....	132
Wireless Security .....	133
What is WPA? .....	133
<b>Technical Specifications .....</b>	<b>134</b>

# Product Overview

## Package Contents



DVA-5582 AC1600 VDSL2 VoIP Gigabit Modem Router



Ethernet Cable



DSL Cable



Power Adaptor

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 DVA-5582 will cause damage and void the warranty for this product.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• A DSL Internet connection</li><li>• Wireless 802.11ac, n, g, b, or an Ethernet LAN port</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 10/8.1/8/7/Vista/XP SP3 or Mac OS X 10.3 or higher</li><li>• An installed Ethernet adapter</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer 10 or higher, Edge 13 or higher</li><li>• Firefox 36 or higher</li><li>• Safari 8 or higher</li><li>• Chrome 40 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 DVA-5582 AC1600 VDSL2 VoIP Gigabit Modem Router is a highly integrated router with everything your home or small business needs for high-speed Internet access. It combines an ADSL2+/VDSL2 modem, Gigabit Ethernet Internet Port, 4G mobile Internet support, Voice over IP (VoIP), and Gigabit wireless together in a single, easy to use product that shares an Internet connection for all your devices.

## Features

- User-friendly GUI for web configuration
- Compatible with all standard Internet applications
- Industry standard and interoperable DSL interface
- WLAN with high-speed data transfer rates of up to 1600 Mbps\*, compatible with IEEE 802.11b/g/n, 2.4GHz compliant equipment
- IP routing and bridging
- Asynchronous transfer mode (ATM) and digital subscriber line (DSL) support
- Asynchronous transfer mode (PTM) and digital subscriber line (VDSL) support
- Point-to-point protocol (PPP)
- Network/port address translation (NAT/PAT)
- Quality of service (QoS)
- Wireless LAN security features: WPA/WPA2, 802.1x, RADIUS client
- Universal plug-and-play(UPnP)
- Web filtering
- 3G/4G Mobile WAN connection
- USB mass-storage, SAMBA
- System statistics and monitoring
- VoIP Integration

\* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac 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

## LEDs

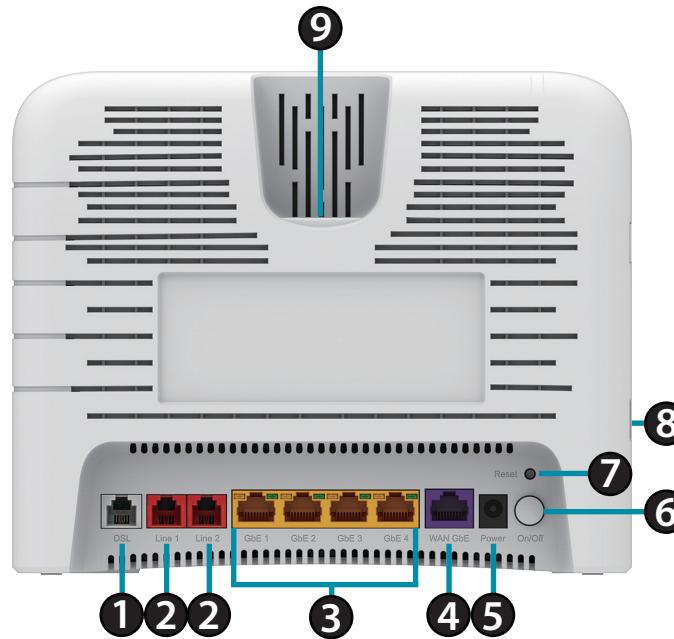


<b>1</b>	<b>USB</b>	Green	On	The connection of a 3G or USB device has been established.
			Blinking	Data is being transmitted.
			Off	No connection of a 3G or USB device is established.
<b>2</b>	<b>Phone (1/2)</b>	Green	Off	No phone signal is detected.
			Blinking	Active call.
			On	The phone interface is ready.
		Orange	On	No VoIP account registered.
<b>3</b>	<b>5 GHz</b>	Green	Blinking	Data is being transmitted through the WLAN interface.
			On	The connection of WLAN interface is normal.
			Off	The WLAN connection is not established.
		Orange	Blinking	WPS pairing in Progress.
<b>4</b>	<b>2.4 GHz</b>	Green	Blinking	Data is being transmitted through the WLAN interface.
			On	The connection of WLAN interface is normal.
			Off	The WLAN connection is not established.
		Orange	Blinking	WPS pairing in Progress.

<b>5</b>	<b>Internet</b>	Green	Off	Either the device is in Bridge Mode, the DSL connection is not present, or the power is off.
			Blinking	Internet data is being transmitted.
			On	An Internet connection is established.
		Orange	On	The device attempted an Internet connection, but failed.
<b>6</b>	<b>xDSL</b>	Green	Off	No signal is detected.
			Blinking	The device is detecting a DSL signal.
			On	DSL Online.
<b>7</b>	<b>Power</b>	Green	Off	The power is off.
			On	The system startup is complete.
		Orange	On	Power failure.

# Hardware Overview

## Rear View



<b>1</b>	<b>DSL</b>	RJ-11 interface. Connect the router to DSL connector through a telephone cable.
<b>2</b>	<b>PHONE (1/2)</b>	RJ-11 interface, using the telephone cable to connect the telephone set.
<b>3</b>	<b>Gigabit LAN (1-4)</b>	RJ-45 interface for connecting to the Ethernet interface of PC or other Ethernet devices through an Ethernet cable.
<b>4</b>	<b>Gigabit WAN</b>	RJ-45 interface for connecting to another router or Ethernet modem.
<b>5</b>	<b>Power Input</b>	For connecting the power adapter. Power input is 12V DC, 2A.
<b>6</b>	<b>Power Button</b>	Power on or off the device.
<b>7</b>	<b>RESET</b>	Reset to the factory defaults. Keep the device powered on, push a paper clip into the hole, press and hold the button for 5 seconds, and then the system restores the default settings.
<b>8</b>	<b>WPS</b>	Press for 1 second to enable WPS pairing. Press and hold for 10 seconds to disable Wi-Fi.
<b>9</b>	<b>USB</b>	USB port, for connecting a 3G/4G dongle or other USB storage devices.

# Installation

## Choosing a Location

Many environmental factors may affect the wireless function of the router. If this is the first time that you have set up a wireless network device, read the following information.

The router can be placed on a shelf or desktop and ideally the LED indicators should be facing towards the front, as you may need to view them for troubleshooting. Designed to have a range of up to 100 meters indoors and up to 300 meters outdoors, wireless LAN lets you access your network from anywhere nearby. However, the numbers of walls, ceilings, or other objects that the wireless signals must pass through may limit the signal range. Typical ranges vary depending on types of materials and background RF noise in your home or business.

## Connecting the Router

### Step 1:

Connect the **DSL** port on the router to the wall outlet with a telephone cable. Next, connect the phone handset the **LINE** port of the router.

### Step 2:

Connect the **LAN** port of the router to an Ethernet LAN port on a PC using an Ethernet cable (MDI/MDIX).

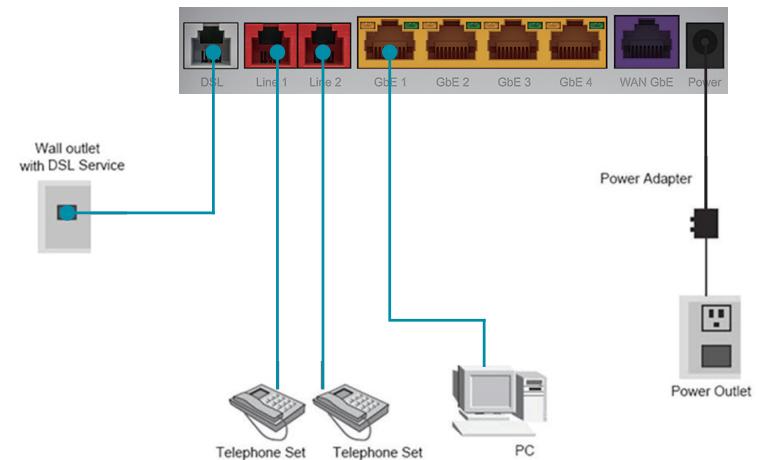
### Step 3:

Plug the power adapter into the wall outlet and then connect the other end of it to the **Power Input** port on the router.

The following figure shows the connection of the router, PC, and telephones handsets.

### Step 4:

If you use 3G/4G Internet service, connect the 3G USB data card to the **USB** interface on the side panel. If you use phone service through the Internet, connect a telephone handset to the **PHONE** interface on the rear panel.



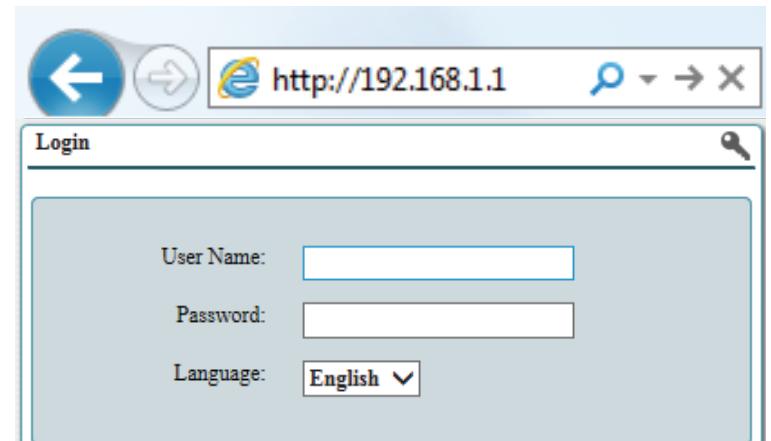
# Configuration

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

You will be presented with the login screen. The username is **admin**, and the default password is **admin**.

Once you are logged in successfully, you will be presented with the **Status** screen which will give you a brief overview of the router's current status and configuration.

To proceed with configuration, click **Advanced Configuration**. If you are configuring the DVA-5582 for the first time, you will be able to access the **Configuration Wizard** from that screen.



A screenshot of the "Status" screen of the D-Link router configuration interface. The screen is titled "D-Link" and shows "CPE Status" with "Firmware Version: DVA-5582\_A1\_WI\_20161221". It displays the status of various interfaces: WEth (Up, 1000 Mbps, Full Duplex), Internet (Down, IP Address N/A, Gateway N/A, DNS), Wireless Wi-Fi Radio 1 (Up, Active ok, SSID, Password, WPS mode), Wireless Wi-Fi Radio 2 (Up, Active ok, SSID, Password, WPS mode), and Phone (Up, Line Number 0001, Line Status Disabled, Call State Idle, Line Number 0002, Line Status Disabled, Call State Idle). On the right side, there is a "Troubleshoot" section with three steps: 1. Verify the ISP username and password you fill in the IAD. 2. If the problem persists power cycle the IAD. 3. Contact your ISP Customer support service to verify your broadband connection. At the bottom, there is a diagram of the router with a computer connected via an Ethernet cable, and a "Advanced Configuration" button.

# Home

The **Home** screen provides a list of all available functions, as well as easy access to the **Configuration Wizard**. Items listed with a + symbol have sub menus that appear when the mouse passes over them to enable quick-and-easy access to all submenu items.

**Configuration Wizard:** Click this icon to launch the **Configuration Wizard** which will guide you through the rest of the setup process. See **Configuration Wizard on page 11** for a guided setup.

**User:** The **User** menu item allows the user to change the default administrator name and password. For details see **Users on page 67** for details.

**Setup:** The **Settings** menu item has a pop-up menu, and contains links to all settings relevant to network connections and administration. For more information see **Settings on page 31** for details

**Storage:** The **Storage** menu item has a pop-up menu, and allows you to set up **Network File Sharing**, **User Accounts** for remote access, **FTP Server** configuration, and **DLNA Media Sharing** for sharing multimedia content on the local network. For details, see **Storage Service on page 72** for details.

**Home Network:** The **Home Network** menu item shows a map of the local network, lists all network interfaces, and provides links to both firewall configuration and WAN configuration. For details, see **Home Network on page 78**.



# Home (cont)

**System:** The **System** menu item has a pop-up menu, and contains links to general administrative tasks, such as the system clock, creating backups of router settings, system reset, and firmware upgrades. For details, see **System on page 79.**

**Diagnostic:** The **Diagnostic** menu item has a pop-up menu, and contains links to diagnostic tools that should not be necessary for most users, including packet configuration, IP tools advanced QoS services, and advanced software configuration. For details, see **Diagnostic on page 87**

**Security:** The **Security** menu item has a pop-up menu, and contains links to firewall, DMZ, and captive portal settings. For details, see **Security on page 96.**

**Modem:** The **Modem** menu item has a pop-up menu, and contains links to help you configure a 3G/4G USB dongle to connect to the internet. For details, see **Modem on page 100.**

**WiFi-1.1** The **WiFi-1.1 (2.4GHz)** and **WiFi-2.1 (5GHz)** are direct links to the **(2.4GHz) and** Wi-Fi configuration for each channel. For details, see **WiFi-1.1 (2.4 GHz) on page 104** and **WiFi-2.1 (5 GHz) on page 105.**



# Home Configuration Wizard

If your router has not come preconfigured from your ISP, or if your connection defaults have been changed, you will need to complete the **Configuration Wizard** in order to access the internet. The wizard consists of two phases: setting the default WAN (Internet connection) and configuring Wi-Fi settings.

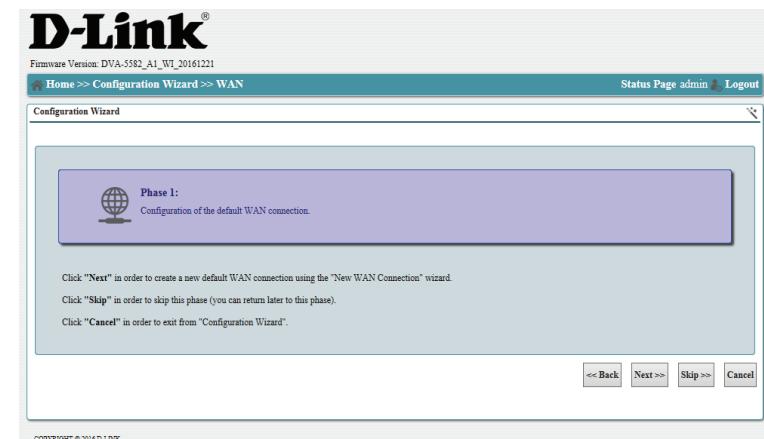
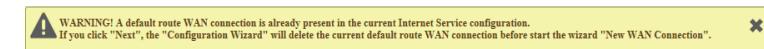
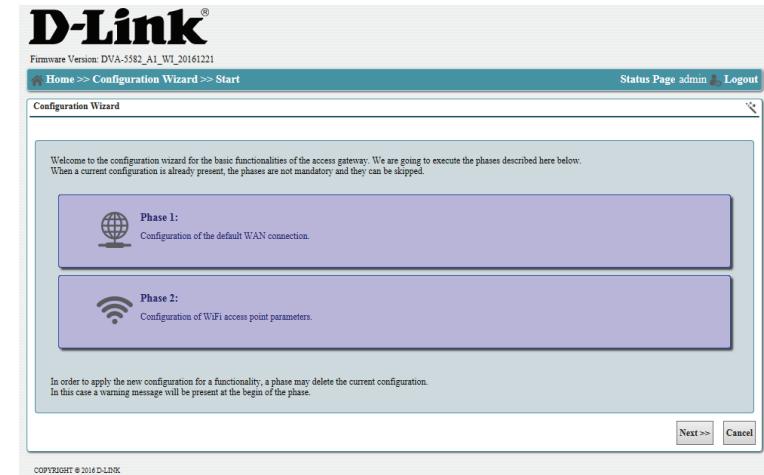
**Note:** If you are configuring a DSL connect, be sure to have your ISP's configuration information on hand. Configuring a DSL connection requires a high level of technical knowledge and advanced concepts beyond the interface are beyond the scope of this manual.

Click **Next** to start the configuration wizard, or **Cancel** to return to the homescreen.

**Note:** If a default connection is already configured, those settings will be erased once you click **Next** on the phase one screen. To edit existing settings, click **Cancel** return to the Home screen and select the relevant connection type instead. You can also choose to **Skip** Phase 1, preserving your WAN settings, and move directly to Phase 2 to configure Wi-Fi settings.

## Configuration Wizard: Phase 1

Click **Next** to configure your Internet connection, or click **Skip** to proceed directly to Phase 2 to configure your Wi-Fi settings. Clicking **Cancel** will return to the Home screen and discard any changes.



# Configuration Wizard: Phase 1 (Cont.)

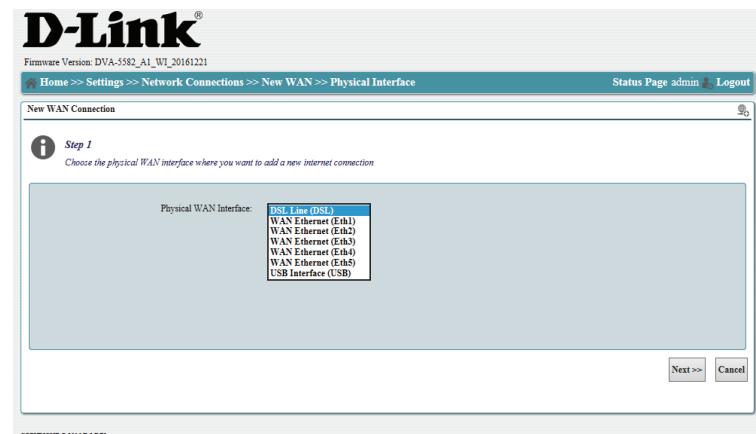
## Physical WAN Interface

**Physical WAN** This menu asks you to choose which physical interface your Internet **Interface:** connection comes from.

**DSL Line (DSL):** Select this interface if you use an xDSL connection. This connection type uses an RJ-11 (telephone) cable plugged into the gray port on the back of your router. For details on the DSL Line (DSL) configuration procedure, see **DSL Line Configuration Wizard on page 16.**

**WAN Ethernet** Choose this connection type if your Internet is delivered over an RJ-45 (**Eth1-5:**) (Ethernet) connection. If your WAN connection is connected to the purple port on the back of the device labelled **WAN GbE**, then you should select **WAN Ethernet (Eth5)**. For details, see **WAN Ethernet Configuration Wizard on page 17.**

**USB Interface (USB):** Choose this interface if your primary Internet connection comes from a 3G/4G dongle or other USB device. For details, see **USB Interface Configuration Wizard on page 18.**



The subsequent steps will be different depending on the type of interface selected.

Click **Next** to start the configuration wizard, or **Cancel** to return to the homescreen.

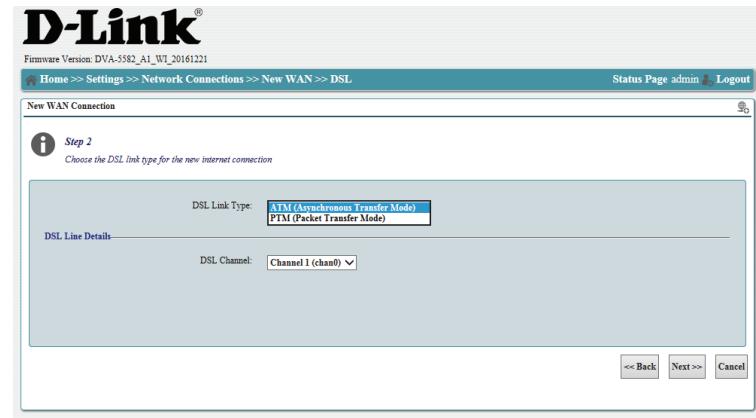
## DSL Link Type

**DSL Link Type:** This menu asks you to choose which physical interface your Internet connection comes from. The options are **ATM (Asynchronous Transfer Mode)** and **PTM (Packet Transfer Mode)**. This information will be provided by your ISP.

**DSL Channel:** Select this interface if you use an xDSL connection. This connection type uses an RJ-11 (telephone) cable plugged into the gray port on the back of your router.

Choose this connection type if your Internet is delivered over an RJ-45 (Ethernet) connection. If your WAN connection is connected to the purple port on the back of the device labelled **WAN GbE**, then you should select **WAN Ethernet (Eth5)**.

Choose this interface if your primary Internet connection comes from a 3G/4G dongle or other USB device.



If you have selected **ATM (Asynchronous Transfer Mode)** for the DSL Link Type, clicking **Next** will take you to **ATM Configuration on page 14**.

If you have selected **PTM (Packet Transfer Mode)** for the DSL Link Type, see **Ethernet Layer Settings (IP Encapsulation) on page 15**.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

## ATM Configuration

**ATM Link:** This menu asks you to specify an existing ATM link to bind to your previously selected interface. Select your link from the drop down menu. If no ATM link exists, or you would like to create a new default link with new settings, selection **New ATM Link**. Be sure to have your ISP's information on hand.

If you choose **New ATM Link**, the following options will be available:

**ATM Link Type:** Choose the correct protocol for the ATM Link. The choices are **Ethernet over ATM**, **IP over ATM**, or **PPP over ATM**. This information will be provided by your ISP

**Destination Address (VPI/VCI):** Virtual Path Identifier and Virtual Channel Identifier (VPI/VCI) are the path and channel between two points of an ATM network. The first field corresponds to VPI, and the second to VCI. For VPI select an identifier from 0-255. For VCI, select an identifier from 32 to 32235.

**Additional VC Search List:** Additional identifiers can be specified by clicking the + button. Up to 51 additional pairs of identifiers can be added.

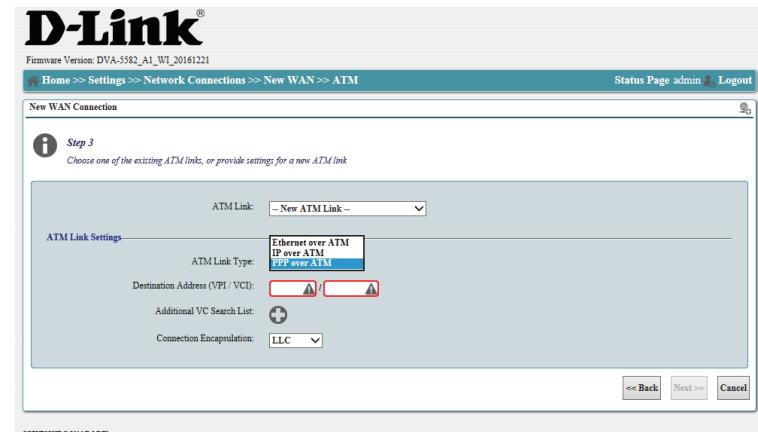
**Connection Encapsulation:** Select either **LLC** (Logical Link Control) or **VCMUX** (Virtual Circuit Multiplexing). This information should be provided by your ISP.

If you have selected **Ethernet over ATM**, clicking **Next** will take you to **Ethernet Layer Settings (IP Encapsulation) on page 15**.

If you have selected **IP over ATM**, clicking **Next** will take you to **IPv4 Interface (IP over ATM) on page 23**.

If you have selected **PPP over ATM**, clicking **Next** will take you to **PPP on page 21**.

Click **Next** to start the configuration wizard, **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

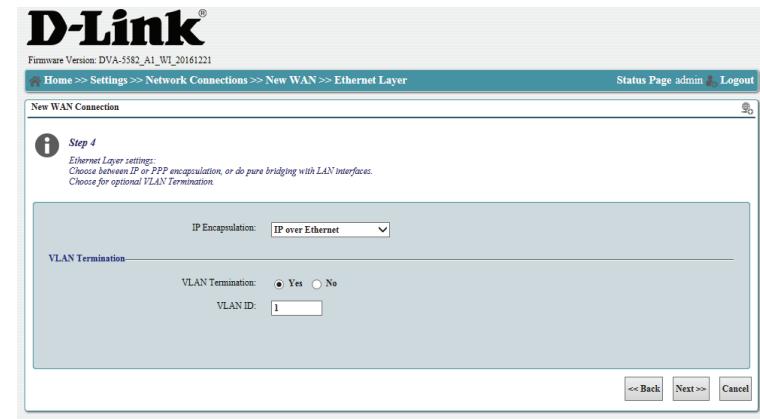


## Ethernet Layer Settings (IP Encapsulation)

**IP Encapsulation:** Choose an **IP Encapsulation** method from the list. The options are **IP over Ethernet**, **PPP over Ethernet**, and **Pure Bridge (no WAN IP)**

**VLAN Termination:** Specify whether **VLAN Termination** (Virtual Local Area Network termination) should be used on this connection. This information should be provided by your ISP.

**VLAN ID:** If you selected **Yes** for **VLAN termination**, choose a VLAN ID from 1 to 4094. This information should be provided by your ISP or network.



If you have selected **IP over Ethernet**, see **IPv4 Interface on page 24**.

If you have selected **PPP over Ethernet**, see **PPP on page 21**.

If you have selected **Pure Bridge (no WAN IP)** see **Pure Bridge on page 20**.

Click **Next** to continue the configuration wizard, **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

# DSL Line Configuration Wizard

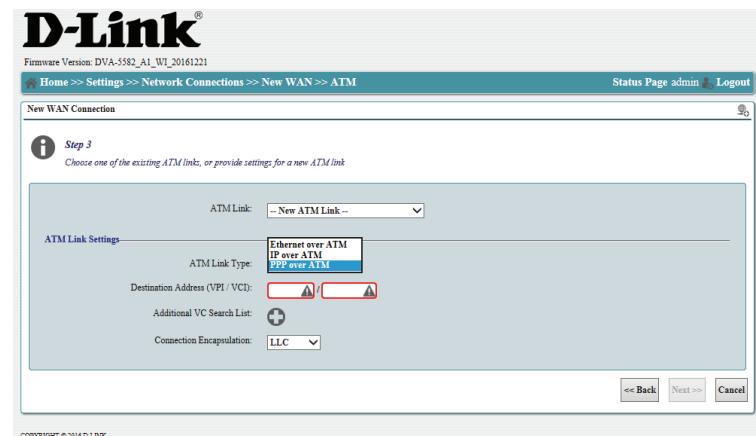
## PTM Configuration

**DSL Link Type:** This menu asks you to choose which physical interface your Internet connection comes from. The options are **ATM (Asynchronous Transfer Mode)** and **PTM (Packet Transfer Mode)**. This information will be provided by your ISP.

**DSL Channel:** Select this interface if you use an xDSL connection. This connection type uses an RJ-11 (telephone) cable plugged into the gray port on the back of your router.

Choose this connection type if your Internet is delivered over an RJ-45 (Ethernet) connection. If your WAN connection is connected to the purple port on the back of the device labelled **WAN GbE**, then you should select **WAN Ethernet (Eth5)**.

Choose this interface if your primary Internet connection comes from a 3G/4G dongle or other USB device.



Click **Next** to continue the configuration wizard, **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

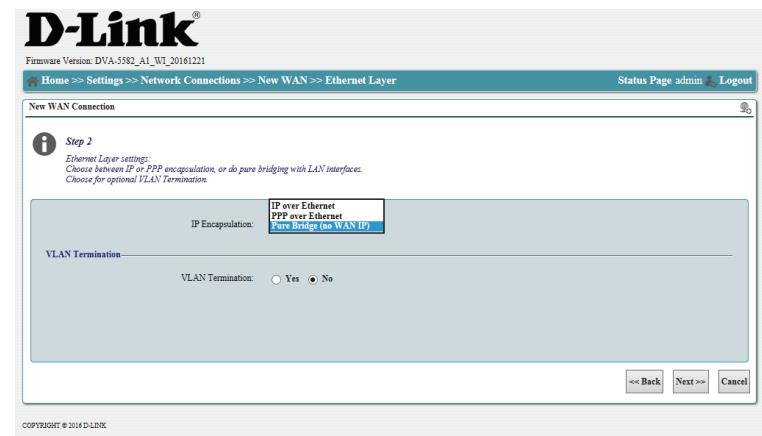
# WAN Ethernet Configuration Wizard

**IP Encapsulation:** Select **IP over Ethernet, PPP over Ethernet, or Pure Bridge (no WAN IP)**. This information should be provided by your ISP or system administrator.

If you have selected **IP over Ethernet**, see **IPv4 Interface on page 24**.

For **PPP over Ethernet**, see **PPP on page 21**.

**VLAN Termination:** If VLAN Termination is required by your Ethernet network, select **Yes** and select a VLAN. The default setting is **No**.



Click **Next** to continue the configuration wizard, **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

# USB Interface Configuration Wizard

**Select Default APN:** Select a default APN (Access Point Name) to connect to your 3G/4G network. If your APN is not listed, you can create a new one by choosing the last option on this list. You may skip this step, but your 3G/4G connection may not function properly until it is configured.

If you select **New Access Point Name**, the following options will appear:

## Operator

**Name:** Select a name to identify your APN. This name is for your reference and has no effect on network settings.

**PLMN Code:** Enter the PLMN Code (public land mobile network code) associated with your carrier. This information should be provided by your carrier.

## Access Point Names

**URL:** Enter the address for your carrier's APN. This information should be provided by your carrier.

**Dial:** Enter the number to dial to initiate the connection. By default, this is \*99#. This information should be provided by your carrier.

Clicking **Next** will prompt you to configure **PPP (USB) on page 19**.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

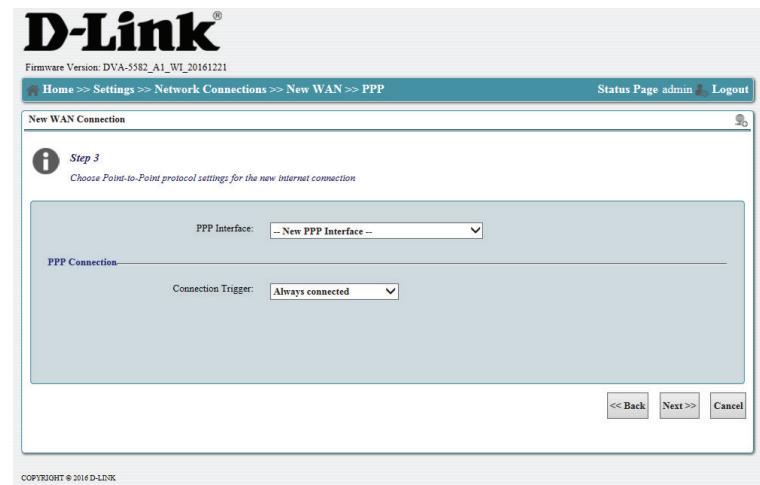
## PPP (USB)

If you have previously selected **PPP** as an IP encapsulation method, you will be prompted to configure your PPP (Point to Point Protocol) account information.

**PPP Interface:** Select an existing PPP interface to use, or select **New PPP Interface** to create a new one. Creating a new interface will display additional configuration options.

### PPP Connection

**Connection Trigger:** Select **Always connected**, **Connect when needed**, **Connect on client request**, or **Connect manually**. **Always connected** is the default setting and will keep your connection online continuously. Other connection settings will prompt for additional settings. These settings may be useful for users on limited or metered connections.



Click **Next** to proceed to the **IPv4 Interface** on page 24.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

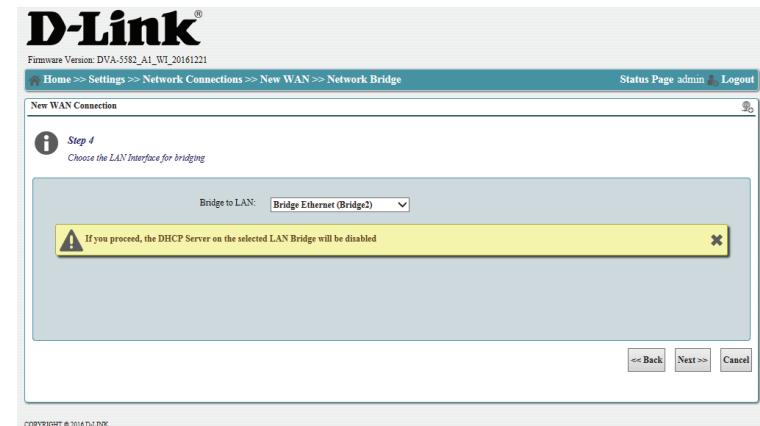
## Pure Bridge

Pure Bridge mode disables the local DHCP server, causing your ISP to assign IP addresses directly to any affected bridges. By default, the assigned bridge is all Ethernet and Wi-Fi LAN clients.

**Note:** This feature may disable firewall features designed to help your network resist intrusions and is not recommended unless specifically required by your ISP or network administrator.

**Note:** Once Pure Bridge Mode is enabled, you will no longer be able to access the configuration interface. Once enabled, the only way to make changes is to perform a manual factory reset by pressing and holding the reset button on the back of router. See **Rear View on page 6** to find your reset button.

**Bridge to LAN:** Select a network bridge from the list. By default, **Bridge1** includes all Ethernet LAN and Wi-Fi interfaces. If you wish to configure additional bridges, they must be set first from **Bridge and VLAN on page 35** before continuing the Wizard.



Click **Next** to proceed to the **Phase 1 Settings Summary on page 26**.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

# PPP

If you have previously selected **PPP** as an IP encapsulation method, you will be prompted to configure your PPP (Point to Point Protocol) account information.

**PPP Interface:** Select an existing PPP interface to use, or select **New PPP Interface** to create a new one. Creating a new interface will display additional configuration options.

## PPP Authentication

**Authentication** Select **Yes** to enable authentication or **No** to disable. If your PPP **Enabled:** service requires a username and password, select **Yes**.

**Authentication** If authentication is enabled, select an Authentication protocol. This **Protocol:** information should be provided by your ISP. **Auto** is default.

**MPPE encryption:** If authentication is enabled, choose from MPPE (Microsoft Point-to-Point Encryption) options. This information should be provided by **Username:** your ISP. **None** is the default setting.

**Password** If authentication is enabled, enter your PPP username. This information should be provided by your ISP.

If authentication is enabled, enter your PPP password. This information should be provided by your ISP.

## PPP Connection

**Connection Trigger:** Select **Always connected**, **Connect when needed**, **Connect on client request**, or **Connect manually**. **Always connected** is the default setting and will keep your connection online continuously. Other connection settings will prompt for additional settings. These settings may be useful for users on limited or metered connections.

The screenshot shows the D-Link DVA-5582 web interface for configuring a new WAN connection. The top navigation bar indicates the path: Home > Settings > Network Connections > New WAN > PPP. The main title is "New WAN Connection". Below it, a sub-section titled "Step 3 Choose Point-to-Point protocol settings for the new internet connection" is displayed. The "PPP Interface" dropdown is set to "New PPP Interface". The "PPP Authentication" section contains fields for "Authentication Enabled" (radio buttons for Yes/No), "Authentication Protocol" (checkboxes for Auto, PAP, CHAP, MS-CHAP, MS-CHAPv2, with Auto checked), "MPPE encryption" (checkboxes for None, 40 bit, 56 bit, 128 bit, stateless, with None checked), and "Username" and "Password" fields. The "PPP Connection" section includes fields for "Connection Trigger" (dropdown menu with "Connect when needed" selected), "Auto Disconnect when Idle" (radio buttons for Yes/No, with Yes selected), "Idle Disconnect Time" (input field with "seconds (min 60)" placeholder), "Auto Disconnect" (radio buttons for Yes/No, with Yes selected), and "Max Connection Time" (input field with "seconds (min 60)" placeholder). The "PPPoE Settings" section contains fields for "Access Concentrator Name" and "Service Name". At the bottom right are buttons for "<< Back", "Next >>", and "Cancel".

## PPP (Cont)

For connection triggers other than **Always connected**, the following options will appear:

**Auto Disconnect** Select **Yes** to disconnect automatically after a fixed time.  
**when Idle:**

**Idles Disconnect** Set an idle timer in seconds. Minimum 60.  
**Time:**

**Auto Disconnect:** Auto Disconnect allows the router to automatically disconnect after a specified period of time regardless of active traffic.

**Max Connection** Set a maximum connection time in seconds. Minimum 60.  
**Time:**

### PPPoE Settings

These settings appear only when configuring an Ethernet WAN connection. This section may be ignored if configuring a DSL or USB connection.

**Access Concentrator Name:** Enter the Access Concentrator Name here.

**Service Name:** Enter the PPPoE Service name here.

Click **Next** to configure IPv4 interface settings documented on the following page.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

## IPv4 Interface (IP over ATM)

**Enable NAT:** Select **Yes** to enable NAT (Network Address Translation) or **No** to disable. NAT is a form of firewall and enabling it is strongly recommended. The default is **Yes**.

**IPv4 Address** Enter your static IP address for IP over ATM. This information should be provided by your ISP.

**Subnet Mask:** Enter the subnet mask for your IPv4 address here. This information should be provided by your ISP.

**Setup as Default Route:** Select **Yes** to set this connection as the default source for your Internet connection. Selecting **No** will require manual connection in advanced settings. The default setting is **Yes**.

### DNS Configuration

**Setup Static DNS Servers:** Select **No** to get DNS information automatically from DHCP. Select **Servers:** **Yes** to setup DNS manually, and you will be prompted for a preferred and alternate server.

**Preferred DNS Server:** Enter the IP address of your preferred DNS Server. This field only appears if **Setup Static DNS Servers** is set to **Yes**.

**Alternate DNS Server:** Enter the IP address of your alternate DNS server. This field only appears if **Setup Static DNS Servers** is set to **Yes**.

Click **Next** to configure **IPv6 Interface Settings** on page 25.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.

# IPv4 Interface

**Enable NAT:** Select **Yes** to enable NAT (Network Address Translation) or **No** to disable. NAT is a form of firewall and enabling it is strongly recommended. The default is **Yes**.

**Obtain IPv4 Address** Select **Yes** to enable DHCP and get an IP address automatically. If you have a fixed IP from your ISP or network administrator, select **Automatically:** **No**. If you select **No**, you will be prompted to enter an IP address and a subnet mask.

**IPv4 Address** If you use a static IP address, enter it here. This field will only appear if **Obtain IPv4 Address Automatically** is **No**.

**Subnet Mask:** If you use a static IP address, enter the subnet mask here. This field will only appear if **Obtain IPv4 Address Automatically** is **No**.

**Setup as Default Route:** Select **Yes** to set this connection as the default source for your Internet connection. Selecting **No** will require manual connection in advanced settings. The default setting is **Yes**.

## DNS Configuration

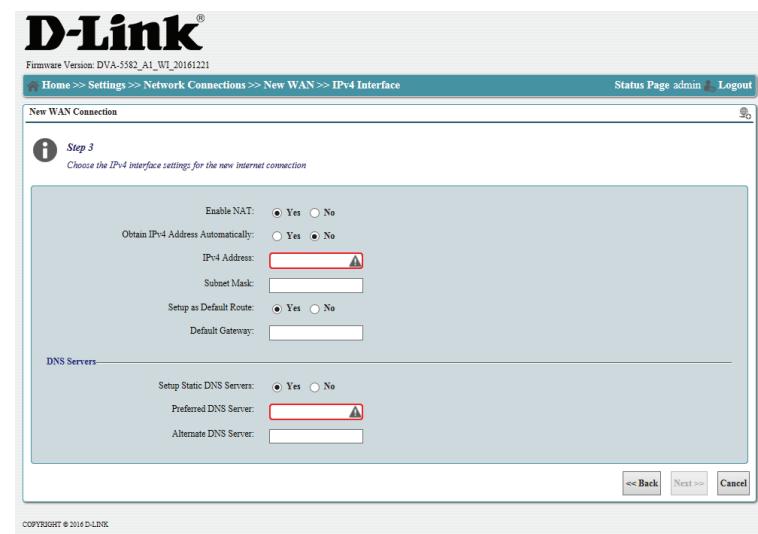
**Setup Static DNS Servers:** Select **No** to get DNS information automatically from DHCP. Select **Yes** to setup DNS manually, and you will be prompted for a preferred and alternate server.

**Preferred DNS Server:** Enter the IP address of your preferred DNS Server. This field only appears if **Setup Static DNS Servers** is set to **Yes**.

**Alternate DNS Server:** Enter the IP address of your alternate DNS server. This field only appears if **Setup Static DNS Servers** is set to **Yes**.

Click **Next** to configure IPv6 interface settings documented on the following page.

Click **Cancel** to return to the homescreen, or **Back** to return to the previous screen.



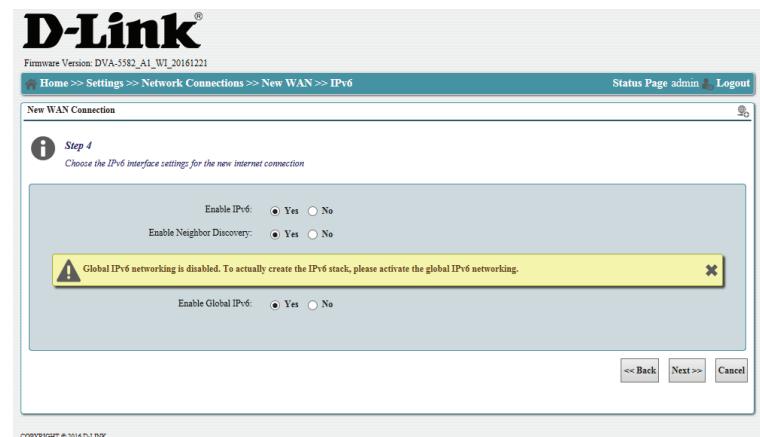
## IPv6 Interface Settings

**Enable IPv6:** Select **Yes** to enable IPv6 on this WAN connection, or **No** to disable it. IPv6 is disabled by default.

**Enable Neighbor Discovery:** Select **Yes** to enable the Neighbor Discovery Protocol (NDP) to allow your router to more easily detect other nodes on the WAN, or **No** to disable. This feature is enabled by default if IPv6 is enabled.

**Enable Global IPv6:** This option enables IPv6 across all interfaces.

**Note:** IPv6 is disabled by default. In order to use IPv6, the protocol stack must be enabled by enabling global IPv6.



Click **Next** to see a summary of your configuration and save your settings.

Click **Cancel** to return to the home screen or **Back** to return to the previous screen.

# Configuration Wizard Phase 1: Phase 1 Settings Summary

The following section will display different information based on the type of interface selected. This is a summary of all previous settings.

The screenshot shows a web-based configuration interface for a D-Link device. At the top, the D-Link logo and firmware version (DVA-5582\_A1\_W1\_20161221) are displayed. The URL bar shows the path: Home > Settings > Network Connections > New WAN > Resume. On the right, there are status pages for admin and logout, along with a refresh icon.

The main content area is titled "New WAN Connection". It includes a step indicator ("Step 5") and a note: "Choose a name to help you recognize the new WAN connection. Check the settings resume before applying." A text input field for "New WAN Connection Name" contains "Interface5", and a radio button group for "Enable" has "Yes" selected.

A "Settings Resume" table provides a summary of the configuration:

Physical WAN Interface:	WAN Ethernet (Eth5)
Ethernet Link:	IPv4
Enable NAT:	Yes
IP Addressing:	Dynamic (DHCP)
Setup as Default Route:	Yes
Setup Static DNS Servers:	No
Enable IPv6:	Yes
Enable Neighbor Discovery:	Yes
Enable Global Neighbor Discovery:	Yes

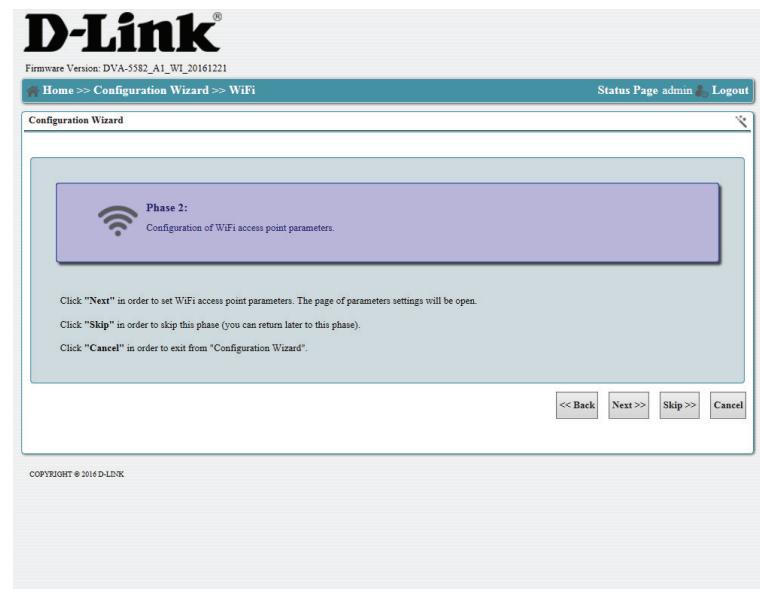
A yellow warning box at the bottom states: "⚠ Global IPv6 networking is disabled. To actually create the IPv6 stack, the global IPv6 networking will be enabled." with a close button (X).

At the bottom right are buttons for "<< Back", "Apply", and "Cancel".

Click **Apply** to save your changes and continue to Phase 2 of the setup wizard, **Cancel** to return to the home screen, or **Back** to return to the beginning of Phase 1.

## Configuration Wizard Phase 2: Wi-Fi Configuration

Phase 2 of the configuration Wizard allows you to configure your Wi-Fi Access Points. To continue, click **Next** and follow the instructions presented on the next page.



Note: This wizard will overwrite any existing Wi-Fi configuration.

Note: This wizard only configures the 2.4 GHz radio. To take full advantage of 802.11ac capabilities, you must enable the 5 GHz radio, described in **WiFi-2.1 (5 GHz) on page 105**.

To continue, click **Next** and follow the instructions presented on the next page.

Click **Apply** to save your changes and continue to Phase 2 of the setup wizard, **Cancel** to return to the home screen, or **Back** to return to the beginning of Phase 1.

# Wireless Access Point

Phase 2 of the configuration Wizard allows you to configure your Wi-Fi Access Points. To continue, click **Next** and follow the instructions presented on the next page.

**Status:** Indicates whether the interface is **Up** or **Down**.

**Enable Access Point:** Select **Yes** to enable the Wi-Fi access point. Selecting no will disable **Point:** Wi-Fi.

**Name (SSID):** Enter the name of your Wi-Fi access point.

## Wi-Fi Security Settings

**SSID Broadcast:** Select **Yes** to broadcast the SSID. Selecting **No** will require all devices wishing to connect to your network to enter the SSID manually in addition to any security

**AP Isolation:** Select **Yes** to isolate the wireless network from other devices on the LAN while retaining internet access. The default is **No**.

**Security Mode:** Select an encryption mode to help protect your Wi-Fi network from being accessed by unauthorized devices. **WPA2 Personal** is the default and recommended mode. WEP and older WPA standards are less secure and provided for compatibility with older devices.

**WPA Passphrase:** Choose a strong password to help protect your network. The longer and harder to guess a password is, the stronger the protection. The password can be any letter, number, symbol, or space. Accent marks and non-ASCII characters are not supported. Passwords must be at least 8 characters.

**Show Password:** This option shows the password as you type it..

The screenshot shows the D-Link Configuration Wizard interface for a Wireless Access Point. At the top, it displays the D-Link logo and firmware version DVA-5582\_A1\_WI\_20161221. The main menu bar includes Home, Configuration Wizard, WiFi Parameters, Status Page, admin, and Logout. The current page is 'WiFi Parameters' under 'Wireless Access Point'. The configuration section includes the following settings:

- Status: Up
- Enable Access Point: Yes (radio button selected)
- Name (SSID): DVA-5582 Test AP
- Wi-Fi Security Settings:
  - SSID Broadcast: Yes (radio button selected)
  - AP Isolation: No (radio button selected)
  - Security Mode: WPA2 Personal (dropdown selected)
  - WPA Passphrase: (password field masked)
  - Management Frame Protection: Disabled (dropdown selected)
- Wi-Fi Protected Setup:
  - WPS Enabled: Yes (radio button selected)
  - Configuration Methods: Push Button (checkbox checked)

At the bottom right of the form are 'Apply' and 'Close' buttons.

# Wireless Access Point (Cont)

## Wi-Fi Protected Setup

**WPS Enabled:** Select **Yes** to enable Wi-Fi Protected Setup (WPS) as a quick-and-easy way to setup an encrypted wireless network.

**Configuration Methods:** Select a WPS configuration method. As of this writing, the firmware only supports WPS Push Button for security reasons.

## WPA2 Enterprise

Your router provides support for **WPA2 Enterprise** for use in some corporate environments. WPA2 Enterprise relies on RADIUS (Remote authentication Dial-In User Service). If your network uses WPA2 Enterprise, you will have the following additional options. This is provided for reference only and home users should generally choose **WPA2 Personal**.

**Radius Server Address:** Enter the address of your RADIUS authentication server here.

**Radius Server Port:** Enter the port number of your RADIUS server here. Default is 1812

**Radius Secret:** Enter your RADIUS secret here.

**Secondary Radius Server Address:** Enter the address of your backup RADIUS authentication server here.

**Secondary Radius Server Port:** Enter the port of your backup RADIUS authentication server here. The default port is 1812.

**Secondary Radius Secret:** Enter your secondary RADIUS secret here.

Click **Apply** to save settings and continue to the **Configuration Wizard Summary on page 30**.

Click **Close** to return to the previous page.

D-Link®  
Firmware Version: DVA-5582\_A1\_WI\_20161221  
Home >> Configuration Wizard >> WiFi Parameters  
Status Page admin Logout  
Wireless Access Point

Status:	Up
Enable Access Point:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Name (SSID):	DVA-5582 Test AP
<b>Wi-Fi Security Settings</b>	
SSID Broadcast:	<input checked="" type="radio"/> Yes <input type="radio"/> No
AP Isolation:	<input type="radio"/> Yes <input checked="" type="radio"/> No
Security Mode:	WPA2 Enterprise
Radius Server Address:	(Redacted)
Radius Server Port:	1812
Radius Secret:	(Redacted)
Secondary Radius Server Address:	(Redacted)
Secondary Radius Server Port:	1812
Secondary Radius Secret:	(Redacted)
Management Frame Protection:	Disabled <input checked="" type="checkbox"/>

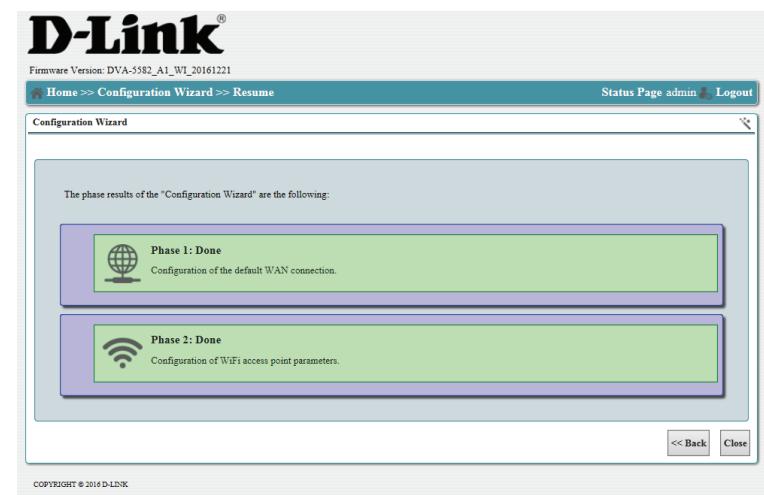
Apply Close

## Configuration Wizard Summary

This page is the end of the configuration wizard. If you have completed both phases, they will be labeled in green. If you have opted to skip one phase, the skipped phase will be grayed out.

Press **Close** to return save all changes and return to the homescreen.

Press **Back** to return to the previous screen.



# Settings

The **Settings** screen provides access to advanced network configuration settings. These settings are for advanced use cases, and should not need to be configured for normal use. Items listed with a + symbol have sub menus that appear when the mouse passes over them to enable quick-and-easy access to all submenu items.

**Physical Interfaces:** The **Physical Interfaces** menu item has a pop-up menu, and contains links to advanced settings for xDSL, Ethernet, USB, phone, and Wi-Fi interfaces. For details, see **Physical Interfaces on page 33.**

**Network Connections:** The **Network Connections** menu item contains links to WAN connections. From this menu item, you can create, manage, or remove WAN interfaces and VPN clients. For details, see **Network Connections on page 34.**

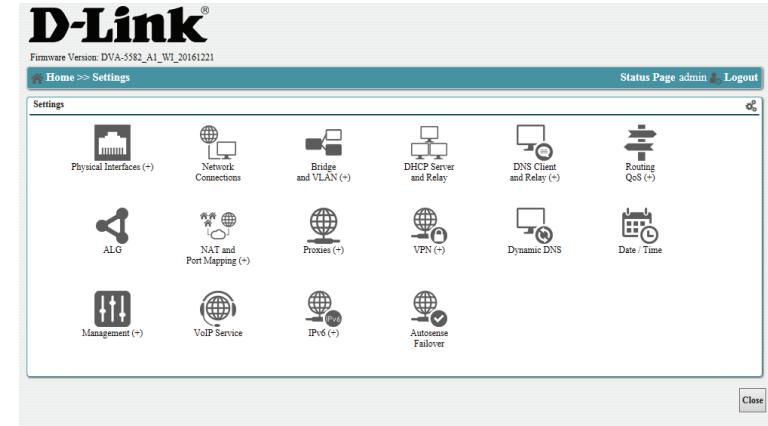
**Bridge and VLAN:** The **Bridge and VLAN** menu item has a pop-up menu, and allows you to manage bridges and VLAN termination. For details, see **Bridge List on page 36.** <sup>1</sup>

**DHCP Server and Relay:** The **DHCP Server and Relay** menu item allows direct management of the router's internal DHCP server, as well as for configuration of relay protocols. For details, see **DHCP Server and Relay on page 38.**

**DNS Client and Relay:** The **DNS Client and Relay** menu item has a pop-up menu, and allows you to configure how local devices use DNS (Domain Name System) servers. For details, see **DNS Client and Relay on page 39.**

**Routing and QoS:** The **Routing and QoS** menu item has a popup menu, and provides configuration options for advanced routing and QoS (Quality of Service) features. For details, see **Routing and QoS on page 43.**

**ALG:** The **ALG** (application layer gateway) menu item allows the direct configuration of ALG modules. For details, see **ALG on page 49.**



# Settings (Cont)

**NAT and Port Mapping:** The **NAT and Port Mapping** menu item has a pop-up menu, and allows you to configure NAT (network address translation) firewall features as well as map ports for specialized applications. For details see **NAT and Port Mapping on page 50.**

**Proxies:** The **Proxies** menu item allows you to control passthroughs for media devices and multicast, as well as PPPoE connections to your ISP. For details, see **Proxies on page 54.**

**VPN:** The **VPN** menu item has a pop-up menu, and allows you to configure your router as a VPN server to gain remote access to your network resources. For details, see **VPN on page 58.**

**Dynamic DNS:** The **Dynamic DNS** menu option allows you to configure a Dynamic DNS service to compensate for a dynamic IP. For details, see **Dynamic DNS on page 61.**

**Date / Time:** The **Date / Time** menu item contains settings for configuring the router's internet clock. For details, see **Date / Time on page 62.**

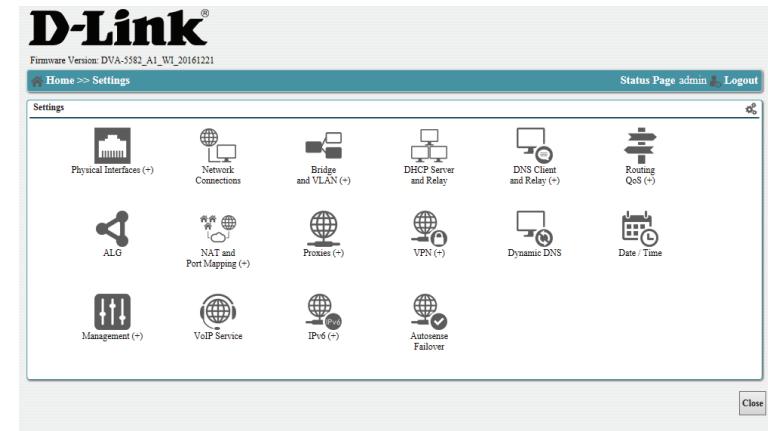
**Management:** The **Management** menu item has a pop-up menu, and contains options for configuring remote management and UPnP. For details, see **Management on page 63.**

**VoIP Service:** The **VoIP Service** menu item contains settings for configuring Voice over IP service provided by your ISP. For details, see **VoIP Service on page 68.**

**IPv6:** The **IPv6** menu item has a pop-up menu, and allows you to set global IPv6 configuration policy. For details, see **IPv6 on page 69.**

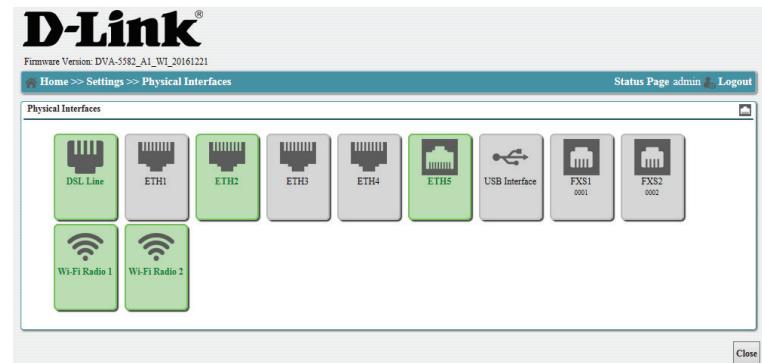
**Autosense Failover:** The Autosense Failover menu item allows you to configure backup internet connections should your primary WAN go down. For details, see **Autosense Failover on page 71.**

Click **Close** to return to the homescreen.



## Physical Interfaces

This screen displays a list of all physical interfaces. Clicking any one will bring up a sub menu with configuration options. Active interfaces are highlighted in green.



Click **Close** to return to the previous screen.

# Network Connections

This screen displays all active network connections, both LAN and WAN. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

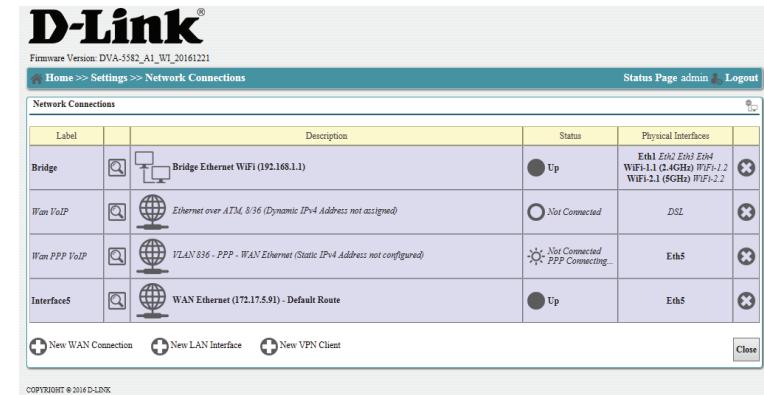
Click the  icon to access a detailed view of the selected interface.

Click the  button to delete the connection. Note that all associated settings will be deleted permanently.

Select **New WAN Connection** to begin Phase 1 of the Configuration Wizard. For details, see **Configuration Wizard Phase 1: on page 26**

Select **New LAN Interface** and follow the on-screen instructions to create a new LAN interface.

Select **New VPN Client** and follow the on-screen instructions to setup a new VPN client.



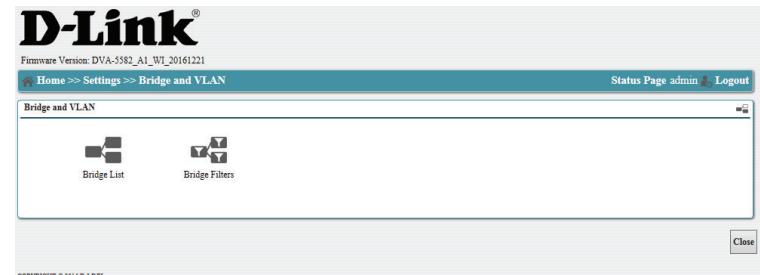
Click **Close** to return to the previous screen.

## Bridge and VLAN

This screen allows you to view and configure network bridges and bridge filters. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

**Bridge List:** The menu displays a list of all bridges and provides options managing them. For details, see **Bridge List on page 36**.

**Bridge Filters:** This menu displays a list of all bridge filters and provides options for managing them. For details, see **Bridge Filters on page 37**.



Click **Close** to return to the previous menu.

## Bridge List

This screen allows you to view and configure network bridges and bridge filters. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

You may **Modify**, **Delete**, or **Filter** by clicking on the buttons to the right-hand side of the corresponding bridge.

Select **Add New Bridge** and follow the on-screen instructions to add a new bridge

The screenshot shows the 'Bridge List' page from a D-Link router's web interface. The page title is 'Bridge List' and it includes the firmware version 'Firmware Version: DVA-5582\_A1\_W1\_20161221'. The URL is 'Home > Settings > Bridge and VLAN > Bridge List'. The top right has 'Status Page admin' and 'Logout' buttons. A 'Network Bridge' table is displayed with the following data:

Name	Standard	Interfaces	Enabled	Status
Bridge Ethernet WiFi (192.168.1.1)	802.1D	Eth1 Eth2 Eth3 Eth4 WiFi-1.1 (2.4GHz) WiFi-1.2 WiFi-2.1 (5GHz) WiFi-2.2	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Enabled

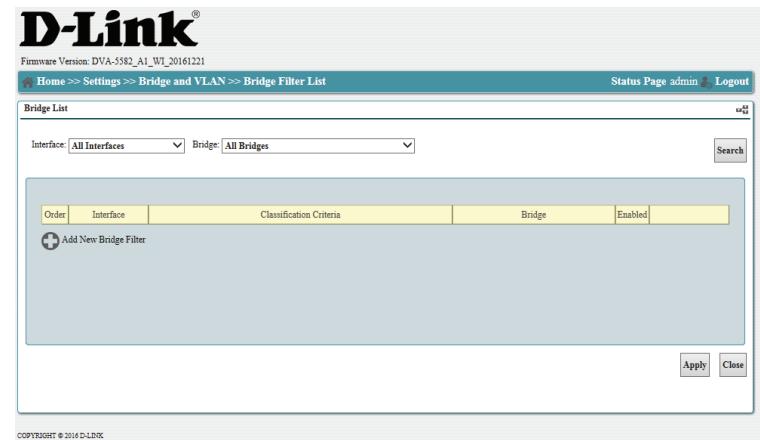
Below the table is a 'Add New Bridge' button. At the bottom right are 'Apply' and 'Close' buttons. The footer contains the copyright notice 'COPYRIGHT © 2016 D-LINK'.

Click **Apply** to save settings or **Close** to return to the previous menu.

## Bridge Filters

This screen allows you to view and configure network bridges and bridge filters. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

Click **Add New Bridge Filter** and follow the on-screen instructions to add a new bridge filter.



Click **Apply** to save settings or **Close** to return to the previous menu.

## DHCP Server and Relay

On this screen, you can configure advanced DHCP settings. This section is for advanced users and network professionals only and can be safely ignored by a majority of users. Select **Yes** to enable the internal DHCP server and allow all LAN devices to be issued local IPs. Select **No** to disable local DHCP assignment and receive IPs directly from your ISP.

**Note:** Disabling the DHCP server will prevent you from accessing the configuration interface. In order to regain access, a factory reset will be required.

The screenshot shows the D-Link DVA-5582 web interface under the 'DHCPv4 Server and Relay' section. At the top, it displays the firmware version: DVA-5582\_A1\_W1\_20161221. The main header is 'DHCP Server Settings'. The 'Enable Server' option is set to 'Yes'. Below this, the 'Serving Pools' section lists three pools: 'First Pool' (Bridge Ethernet WiFi (192.168.1.1), 192.168.1.100-192.168.1.150, 255.255.255.0, 12h 2m, Enabled), 'Pool2' (disabled), and 'Pool3' (disabled). There are buttons for 'New Serving Pool' and 'Edit/Delete'. The 'Relaying Pools' section shows one entry: 'Forwarding1' (disabled). Buttons for 'New Relaying Pool' and 'Edit/Delete' are also present. At the bottom right are 'Apply' and 'Close' buttons.

Click **Apply** to save settings or **Close** to return to the previous menu.

## DNS Client and Relay

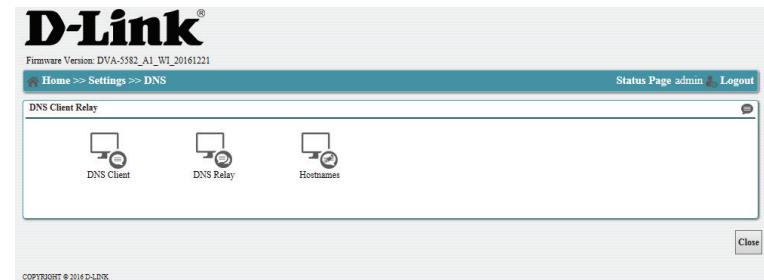
These pages allow you to configure advanced DNS settings for special usage cases. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

This section has three sub-menus which are described on the following pages:

**DNS Client on page 40**

**DNS Relay on page 41**

**Hostnames on page 42**



Click **Apply** to save settings or **Close** to return to the previous menu.

## DNS Client

This screen allows you to configure advanced DNS Client settings. This section is for advanced users and network professionals only and can be safely ignored by a majority of users. This information should be provided by your ISP.

You may modify or delete items by clicking on the button of the corresponding item.

Select **Add Server** to and follow the on-screen instructions to add a new server.

Select **Add Rule for Dynamic Server** to add new rules to the list.

The screenshot shows the 'DNS Client Settings' page of a D-Link router's web interface. At the top, there are buttons for 'Add Server' and 'Add Rule for Dynamic Server'. Below these are two tables: 'DNS Servers...' and 'Rules for Dynamic DNS Servers'. The 'DNS Servers...' table has one entry: Origin 'DHCPv4', IP Address '192.168.0.1', Domains/Hostnames 'Any', and Outbound Interface 'WAN Ethernet (192.168.0.51)'. The 'Rules for Dynamic DNS Servers' table has two entries: 'Any' for origin, 'voip.libero.it' and 'sip.infostrada.it' for domains/hostnames, and 'Ethernet over ATM, \$/36 (Dynamic IPv4 Address not assigned)' for the outbound interface. There are also 'Apply' and 'Close' buttons at the bottom.

Click **Apply** to save settings or **Close** to return to the previous menu.

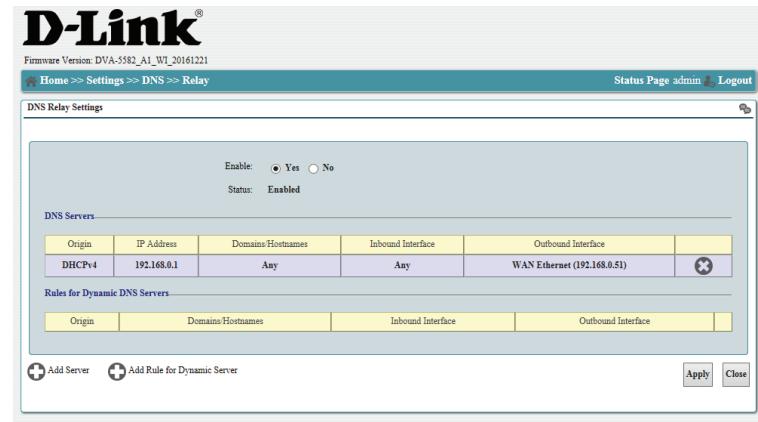
## DNS Relay

This screen allows you to configure advanced DNS relay settings. This section is for advanced users and network professionals only and can be safely ignored by a majority of users. This information should be provided by your ISP.

You may modify or delete items by clicking on the button of the corresponding item.

Select **Add Server** to and follow the on-screen instructions to add a new server.

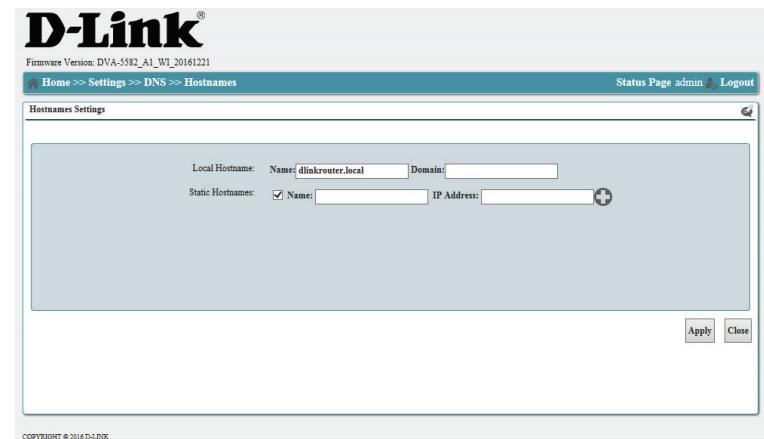
Select **Add Rule for Dynamic Server** to add new rules to the list.



Click **Apply** to save settings or **Close** to return to the previous menu.

## Hostnames

This screen allows you to configure a local hostname for easy access to your router without needing to keep track of your router's IP address.



Click **Apply** to save settings or **Close** to return to the previous menu.

## Routing and QoS

This section provides advanced settings for Routing and QoS (quality of service).

It has five submenus described below:

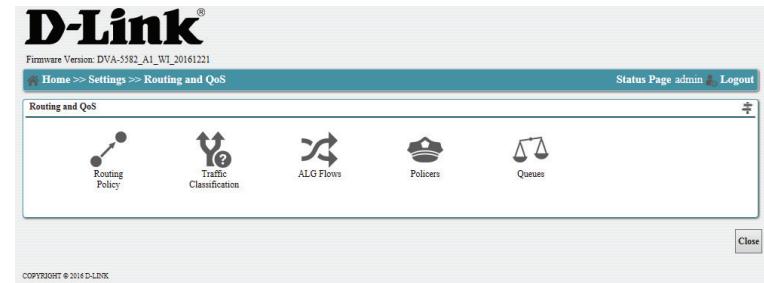
**Routing Policy on page 44**

**Traffic Classification on page 45**

**ALG Flows on page 46**

**Policers on page 47**

**Queues on page 48**



This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

## Routing Policy

This section allows you to manually configure routing tables. The table displays current information about this route. Click the check boxes to disable any specific route. Click **Add New Route** to add a new route.

The screenshot shows the D-Link IP Forwarding Rules configuration interface. At the top, it displays the firmware version as DVA-5582\_A1\_W1\_20161221. The navigation bar includes Home, Settings, Routing and QoS, and IPv4 Forwarding Rules. On the right, there are links for Status Page, admin, Logout, Apply, and Close. The main area is titled 'IP Forwarding Rules' and contains a table with the following data:

Destination IP / SubnetMask	Gateway IP Address	Interface	Traffic Classes	Metric	Type	Status	Enabled
Network 192.168.168.249/255.255.255.255	172.17.5.254	WAN Ethernet (172.17.5.47)	None	Dynamic	Enabled	<input checked="" type="checkbox"/>	
Network 192.168.168.201/255.255.255.255	172.17.5.254	WAN Ethernet (172.17.5.47)	None	Dynamic	Enabled	<input checked="" type="checkbox"/>	
Network 192.168.168.250/255.255.255.255	172.17.5.254	WAN Ethernet (172.17.5.47)	None	Dynamic	Enabled	<input checked="" type="checkbox"/>	
Default	172.17.5.254	WAN Ethernet (172.17.5.47)	None	Dynamic	Enabled	<input checked="" type="checkbox"/>	

Below the table is a button labeled 'Add New Route'. At the bottom right are 'Apply' and 'Close' buttons. The footer of the page includes the copyright notice 'COPYRIGHT © 2014 D-LINK'.

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Traffic Classification

On this screen, you are able to directly edit traffic classification. Traffic classification is used to prioritize certain traffic (such as VoIP) to ensure correct functioning of time-sensitive services.

From this screen, the **Order** of given traffic may be moved up or down, with traffic at the top of the list receiving highest priority. Traffic classes may be modified or deleted with the buttons on the right hand side of the screen.

Click **Add New Class** to add a new traffic class.

Order	Name	Classification Criteria	Classification Outcome	Enabled
1	SIP	Interface Protocol Destination Port	Egress Queue Application	No
2	FTP ALG	All Interfaces Protocol Destination Port	Application	FTP
3	IFTP ALG	All Interfaces Protocol Destination Port	Application	IFTP
4	PFTP ALG	All Interfaces Protocol Destination Port	Application	PFTP
5	H323-UDP ALG	All Interfaces Protocol Destination Port	Application	H323
6	H323-TCP ALG	All Interfaces Protocol Destination Port	Application	H323
7	SIP FXS	Locally Generated Traffic DSCP Field	Classes 7,200 Egress Queue Ethernet Priority (802.1Q)	WETH HP - ETH5
8	SIP-VDSL-WETH	Locally Generated Traffic DSCP Field	Ethernet Priority (802.1Q)	5

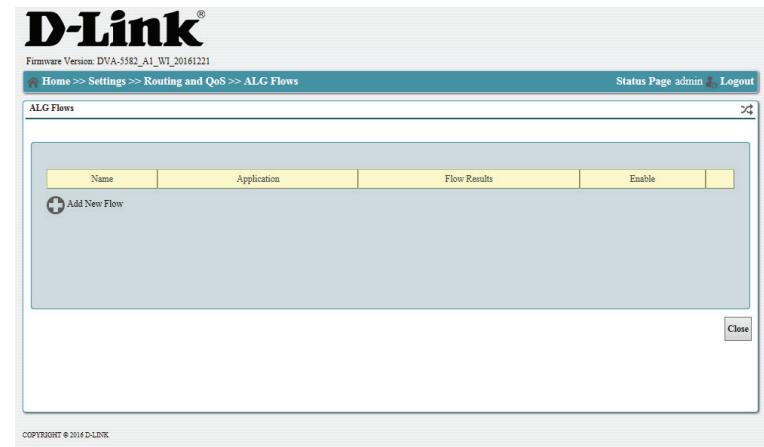
**Add New Class**

Click **Close** to return to the previous menu.

## ALG Flows

The Application Layer Gateway (ALG) flows allows you to configure dynamic port and address translation for traversal over the NAT firewall.

Click **Add New Flow** to configure this for a new application and follow the on-screen instructions.

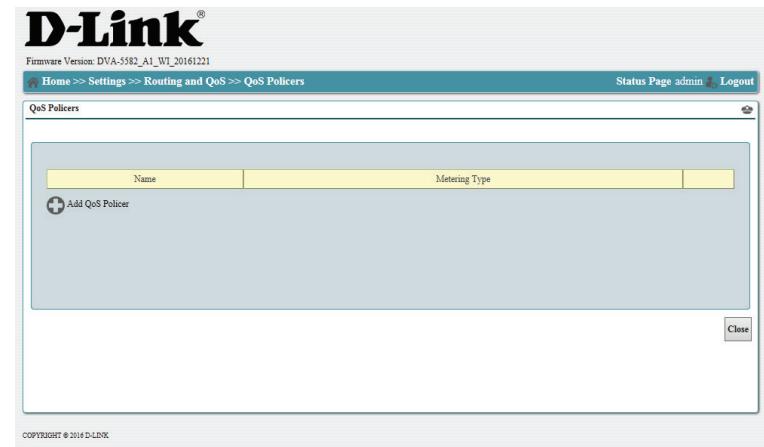


Click **Close** to return to the previous menu.

## Policers

Configuring Policers allows you to control the flow rate of certain kinds of traffic. When traffic exceeds this limit, it can be dropped or sent to a different forwarding class.

Click **Add QoS Policer** and follow the on-screen instructions to configure a new policer.



Click **Close** to return to the previous menu.

## Queues

The **Queues** screen allows you to prioritize traffic based on traffic class and interface. The default layout includes PTM, ATM, and Ethernet WAN interfaces. You may modify or delete existing queues using the modify and delete buttons to the right. Click **Add QoS Queue** and follow the on-screen instructions to add a new queue.

The screenshot shows the 'QoS Queues' configuration page for a D-Link device. The page header includes the D-Link logo, firmware version (DVA-5582\_A1\_W1\_20161221), and user status (Status Page admin). The main content area displays a table of current QoS queues:

Name	Queue Position	Precedence	Scheduling Algorithm	Traffic Classes	Action
ATM LP		2	SP		
ATM HP		1	SP	SIP FXS	
PTM LP		2	SP		
PTM HP		1	SP	SIP FXS	
WETH LP	ETH5	2	SP		
WETH HP	ETH5	1	SP	SIP FXS	

Below the table are 'Add QoS Queue' and 'Close' buttons. The footer contains the copyright notice 'COPYRIGHT © 2016 D-LINK'.

Click **Close** to return to the previous menu.

# ALG

An application-level gateway (ALG) is a security component that augments a firewall or NAT employed in a network. It allows customized NAT filters to support address and port translation for specified application layer protocols. To edit modules, select, the **Modify** icon on the right-hand side corresponding to the module you wish to change.

This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

The screenshot shows the D-Link DVA-5582 User Interface with the following details:

- Header:** D-Link® Firmware Version: DVA-5582\_A1\_W1\_20161221 Status Page admin Logout
- Breadcrumbs:** Home >> Settings >> ALG
- Section Title:** Application Level Gateways
- Information:** i **ALG Modules**  
Some application protocols need ALGs in order to work properly. You can enable or disable them, and set up default policies.
- Table:** A grid showing ALG settings for various protocols. The columns are: Protocol, DSCHC Mark, Ethernet (802.1Q) Priority, Routing Policy, QoS Queue, Policer, Associated Traffic Classifications, and Associated Traffic Flows. The rows include: FTP, TFTP, SIP, H323, PPTP, and IPsec. Most entries show "No Change" in the first two columns and "None" in the others. Some rows have "FTP ALG", "TFTP ALG", "SIP", "H323-UDP ALG", "H323-TCP ALG", "PPTP ALG", and "None" in the last two columns respectively.
- Buttons:** Close

Click **Close** to return to the previous menu.

## NAT and Port Mapping

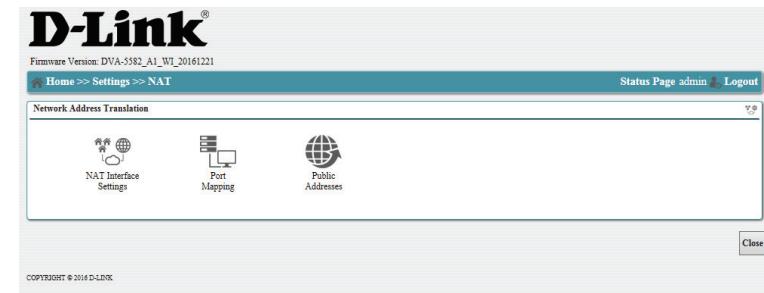
This menu provides links to configure NAT and port mapping. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

It has three sub menus described on the following pages:

**NAT Interface Settings on page 51**

**Port Mapping on page 52**

**Public Addresses on page 53**



Click **Close** to return to the previous menu.

## NAT Interface Settings

This page allows you to configure NAT firewalls individually for each external interface.

To change the prioritization of NAT interfaces, use the arrows on the left hand side. To modify or delete a NAT interface, select the appropriate button on the right-hand side corresponding to the interface you wish to change.

Click **Add new NAT** and follow the on-screen instructions to create a new NAT interface.

Order	Name	Match	Type	External Interface	Status	Enable	Actions
↓	InterfaceSetting2	All Packets	NAPT	Ethernet over ATM, 8/36 (Dynamic IPv4 Address not assigned)	Enabled	<input checked="" type="checkbox"/>	
↑ ↓	InterfaceSetting3	All Packets	NAPT	VLAN \$36 - PPP - WAN Ethernet (Static IPv4 Address not configured)	Enabled	<input checked="" type="checkbox"/>	
↑ ↓	InterfaceSetting4	All Packets	NAPT	WAN Ethernet (172.17.5.4)	Enabled	<input checked="" type="checkbox"/>	
↑	InterfaceSetting5	All Packets	NAPT	Ethernet over ATM, 0/32 (Dynamic IPv4 Address not assigned)	Enabled	<input checked="" type="checkbox"/>	

Add new NAT

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Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

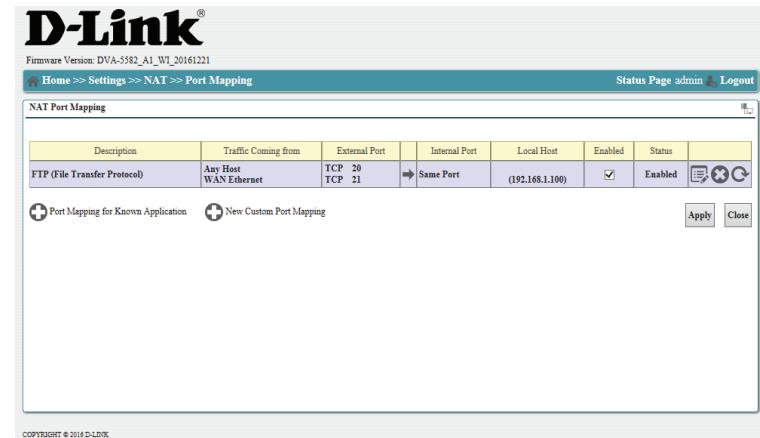
## Port Mapping

Port mapping allows you to specify a port or range of ports to open for specific devices on the network. This might be necessary for certain applications to connect through the router. In some cases you may have two applications running on different devices which require the same public port. Port mapping also allows you to remap a different external port to each device.

You may **Modify**, **Delete**, or **Reload** by clicking on the buttons to the right-hand side of the corresponding port map.

Select **Port Mapping for Known Application** to create a mapped port from an internal database of protocols.

Select **New Custom Port Mapping** to create a custom mapped port.



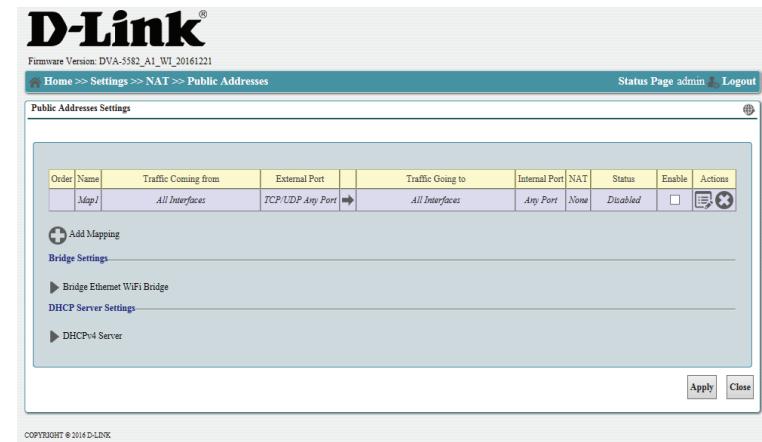
Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Public Addresses

This menu allows you to bind traffic from one interface to another, allowing you to bypass local bridges and NAT in certain circumstances. Mapping can also allow you to forward only specific protocols to specific targets. These maps can be accessed from other menus to synergize with other options. Mappings may be modified or deleted by selecting the appropriate buttons on the right-hand side corresponding to the target mapping.

Select **Add Mapping** to add a new port mapping.

Selecting bridges or DHCP servers will take you to their respective configuration pages.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Proxies

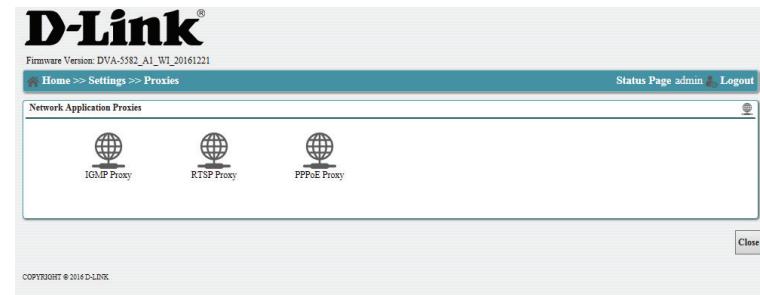
This menu allows direct control of proxies for specific protocols pertaining to multicast functionality. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

This section contains three submenus described on the following pages:

**IGMP Proxy on page 55**

**RTSP Proxy on page 56**

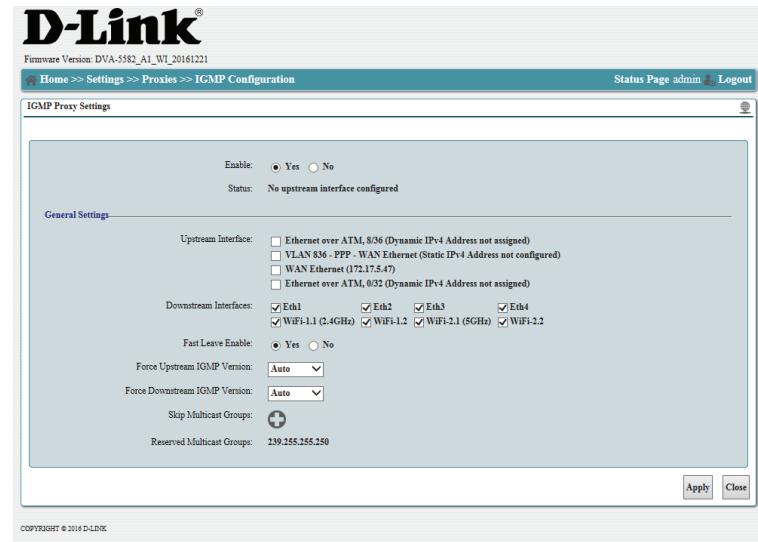
**PPPoE Proxy on page 57**



Click **Close** to return to the previous menu.

## IGMP Proxy

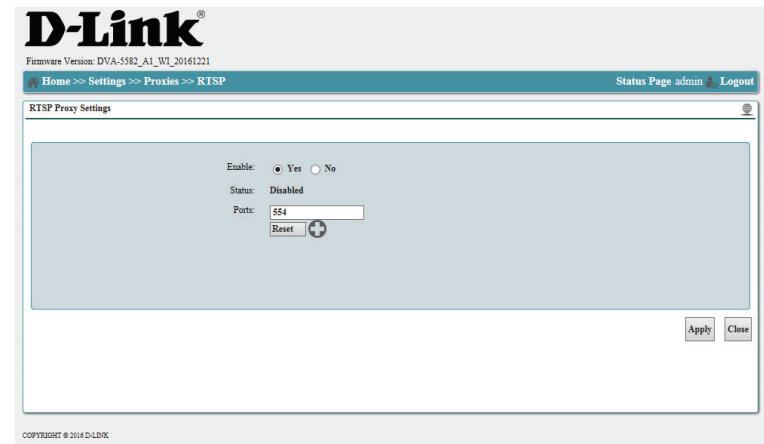
Creating an IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system has discovered through standard IGMP interfaces. This allows the system to act as a proxy for its hosts after being enabled. If applicable, these settings should be provided by your network administrator.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## RTSP Proxy

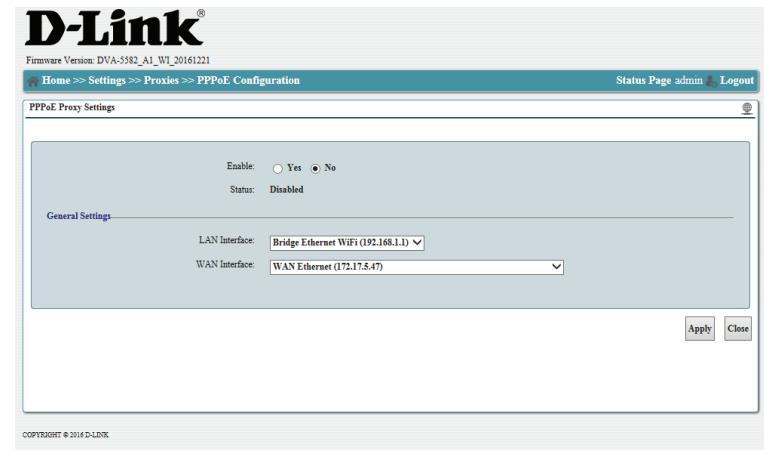
Enabling this feature allows applications that uses Real Time Streaming Protocol (RTSP) to receive streaming media from the Internet. If applicable, these settings should be provided by your network administrator.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## PPPoE Proxy

Specific settings may be required to use proxy configuration. If applicable, these settings should be provided by your network administrator.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## VPN

This section provides configuration options to use your router as a VPN server. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

This section contains two submenus described on the following pages:

**PPTP / L2TP Server on page 59**

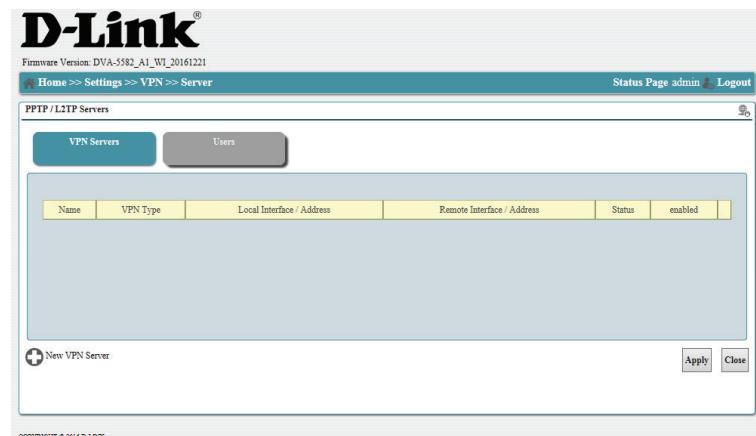
**IPsec on page 60**



Click **Close** to return to the previous menu.

## PPTP / L2TP Server

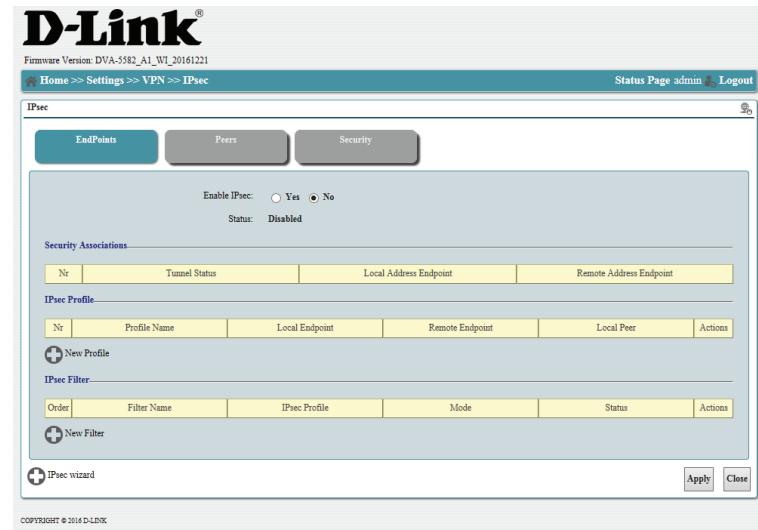
This page allows you to configure your router as a VPN server to enable remote access to your network. Select **New VPN Server** and follow the on-screen instructions to configure a new VPN server using the PPTP or L2TP protocols.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## IPsec

This page allows you to configure your router as a VPN server to enable remote access to your network using the IPsec protocol. Select **IPsec wizard** and follow the on-screen instructions to configure a new VPN server using the PPTP or L2TP protocols.

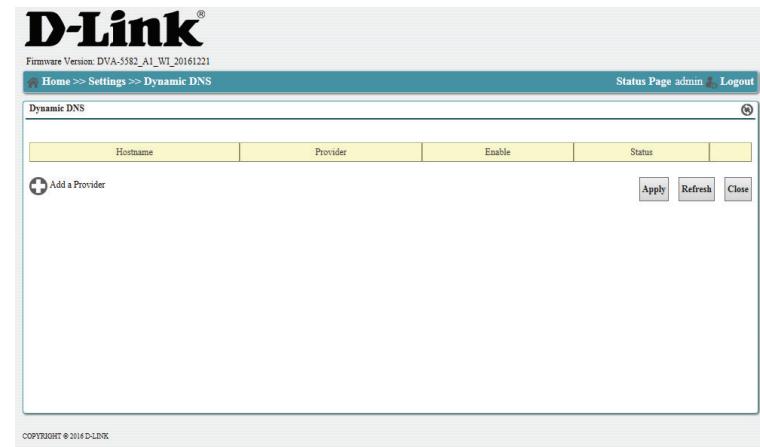


Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Dynamic DNS

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

Select **Add a Provider** and follow the on-screen instructions to configure a new DDNS provider.



Click **Apply** to save settings, **Refresh** to update the page, or click **Close** to return to the previous screen.

## Date / Time

This screen allows you to configure date and time settings for your router. Enter one or more NTP servers to automatically synchronize your date and time settings across the Internet. If you choose not to use an NTP server, you will be prompted to enter date and time manually. Note that manual date/time information may be lost in the event of a power failure.

D-Link®  
Firmware Version: DVA-5582\_A1\_W1\_20161221  
Home >> Settings >> NTP  
Status Page admin Logout  
Date and Time Settings

Current Time: Time: 10:31:52 Date: 08/03/2017  
Enable NTP:  Yes  No  
Set time/date manually:   
Synchronization Status: Synchronized  
Time Zone: CET-1CEST-2,M3.5.0/2  
NTP Server 1: time.ien.it  
NTP Server 2:  
NTP Server 3:  
NTP Server 4:  
NTP Server 5:

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Apply Refresh Close

D-Link®  
Firmware Version: DVA-5582\_A1\_W1\_20161221  
Home >> Settings >> NTP  
Status Page admin Logout  
Date and Time Settings

Current Time: Time: 10:31:52 Date: 08/03/2017  
Enable NTP:  Yes  No  
Set time/date manually:  00:00:00  
Synchronization Status: Synchronized  
Time Zone: CET-1CEST-2,M3.5.0/2  
NTP Server 1: time.ien.it  
NTP Server 2:  
NTP Server 3:  
NTP Server 4:  
NTP Server 5:

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Apply Refresh Close

Click **Apply** to save settings, **Refresh** to update the page, or click **Close** to return to the previous screen.

# Management

The management section provides links to administrative and management features available on your router. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

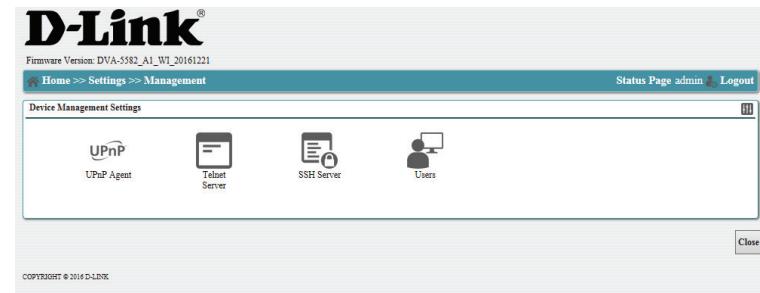
This section contains four submenus described on the following pages:

**UPnP Agent on page 64**

**Telnet Server on page 65**

**SSH Server on page 66**

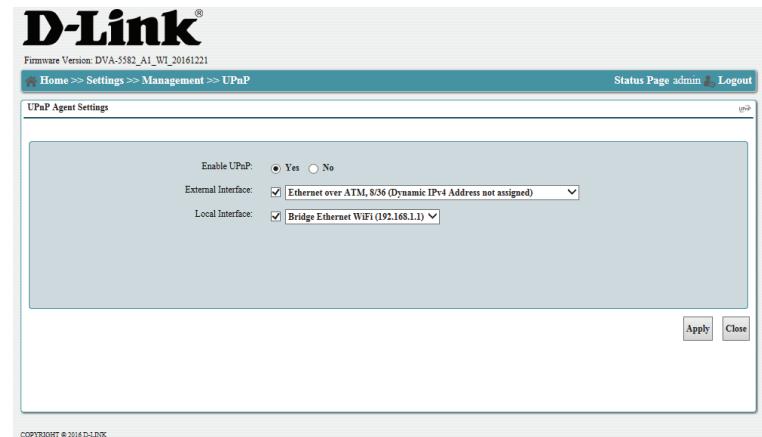
**Users on page 67**



Click **Close** to return to the previous menu.

## UPnP Agent

This page is used to configure UPnP. UPnP helps to automatically configure software and devices on your network to access the resources they require.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Telnet Server

This page allows you to enable and configure telnet remote administration of the device. Use of this feature is not recommended for novice users.

The screenshot shows the 'Telnet Command Line Settings' page from a D-Link device's web interface. The page title is 'Telnet Server'. At the top, there are tabs for 'Basic Settings', 'Local Access Control List', and 'Remote Access Control List'. The 'Basic Settings' tab is selected. Under 'Local Access', the 'Enable Local Access' option is set to 'Yes' (radio button selected), port is 23, LAN Interfaces is unchecked, and Session Life Time is 300. Under 'Remote Access', the 'Enable Remote Access' option is set to 'No' (radio button selected). At the bottom right are 'Apply' and 'Close' buttons.

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## SSH Server

This page allows you to enable and configure SSH remote administration of the device. Use of this feature is not recommended for novice users.

D-Link®  
Firmware Version: DVA-5582\_A1\_W1\_20161221  
Home >> Settings >> Management >> SSH Server Status Page admin Logout

SSH Command Line Settings

Basic Settings Local Access Control List Remote Access Control List

Local Access...

Enable Local Access:  Yes  No  
Port: 22  
LAN Interfaces:  Click to bind the SSH service to specific LAN interfaces  
Session Life Time: 300

Remote Access

Enable Remote Access:  Yes  No

Apply Close

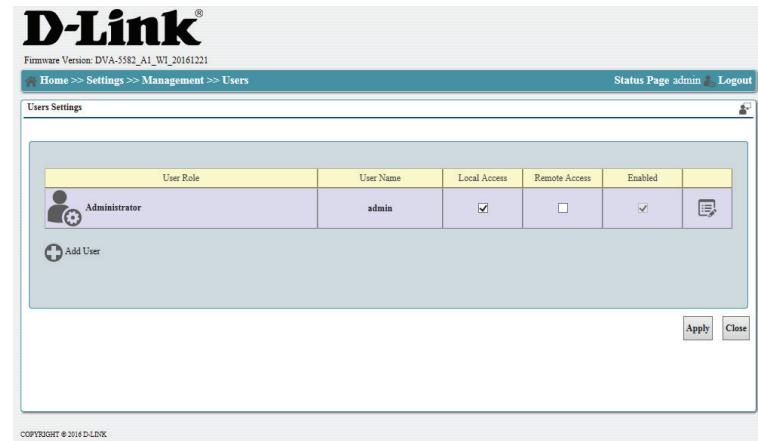
Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Users

The **Users** page allows you to add new user accounts and manage their access to administrative rights and remote access.

To modify or delete users, select the **Modify** or **Delete** buttons on the right-hand side of the screen. Note that you cannot delete an active user.

To add a new user, select **Add User** and follow the on-screen instructions.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## VoIP Service

This menu provides advanced configuration options for VoIP service. If your service has not been pre-configured by your ISP, this information should be provided by your ISP. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

The screenshot shows a web-based configuration interface for a D-Link device. At the top, it displays the D-Link logo and the firmware version: DVA-5582\_A1\_W1\_20161221. The navigation bar includes Home, Settings, VoIP Service, Status Page, admin, and Logout. Below the navigation is a sub-menu for VoIP Lines, which is currently selected. A prominent yellow warning box states: "Warning! The current VoIP functionality is compromised due to the absence of a 'Outbound Interface'. Please select a valid 'Outbound Interface' in order to restore the correct functionality of VoIP." Below the warning is a table titled "VoIP Lines" with the following data:

Line	Number	Physical Interface	Line Status	Call Status	Profile	enabled	
0001	0001	FXS1	Not Registered	Idle	Line1 (Disabled)	<input type="checkbox"/>	
0002	0002	FXS2	Not Registered	Idle	Line2 (Disabled)	<input type="checkbox"/>	

At the bottom of the table area are three buttons: "New Line" (with a plus sign), "Apply", "Refresh", and "Close".

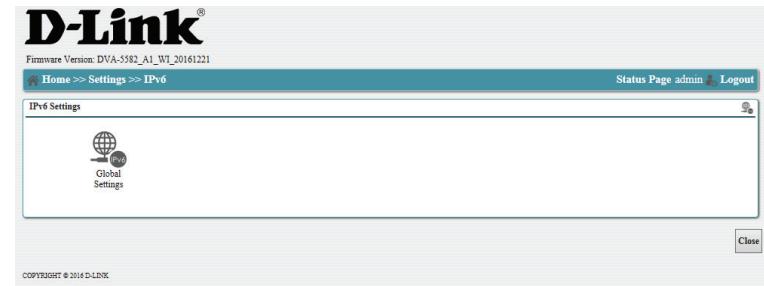
Click **Apply** to save settings, **Refresh** to update the page, or click **Close** to return to the previous screen.

## IPv6

The IPv6 menu provides a links to configure IPv6 settings across all interfaces. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

This section contains one submenu described on the following page:

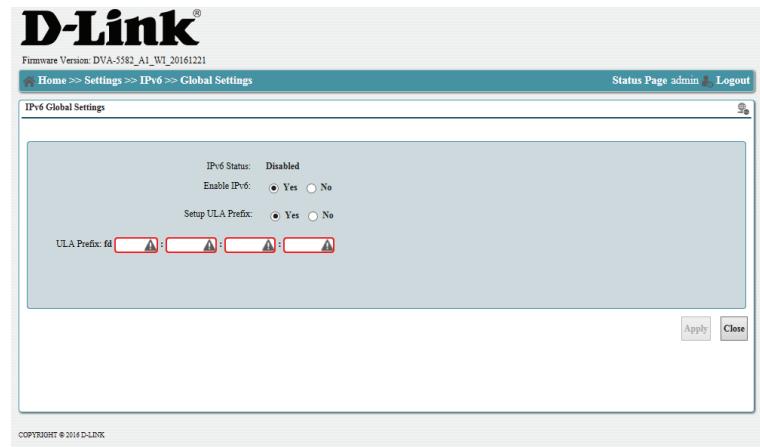
**Global Settings on page 70**



Click **Close** to return to the previous menu.

## Global Settings

This menu allows you to configure global IPv6 settings. This information should be provided by your ISP or network administrator.



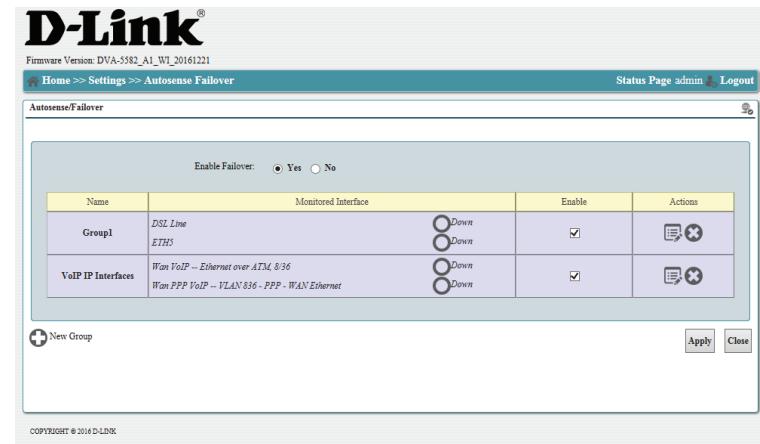
Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Autosense Failover

This section will allow you to configure your Internet fail over 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. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

Failover interfaces are managed in groups to allow redundancy across different interface types. To modify or delete a group, select the corresponding **Modify** or **Delete** button on the right-hand side.

To create a new failover group, select **New Group** and follow the on-screen instructions.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Storage Service

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

This section contains a status display and four submenus described on the following pages:

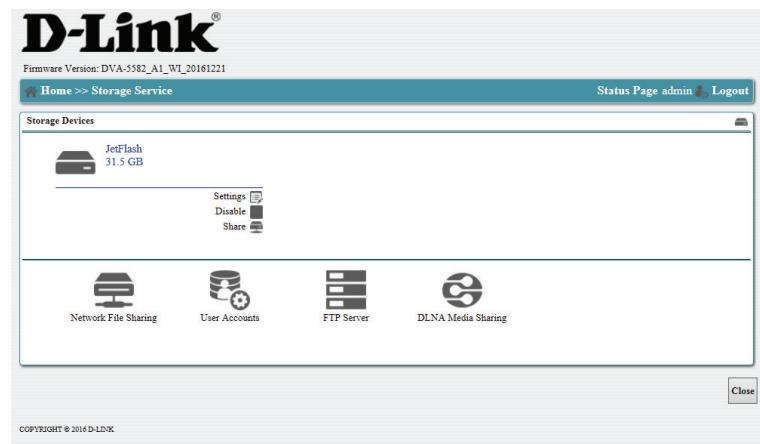
**Storage Device** on page 73

**Network File Sharing** on page 74

**User Accounts** on page 75

**FTP Server** on page 76

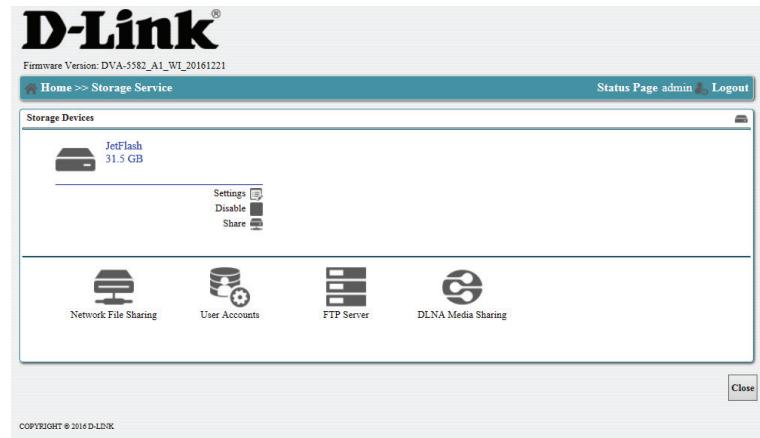
**DLNA Media Sharing** on page 77



Click **Close** to return to the previous menu.

## Storage Device

If an external storage device is attached, it will appear at that top of the Storage Service screen. To configure a device, click the corresponding **Settings** button.



Click **Close** to return to the previous menu.

## Network File Sharing

This page allows you to enable and configure basic filessharing features to remotely access your media across the network.

The screenshot shows the 'Network File Sharing Settings' page from a D-Link router's web interface. The page title is 'Network File Sharing'. At the top, it displays 'Firmware Version: DVA-5582\_A1\_W1\_20161221'. On the right, there are links for 'Status Page', 'admin', and 'Logout'. Below the title, there are two main sections: 'Network File Sharing Settings' and 'Automatic File Sharing'. In the 'Network File Sharing Settings' section, there are four configuration options: 'Enable Sharing' (radio button selected for 'No'), 'Ask for User Authentication' (radio button selected for 'No'), 'Netbios Domain\Workgroup' (text input field), 'Netbios Name' (text input field), and 'Interfaces' (checkbox with the note 'Click to bind File Sharing to a specific interface'). In the 'Automatic File Sharing' section, there is a single option 'Share Automatically All Volumes' (radio button selected for 'No'). At the bottom right of the form are 'Apply' and 'Close' buttons.

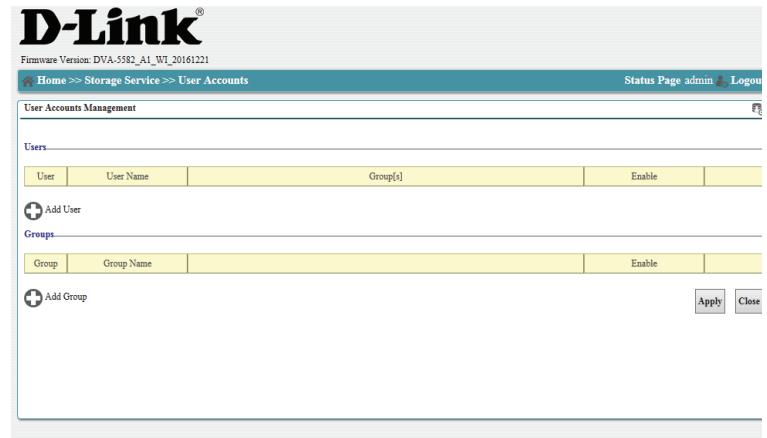
Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## User Accounts

If **User Authentication** has been enabled, you may need to configure login credentials to access storage over the network. User accounts may also be required to access FTP services.

Click **Add User** to create a new user.

Click **Add Group** to add a new user group.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# FTP Server

This page allows you to configure remote access to storage using the industry-standard FTP protocol.

The screenshot shows the D-Link DVA-5582 web interface with the following details:

- Header:** D-Link, Firmware Version: DVA-5582\_A1\_W1\_20161221, Home >> Storage Service >> FTP Server, Status Page admin, Logout.
- Section:** Local FTP Server (selected).
- Configuration:**
  - Enable FTP Server:  No
  - Starting Folder: Not Specified
  - Maximum Number of Simultaneous Users: 16
  - Maximum Idle Time:  Click to enable automatic disconnect time
  - Port:  Click to bind the FTP service to a custom port
  - Interface:  Click to bind the FTP service to specific interfaces
- Users Access:**

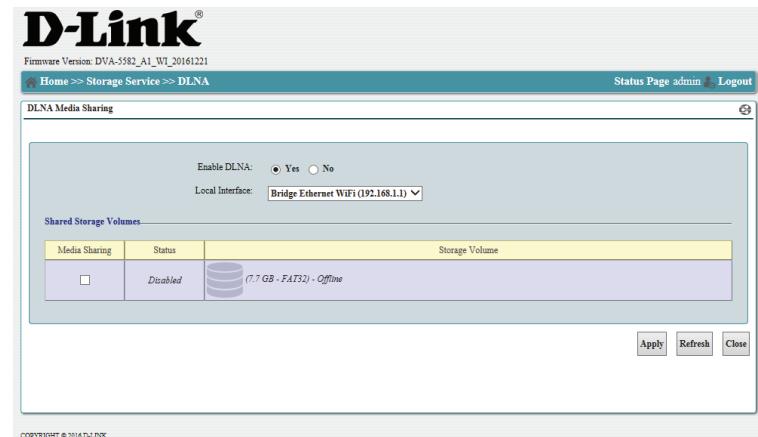
	User Account	Enabled	Starting Folder	Read Only
	Anonymous User	<input type="checkbox"/>	Not Specified	<input checked="" type="checkbox"/>
- Buttons:** Manage User Accounts, Apply, Close.

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## DLNA Media Sharing

The Digital Living Network Alliance (DLNA) protocol allows you to seamlessly stream media between compatible devices.

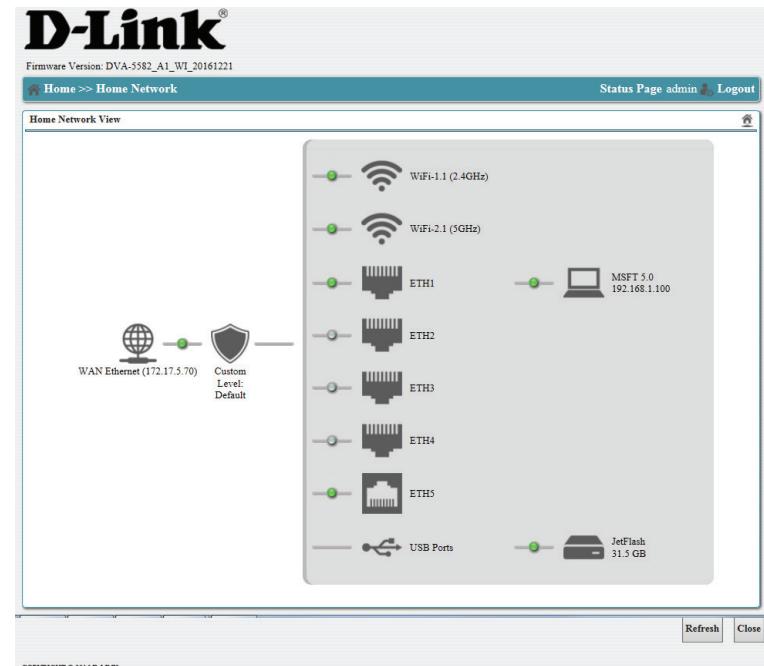
When enabled, you will be prompted to select an interface on which to enable DLNA access, as well as which attached storage devices to share.



Click **Apply** to save settings, **Refresh** to update the page, or click **Close** to return to the previous screen.

# Home Network

This menu gives you a graphical view of all interfaces on your router. Click any interface to be taken to the relevant configuration page. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.



Click **Refresh** to update the page, or click **Close** to return to the previous screen.

# System

The system section provides quick links for administration, troubleshooting, and updates for your router. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

It contains seven submenus described on the following pages:

**Logging** on page 80

**Reboot** on page 81

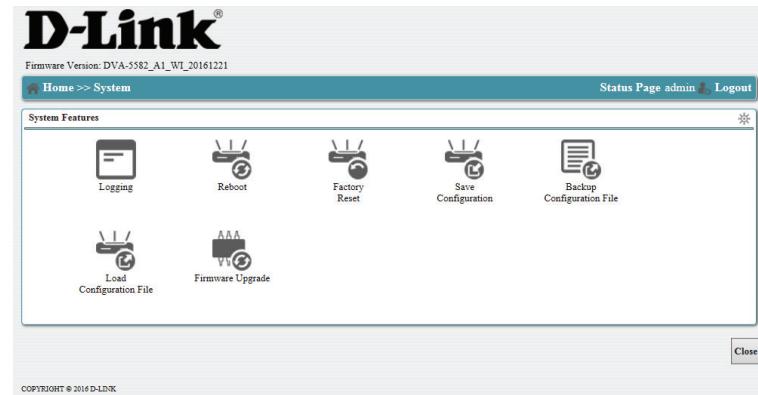
**Factory Reset** on page 82

**Save Configuration** on page 83

**Backup Configuration File** on page 84

**Load Configuration File** on page 85

**Firmware Upgrade** on page 86



Click **Close** to return to the previous menu.

# Logging

The logging menu provides a detailed log of all router activity and allows fine control over logging information. Logs can be downloaded as text files for analysis and archiving.

Services	Log Messages
WWAN Modem	[General Information]
udhcpc	[General Information]
httpd	[General Information]
NTP	[General Information]
dns	[General Information]

Log

```

22/12/2016 13:37:56 httpd INFO nls/default custom.yaml file found
22/12/2016 13:37:44 httpd [WARNING] Redirect peer to ui
22/12/2016 13:37:44 httpd [WARNING] VM: /css/Omnes-Regular off not found, request from 192.168.1.100:3651
22/12/2016 13:37:43 httpd INFO nls/default custom.yaml file found
22/12/2016 13:37:25 httpd [WARNING] Redirect peer to ui
22/12/2016 13:37:25 httpd [WARNING] VM: /css/Omnes-Regular off not found, request from 192.168.1.100:3629
22/12/2016 13:37:25 httpd INFO nls/default custom.yaml file found
22/12/2016 13:37:25 httpd [WARNING] VM: /css/Omnes-Regular off not found, request from 192.168.1.100:3612
22/12/2016 13:37:10 dns INFO Resolved UDP query for dns.mithicu.com via 192.168.0.1
22/12/2016 13:37:05 httpd [WARNING] Redirect peer to ui
22/12/2016 13:37:05 httpd [WARNING] VM: /css/Omnes-Regular off not found, request from 192.168.1.100:3612
22/12/2016 13:37:05 httpd INFO nls/default custom.yaml file found
22/12/2016 13:36:45 httpd [WARNING] Redirect peer to ui

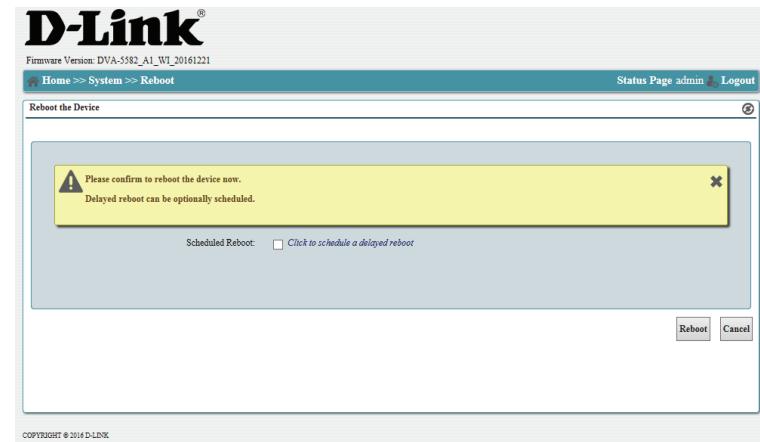
```

Start From:  Click here to filter on start time  
Up To:  Click here to filter on end time  
Auto Refresh:  Click to refresh messages every 10 sec  
Update Flush Download

Click **System** in the top left corner to return to the previous menu.

## Reboot

This screen allows you to reboot the router over the GUI, without having to toggle the power manually. It also allows you to schedule a reboot on a timer of up to one hour.

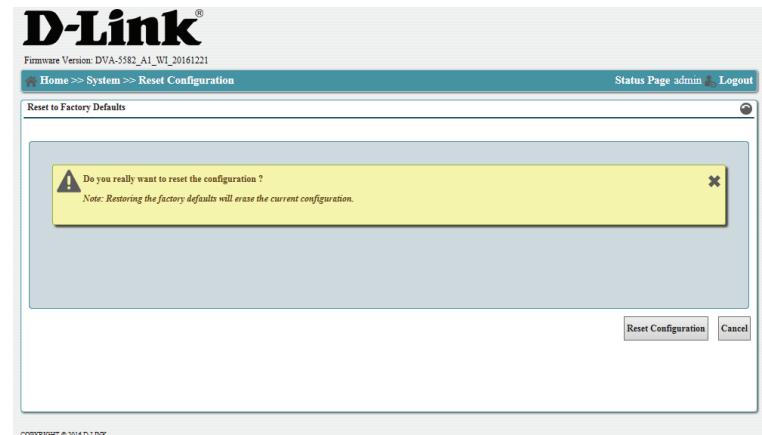


Click **Reboot** to restart the router or execute a scheduled reboot, or click **Cancel** to return to the previous screen.

## Factory Reset

This setting allows you to reset the router to factory defaults over the UI.

**Note:** Resetting the router will cause all settings to be lost. Wi-Fi will be offline until reconfigured.

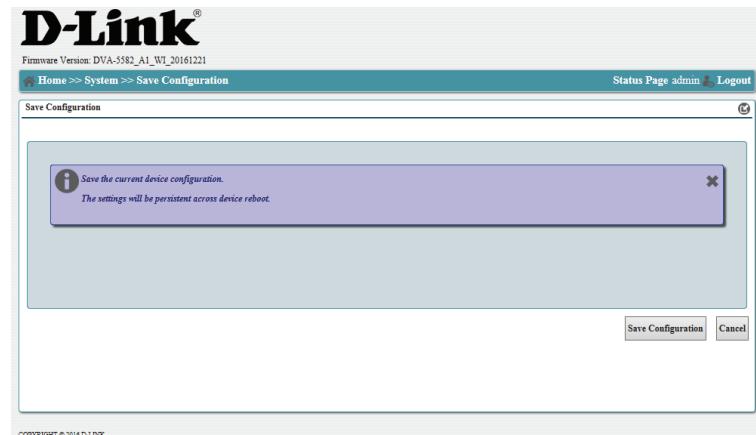


Click **Reset** to activate the factory reset procedure, or click **Cancel** to return to the previous screen.

## Save Configuration

This screen allows you to save settings to be persistent across device reboot.

**Note:** Most settings are generally saved when you click **Apply**, but this is provided as an extra layer of verification

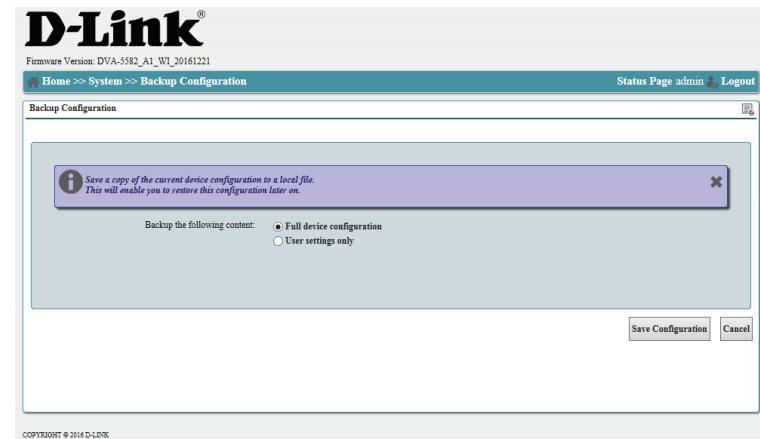


Click **Save Configuration** to save all settings to persistent memory, or click **Cancel** to return to the previous screen.

## Backup Configuration File

This screen allows you to create a backup of your router's configuration that can be saved on external storage (such as a PC). This allows you to quickly restore all settings in the event of a factory reset or device replacement with just a few clicks.

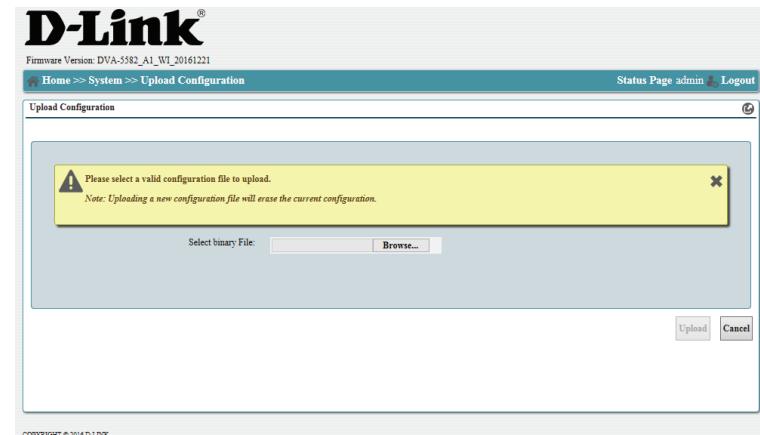
Select from **Full Device Configuration** or **User settings only**.



Click **Save Configuration** to download a copy of your settings, or click **Cancel** to return to the previous screen.

## Load Configuration File

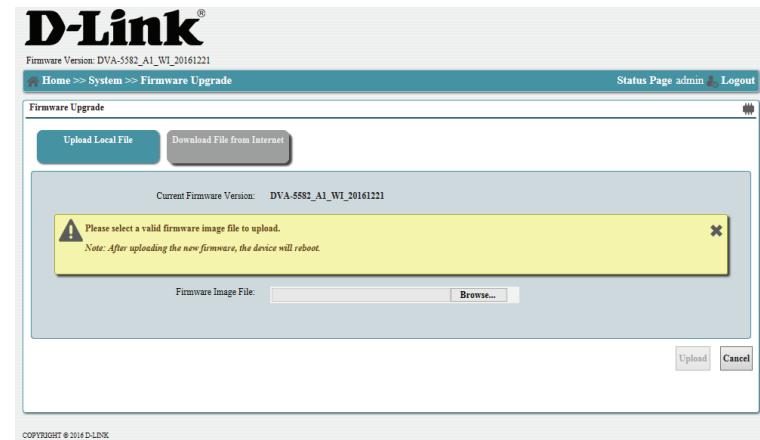
This screen allows you to restore settings previous backed up using **Backup Configuration File** on page 84. Select **Browse** and navigate to your configuration file.



Click **Upload** to upload your settings and reboot, or click **Cancel** to return to the previous screen.

## Firmware Upgrade

You can upgrade the firmware of the access point here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update.



Click **Upload** to upload your firmware and reboot, or click **Cancel** to return to the previous screen.

# Diagnostic

You can use diagnostic tools to examine performance and troubleshoot problems your router may have. This section is for advanced users and network professionals only and can be safely ignored by a majority of users.

This section contains eight submenus described on the following pages:

**UDP Echo** on page 88

**Ping** on page 89

**Download** on page 90

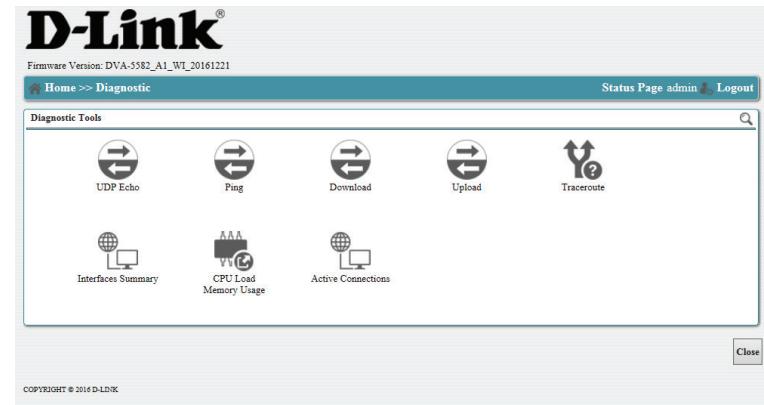
**Upload** on page 91

**Traceroute** on page 92

**Interfaces Summary** on page 93

**CPU Load Memory Usage** on page 94

**Active Connections** on page 95



Click **Close** to return to the previous menu.

## UDP Echo

UDP Echo can be used to test the roundtrip times of packets over a network. Enter the appropriate test parameters

The screenshot shows the D-Link DVA-5582 web interface with the following configuration settings for UDP Echo:

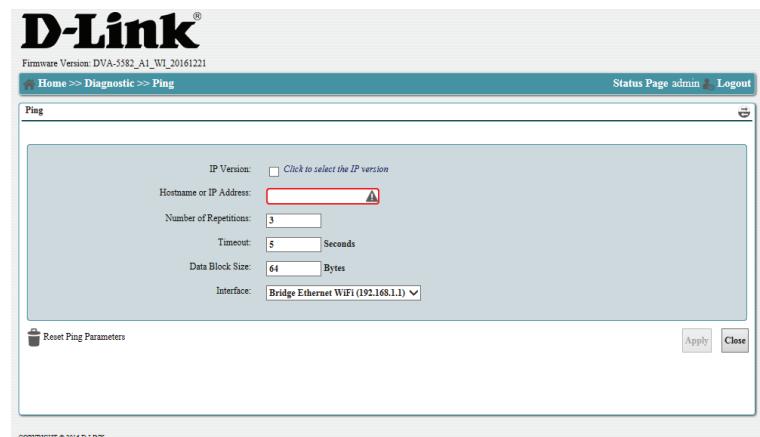
- Echoplus enabled: No (radio button selected)
- Hostname or IP Address: [redacted] (with a warning icon)
- Port: 7
- Number of Repetitions: 3
- DSCH: 0
- Data Block Size: 1000 bytes
- Timeout: 100 msec
- Inter Transmission Time: 100 msec
- Interface: Bridge Ethernet WiFi (192.168.1.1)
- Egress Queue: None

At the bottom of the form are buttons for "Reset UDP Echo Parameters", "Apply", and "Close".

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Ping

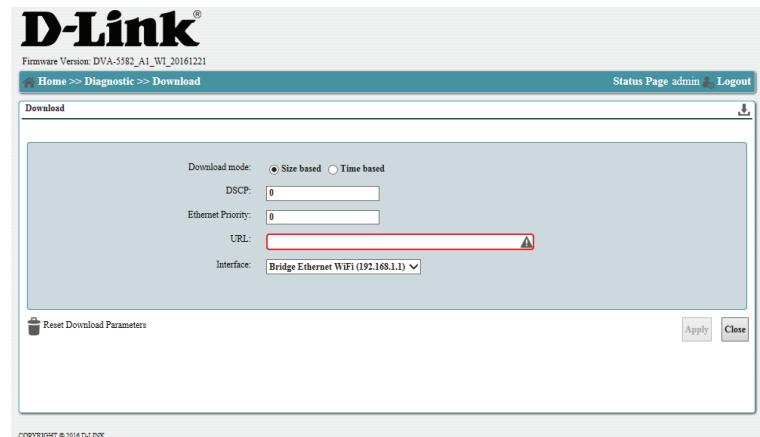
The Ping section enables you to run an IPv4 connectivity test.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Download

This section allows you to measure network performance by downloading a test file from a URL of your choice.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Upload

This section allows you to measure network performance by uploading a test file from a URL of your choice.

The screenshot shows the D-Link Diagnostic > Upload page. At the top, it displays the firmware version: DVA-5582\_A1\_W1\_20161221. Below the header, there are several input fields:

- Upload mode: A radio button group where "Size based" is selected, and "Time based" is unselected.
- DSCP: An input field containing the value "0".
- Ethernet Priority: An input field containing the value "0".
- Test File Length: An input field containing the value "0", which has a red border indicating an error or warning.
- URL: An input field containing a long URL, also with a red border.
- Interface: A dropdown menu set to "Bridge Ethernet WiFi (192.168.1.1)".

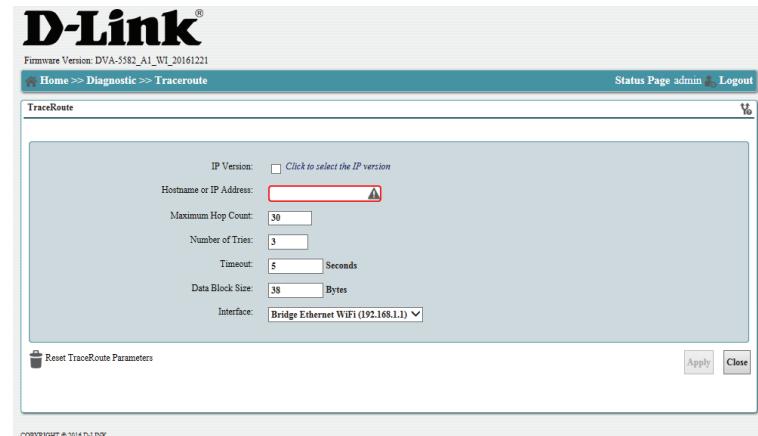
At the bottom of the form are two buttons: "Reset Upload Parameters" (with a trash icon), "Apply", and "Close".

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## Traceroute

The Traceroute section enables you to run a traceroute test to see how your traffic traverses the Internet.

Input a **Hostname or IP Address** and select an interface.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Interfaces Summary

This screen displays a complete summary of all interfaces on the router.

**D-Link®**  
Firmware Version: DVA-5582\_A1\_WJ\_20161221  
Home >> Diagnostic >> Interfaces Summary      Status Page admin Logout

Interfaces Summary

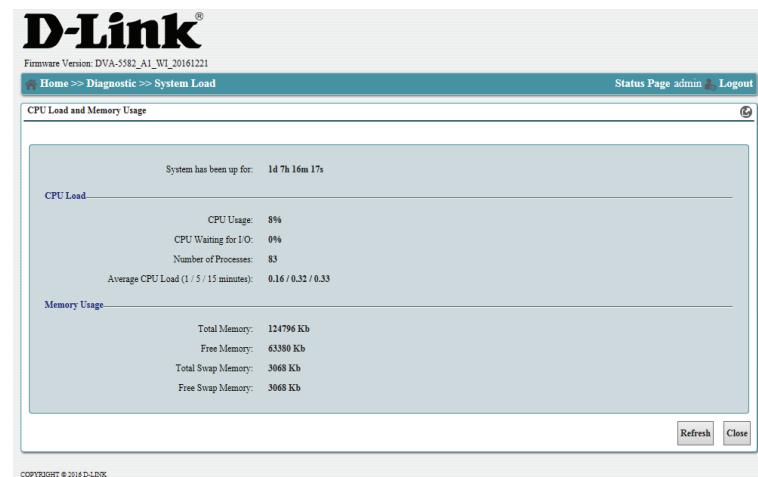
Name	Device Name	Status	Network	Underlying Device	PVC / VLAN	Connection Type	Download Rate	Upload Rate	MAC Address	IP Address	Subnet Mask
Eth1	eth0	Up	LAN			ethif	1000FD	1000FD	dc:0b:1a:bf:13:01		
Eth2	eth1	Down	LAN						dc:0b:1a:bf:13:06		
Eth3	eth2	Down	LAN			ethif			dc:0b:1a:bf:13:07		
Eth4	eth3	Down	LAN			ethif			dc:0b:1a:bf:13:08		
Bridge1	br0	Up	LAN						dc:0b:1a:bf:13:01	192.168.1.1	255.255.255.0
WiFi1.1 (2.4GHz)	wl0	Enabled	LAN	wl0		wradio	300	300	dc:0b:1a:bf:13:02		
WiFi1.2	wl0.1	Disabled	LAN	wl0		wradio	300	300	dc:0b:1a:bf:13:03		
WiFi2.1 (5GHz)	wl1	Enabled	LAN	wl1		wradio	1300	1300	dc:0b:1a:bf:13:04		
WiFi2.2	wl1.1	Disabled	LAN	wl1		wradio	1300	1300	dc:0b:1a:bf:13:05		
ATM (8/36)	atm1	Not Connected	Generic	atm1	PVC 8/36	atmlink			0		
Interface2	ppp1	Not Connected	Generic	eth4.836	VLAN 836	pppif					
Eth5	eth4	Up	Generic	eth4		ethif			dc:0b:1a:bf:13:09	192.168.0.50	255.255.255.0
DSL	dsl0	Down	WAN			dline					

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Click **Close** to return to the previous menu.

## CPU Load Memory Usage

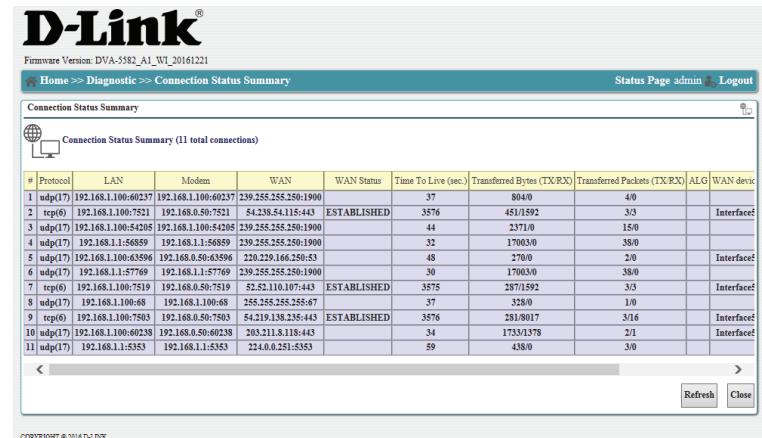
This screen shows the current status of the router's CPU and memory usage.



Click **Refresh** to update the page, or click **Close** to return to the previous screen.

# Active Connections

This screen lists all active connections over all interfaces. It can be used to diagnose connectivity and unusual traffic activity from your network.



The screenshot shows a table titled "Connection Status Summary" with 11 rows of data. The columns are: #, Protocol, LAN IP, Modem IP, WAN IP, WAN Status, Time To Live (sec.), Transferred Bytes (Tx/Rx), Transferred Packets (Tx/Rx), ALC, and WAN device. The data is as follows:

#	Protocol	LAN	Modem	WAN	WAN Status	Time To Live (sec.)	Transferred Bytes (Tx/Rx)	Transferred Packets (Tx/Rx)	ALC	WAN device
1	udp(17)	192.168.1.100:60237	192.168.1.100:60237	239.255.255.250:1900		37	804/0	4/0		
2	tcp(6)	192.168.1.100:7521	192.168.0.50:7521	54.238.54.115:443	ESTABLISHED	3576	451/1592	3/3		Interface
3	udp(17)	192.168.1.100:54205	192.168.1.100:54205	239.255.255.250:1900		44	2371/0	15/0		
4	udp(17)	192.168.1.1:56859	192.168.1.1:56859	239.255.255.250:1900		32	17003/0	38/0		
5	udp(17)	192.168.1.100:63596	192.168.0.50:63596	239.229.9.166.250:53		48	270/0	2/0		Interface
6	udp(17)	192.168.1.1:57760	192.168.1.1:57760	239.255.255.250:1900		30	17003/0	38/0		
7	tcp(6)	192.168.1.100:7519	192.168.0.50:7519	\$2.52.110.107:443	ESTABLISHED	3575	257/1592	3/3		Interface
8	tcp(6)	192.168.1.100:68	192.168.1.100:68	255.255.255.255:67		37	328/0	1/0		
9	tcp(6)	192.168.1.100:7504	192.168.0.50:7504	54.219.138.235:443	ESTABLISHED	3576	28180/17	3/16		Interface
10	udp(17)	192.168.1.100:60238	192.168.0.50:60238	203.211.8.118:443		34	1733/1378	2/1		Interface
11	udp(17)	192.168.1.1:5353	192.168.1.1:5353	224.0.251:5353		59	438/0	3/0		

Click **Refresh** to update the page, or click **Close** to return to the previous screen.

# Security

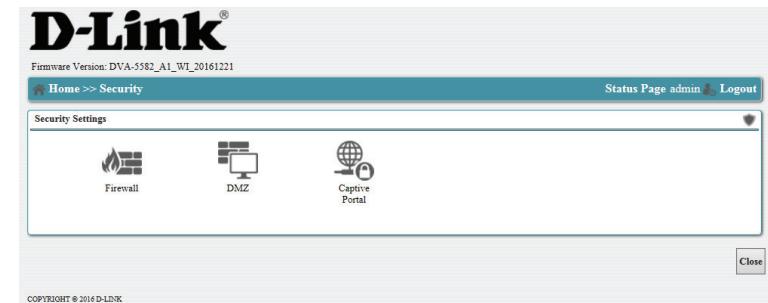
The Security section allows you to configure firewall, authentication, and security features. This section is for advanced users and network professionals only and can be safely ignored by a majority of users. Note that improper configuration of these items could expose your network to attacks over the Internet.

This section contains three submenus described on the following pages:

**Firewall** on page 97

**DMZ** on page 98

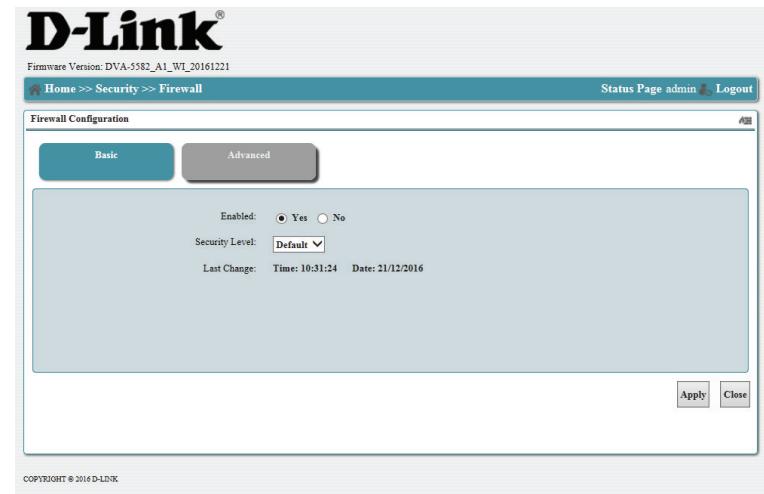
**Captive Portal** on page 99



**Close** to return to the previous screen.

## Firewall

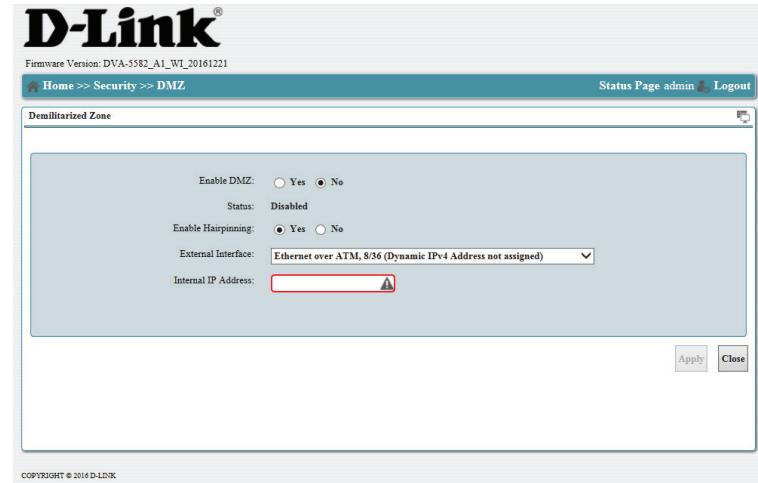
This screen allows you to configure the router's built in firewall. Note that disabling the firewall may expose your network to attacks over the internet and is not recommended.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

## DMZ

This page allows you to manually configure the router's DMZ settings. Since some applications are not compatible with NAT, the device supports the use of a DMZ IP address for a single host on the LAN. This IP address is not protected by NAT and it is visible on the Internet with the correct type of software. Note that any client PC in the DMZ is exposed to various types of security risks. If you use DMZ, take measures (such as client-based virus protection) to protect the remaining client PCs on your LAN from possible contamination through DMZ.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Captive Portal

This screen allows you to configure a landing page that any unauthenticated device on your network will load first before being granted access to the network.



Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Modem

The modem section provides configuration options for an external USB modem.

It contains the following submenus:

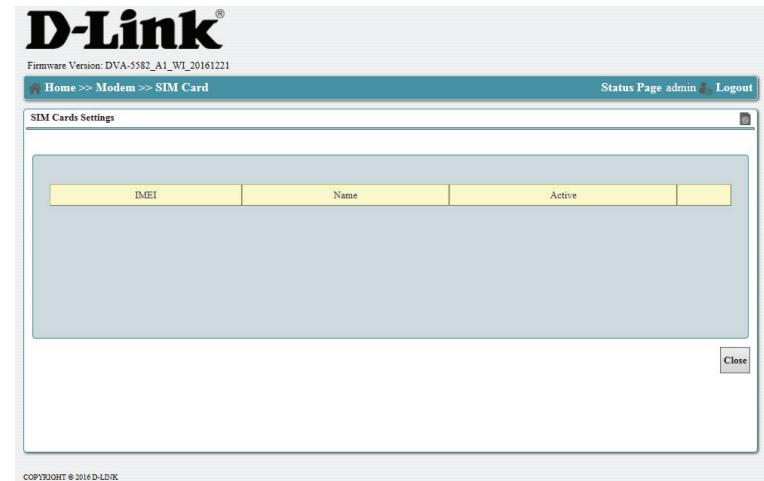
- SIM Card on page 101**
- USB Modem on page 102**
- Operator on page 103**



**Close** to return to the previous screen.

## SIM Card

If you have attached a compatible USB modem and SIM card, information about the SIM will be displayed on this page.



**Close** to return to the previous screen.

# USB Modem

This screen displays a full list of all pre-configured USB 3G/4G modems. Existing modems may be deleted or modified. If you wish to attach a new modem, click **Add New USB Modem** and follow the on-screen instructions.

Name	Manufacturer	Vendor ID (hex)	Product ID (hex)	enabled
(ZTE) K3770-Z	Vodafone	19d2	1175	Yes
L-07A	LG	1004	614e	Yes
E220, E230, E270, E870	Huawei	12d1	1003	Yes
EVDO 3G Modem (for TianYi)	Qtronix	05c7	1000	Yes
HSO device (49201)	Option	0xaf0	c031	Yes
L-08C (NTT docomo)	LG	1004	61eb	Yes
HSO device (53267)	Option	0xaf0	d013	Yes
PicoPix 1020 Projector	Philips	1de1	1101	Yes
One Touch X020	Alcatel	1c9e	1001	Yes
Action	Mobile	0d17	0800	Yes
MF192 (Variant)	ZTE	19d2	1517	Yes

Name	Manufacturer	Vendor ID (hex)	Product ID (hex)	Enabled
GlobeTrotter GII515	Option	0af0	d011	Yes
CS-15 LM-/S	Nokia Sputne	0421 usco	0610 r000	Yes
K5150	Vodafone	12d1	1f16	Yes
E3131	T-Mobile	12d1	15ca	Yes
E3276 SWC	Huawei	12d1	1597	Yes
E352, E3276, E3551, E3372	Huawei	12d1	14fe	Yes
K5005	Vodafone	12d1	14c3	Yes
MF669	ZTE	19d2	0154	Yes
MF636	ZTE	19d2	2000	Yes
MF-831	ZTE	19d2	1225	Yes
E349	Huawei	12d1	1505	Yes
E3531	Huawei	12d1	15d2	Yes
E3372h-153	Huawei	12d1	15d6	Yes

**Add New USB Modem**

**Close** to return to the previous screen.

# Operator

On this screen you will see the current Layer 2 (L2) interface configuration. Click **Add** to add another interface, or **Delete** to delete the currently selected interface.

D-Link®  
Firmware Version: DVA-5582\_A1\_W1\_20161221  
Home >> Modem >> Operator Status Page admin Logout

Operators Settings

Name	Short Name	PLMN Code
Cosmote Internet on the Go	GR COSMOTE	20201
VODAFONE Live	VODAFONE GR	20205
Wind ADSM	WIND GR	20209
Wind ADSM	WIND GR	20210
Vodafone Mobiel Internet	Vodafone NL	20404
KPN Mobiel Internet	NL KPN	20408
T-Mobile Mobiel Internet	Telfort NL	20412
T-Mobile Mobiel Internet	T-Mobile NL	20416
Orange Mobiel Internet	Orange NL	20420
Proximus Mobile Internet	BEL PROXIMUS	20601
Mobistar Mobile Internet	B mobistar	20610

Name	Short Name	PLMN Code
Internet Móvil Tigo	Tigo GT	70402
Internet Móvil Tigo	Tigo HN	70802
Speedy Móvil Movistar	Movistar PE	71606
Internet Claro	Claro PE	71610
AS EMT	EMT	24801
Elisa Eesti AS	Elisa Eesti	24802
Tele2 Eesti AS	Tele2 Eesti	24803
Orange Telecom Israel	Orange IL	42501
Cellcom Israel Ltd	Cellcom	42502
Telephone Israel	Telephone	42503
British Telecom Italia	BT-Italia	42000
TEST Operator	TEST	00101
Tiscali	Tiscali	22201

+ Add New Operator Close

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**Close** to return to the previous screen.

# WiFi-1.1 (2.4 GHz)

This screen allows you to configure the 2.4 GHz radio for 802.11n/g/b wireless access.

The screenshot shows the D-Link WiFi-1.1 (2.4 GHz) configuration interface. At the top, it displays the D-Link logo and the firmware version: DVA-5582\_A1\_WL\_20161221. The main title is "Wireless Access Point - WiFi-1.1 (2.4GHz)". The status is shown as "Up". The "Enable Wi-Fi Access Point" option is selected ("Yes"). The "Name (SSID)" field is redacted. The "Channel" dropdown is set to "Auto (1)".  
  
Under "Wi-Fi Security Settings", the "SSID Broadcast" option is selected ("Yes"). The "AP Isolation" option is selected ("No"). The "Security Mode" dropdown is set to "WPA2 Personal". The "WPA Passphrase" field is redacted. The "Management Frame Protection" dropdown is set to "Disabled".  
  
Under "Wi-Fi Protected Setup", the "WPS Enabled" option is selected ("Yes"). The "Configuration Methods" dropdown has "Push Button" checked.  
  
Under "Wi-Fi Clients Access", the "Access Control List" dropdown is set to "None". The "MAC Addresses" field contains a list of MAC addresses, with a plus sign (+) button to add more.  
  
At the bottom, there are links for "Advanced Configuration" and "Start WPS", along with "Apply" and "Close" buttons.

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# WiFi-2.1 (5 GHz)

This screen allows you to configure the 5 GHz radio for 802.11ac/n/a wireless access.

The screenshot shows the D-Link WiFi-2.1 (5 GHz) configuration interface. At the top, it displays the D-Link logo and the firmware version: DVA-5582\_A1\_WI\_20161221. The main title is "Wireless Access Point - WiFi-2.1 (5GHz)". The status is shown as "Up". The "Enable Wi-Fi Access Point" option is set to "Yes". The "Name (SSID)" field is redacted. The "Channel" dropdown is set to "Auto (36)".  
  
Under "Wi-Fi Security Settings", the "SSID Broadcast" option is set to "Yes". The "AP Isolation" option is set to "No". The "Security Mode" dropdown is set to "WPA2 Personal". The "WPA Passphrase" field is redacted. The "Management Frame Protection" dropdown is set to "Disabled".  
  
Under "Wi-Fi Protected Setup", the "WPS Enabled" option is set to "Yes". The "Configuration Methods" dropdown has "Push Button" checked.  
  
Under "Wi-Fi Clients Access", the "Access Control List" dropdown is set to "None". The "MAC Addresses" field contains a redacted MAC address, with a plus sign (+) button next to it.  
  
At the bottom, there are links for "Advanced Configuration" and "Start WPS", along with "Apply" and "Close" buttons.

Click **Apply** to save your changes, or **Close** to return to the previous menu without saving.

# Connect a Wireless Client to your Router

## WPS Button

The easiest and most secure way to connect your wireless devices to the router is with 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 DVA-5582 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 DVA-5582 for about 1 second. The WiFi LEDs on the front will start to blink orange.



**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 for your connection to be configured. Once the Internet light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

# Windows® 8

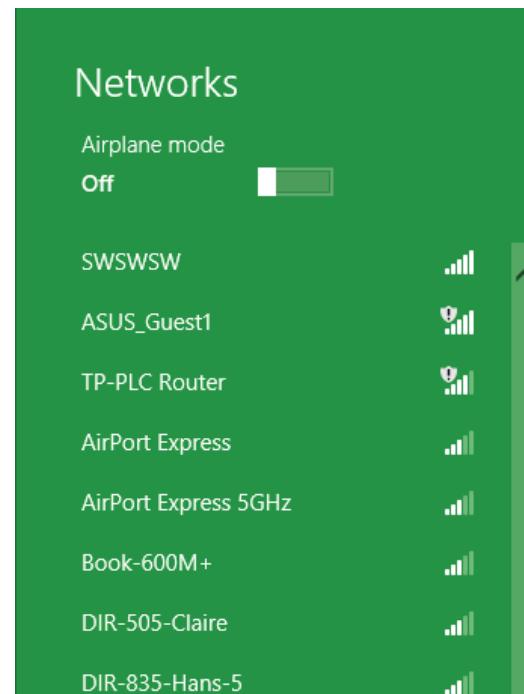
## WPA/WPA2

It is recommended that you 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.

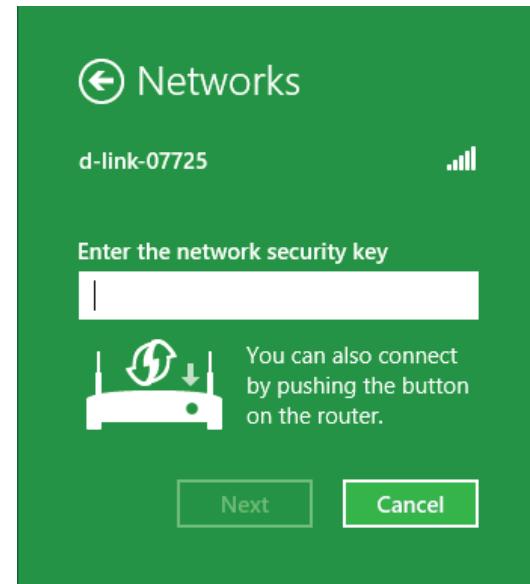


Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.

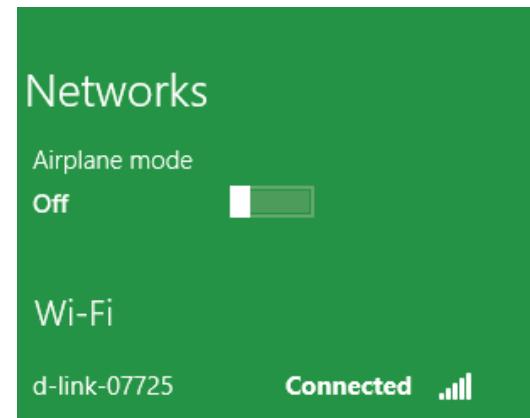


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

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 during this step to enable the WPS function.



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



# Windows® 7

## WPA/WPA2

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

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



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

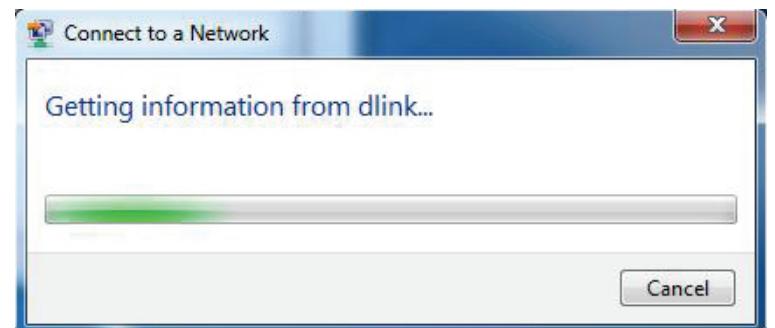


3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

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.

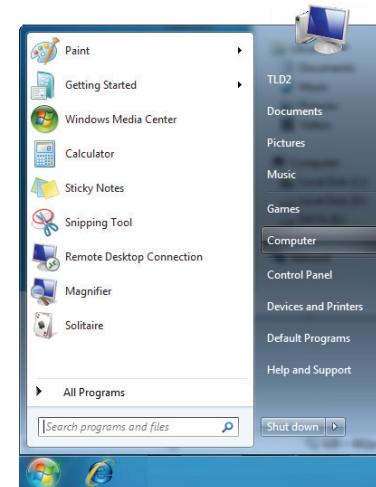
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as the one on the wireless router.



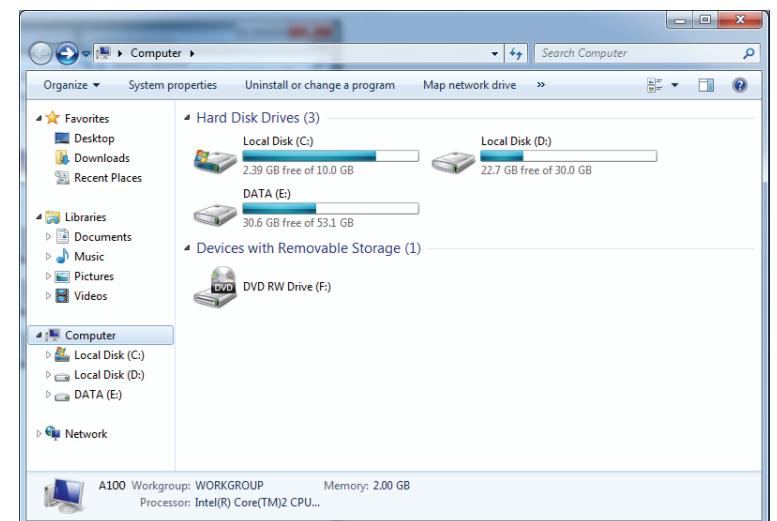
# WPS

The WPS feature of the DVA-5582 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

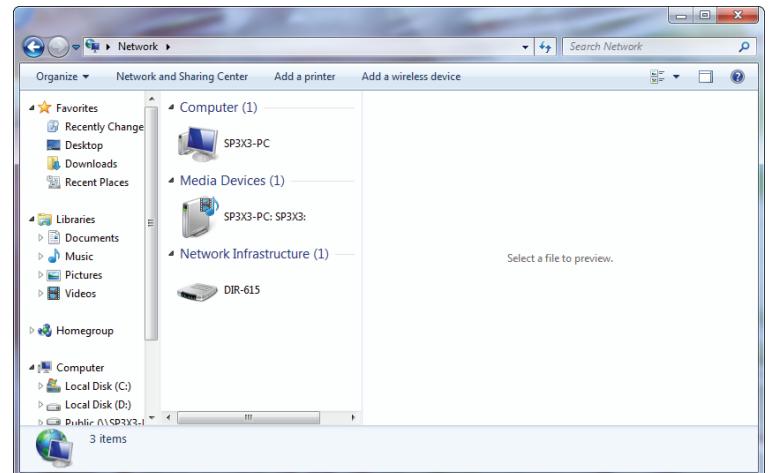
1. Click the **Start** button and select **Computer** from the Start menu.



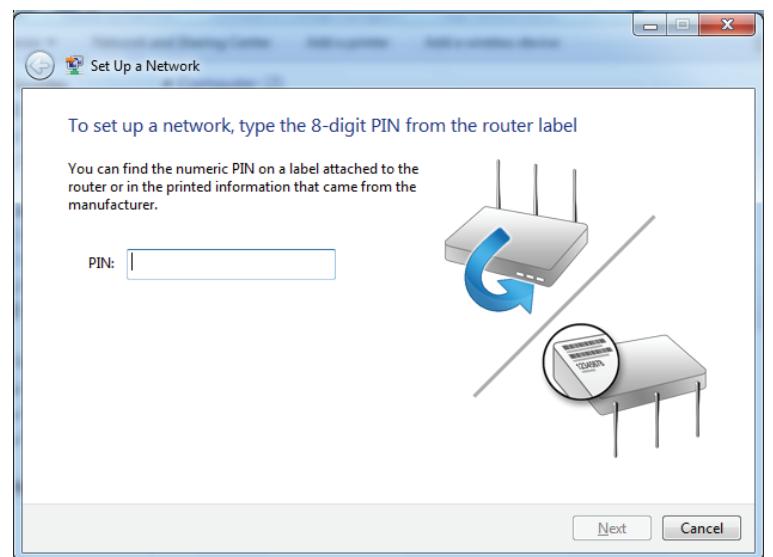
2. Click **Network** on the left side.



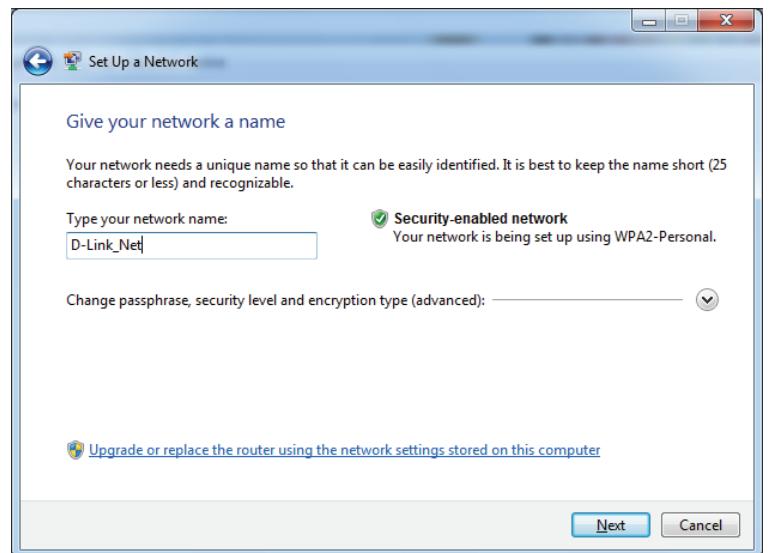
3. Double-click the DVA-5582.



4. Input the WPS PIN number (on the router label) in the **Setup > Wireless Setup** menu in the Router's Web UI and click **Next**.



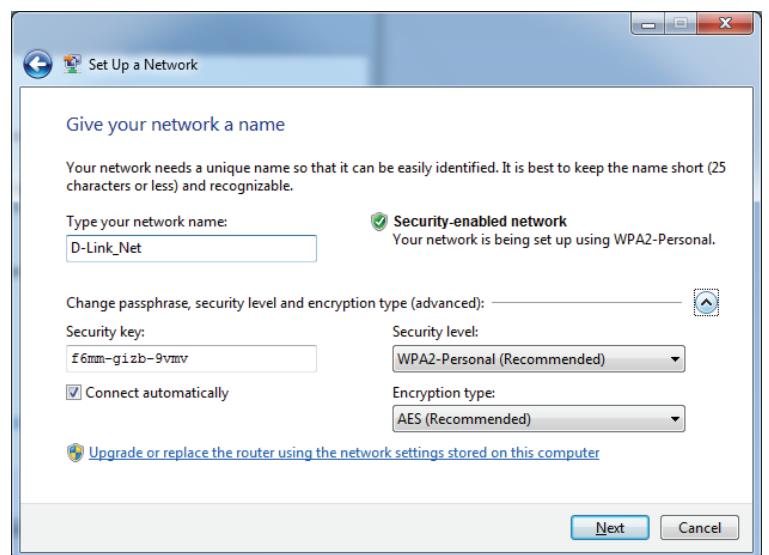
### 5. Type a name to identify the network.



6. To configure advanced settings, click the icon.



Click **Next** to continue.



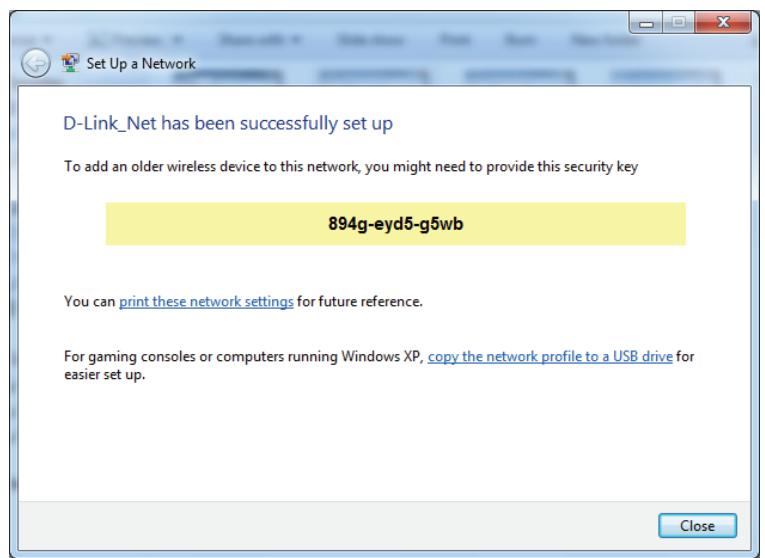
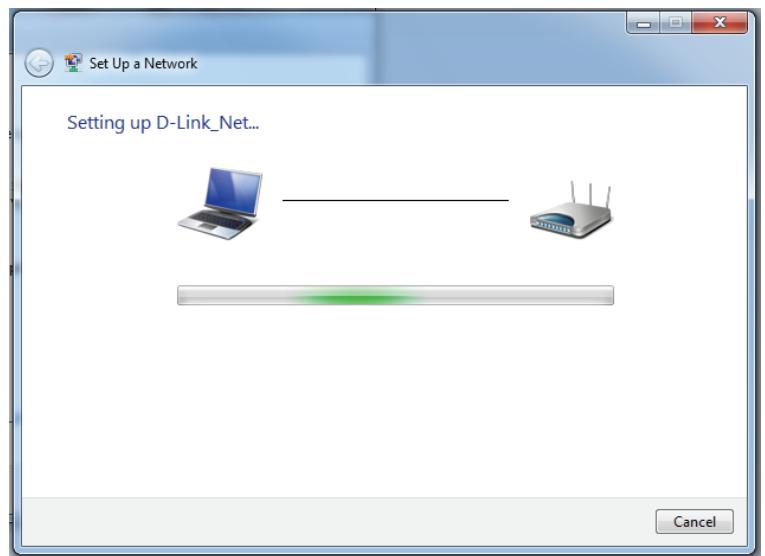
7. The following window appears while the Router is being configured.

Wait for the configuration to complete.

8. The following window informs you that WPS on the router has been set up successfully.

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

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



# Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's wireless utility, please refer to the user manual of your wireless adapter for help connecting to a wireless network. Most wireless 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.

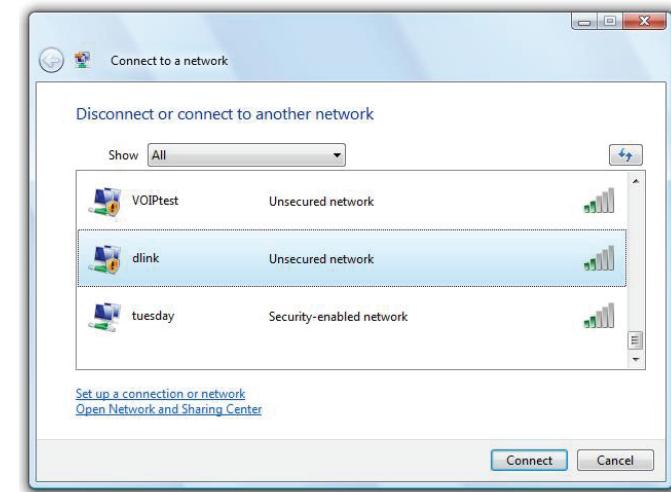
or

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 your TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



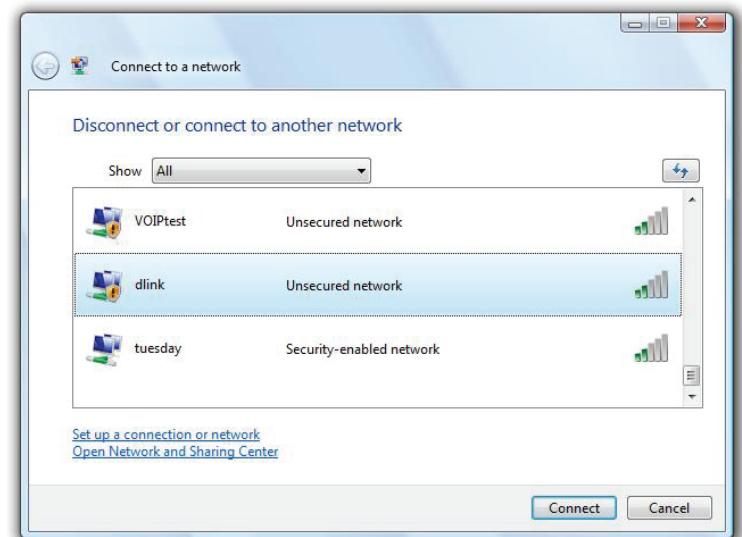
## WPA/WPA2

It is recommended that you 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 the one on the wireless router.



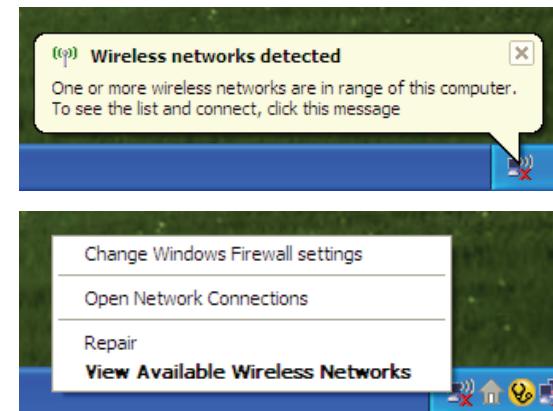
# Windows® XP

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.

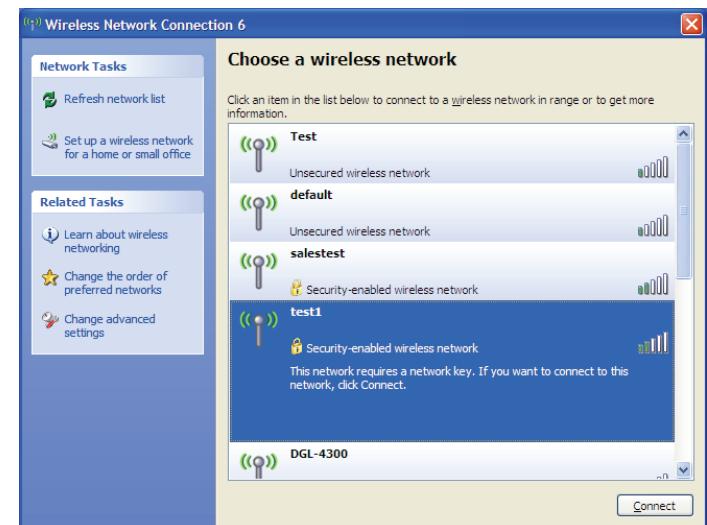
or

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.

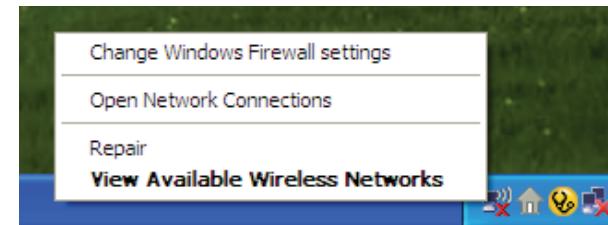
If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



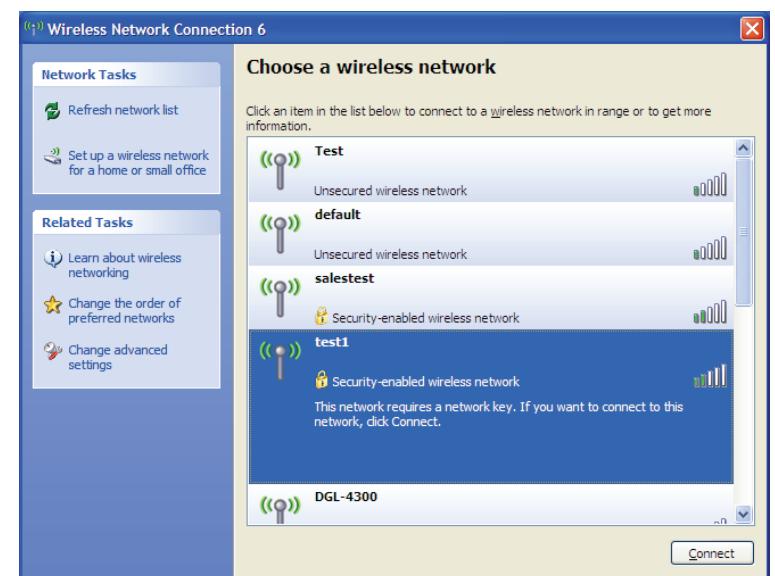
## WPA/WPA2

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**.

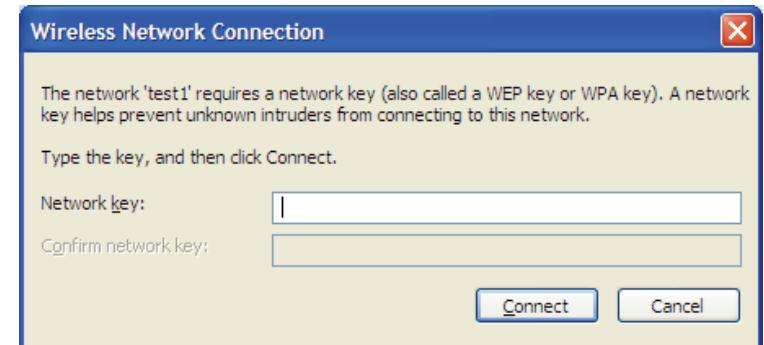


2. Highlight the Wi-Fi network (SSID) you would like to connect to and click **Connect**.



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 DVA-5582. 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 these examples.

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

When entering the IP address of the D-Link router (**192.168.0.1** for example), you are not connecting to a website, 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 or higher
  - Mozilla Firefox 3.5 or higher
  - Google™ Chrome 8 or higher
  - Apple Safari 4 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable, or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as ZoneAlarm, BlackICE, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

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

You should start at 1472 and work your way down by packet. Take that value and add 28 to the value to acco

```
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.

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:\>
```

u get a fragmented  
y 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 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 similarly to how cordless phones work, through radio signals that 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 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, university 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. This 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 Uses/Benefits**

- 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 Uses/Benefits**

- 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 the 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 the 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 DVA-5582 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

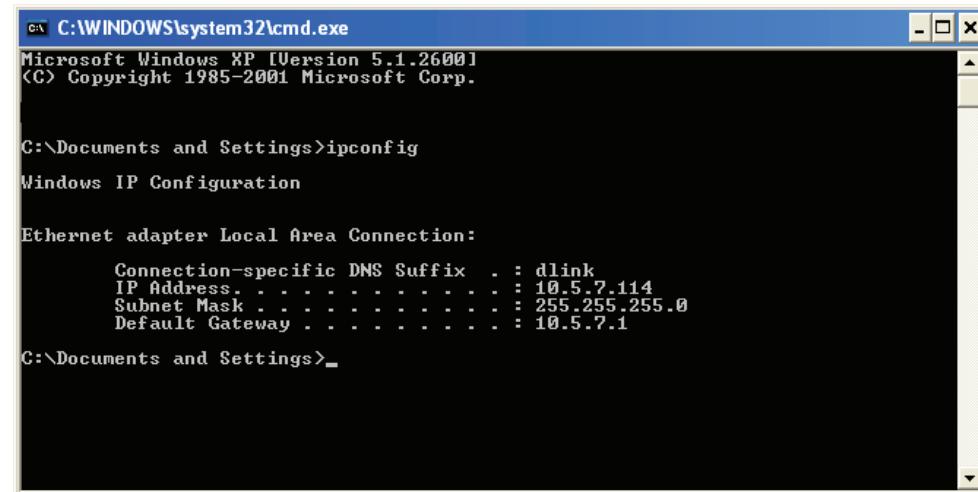
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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.



The screenshot shows a Windows XP Command Prompt window titled 'C:\WINDOWS\system32\cmd.exe'. The window displays the following text:

```
Microsoft Windows XP [Version 5.1.2600]
(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

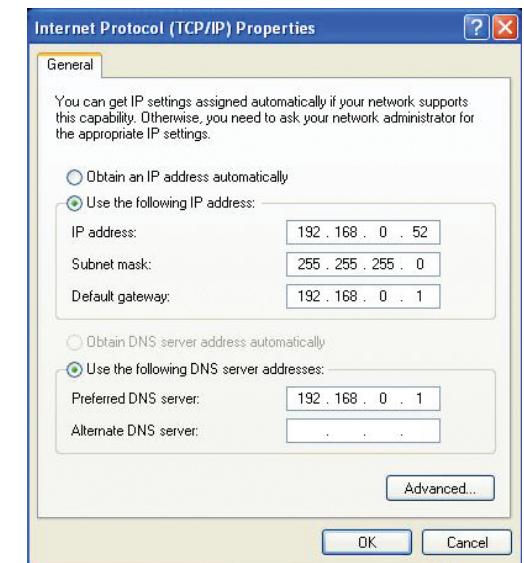
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

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

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

### Step 5

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



## Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DVA-5582 offers the following types of security:

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

### What is WPA?

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

The 2 major improvements over WEP:

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

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

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

# Technical Specifications

## Device Interfaces

- One RJ-11 xDSL port
- One 10/100/1000 Gigabit Ethernet WAN port
- 802.11 ac/n/g/b Wireless LAN
- Four 10/100/1000 Gigabit Ethernet LAN ports
- Two USB 2.0 ports
- Two FXS VoIP ports
- WPS Button
- Power Switch
- Power Connector

## Antenna Configuration

- 2.4 GHz: Two internal MIMO antennas
- 5 GHz: Three internal MIMO antennas
- 

## Data Signal Rate

- 2.4 GHz: 300 Mbps
- 5 GHz: 1300 Mbps

## Standards

- IEEE 802.11ac
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3az
- IEEE 802.3x
- 

## ADSL Features

- T1.413i2, G.992.1
- G.dmt, G.992.2, G.lite
- G.992.3 (G.bis/ADSL2)

- G.992.5 (ADSL2+)
- ITU G.994.1 (G.hs)
- Annex L (Reach Extended ADSL2)

## VDSL Features

- ITU-T G.993.2 VDSL2
- Supports 8b, 12a, 12b, 17a profiles
- Supports G.vector
- Supports ATM and PTM
- Supports G.INP
- Supports ATM forum UNI3.0, 3.1 and 4.0 permanent virtual circuits (PVCs)
- Supports CBR, UBR, VBR-rt, VBR-nrt
- Supports multiple PVCs
- Supports ITU-T i.610F4/F5 OAM
- 

## Network Protocols

- RFC2684 multiprotocol Encapsulation over ATM Adaptation Layer 5
- RFC1483 multiprotocol Encapsulation over ATM Adaptation Layer 5
- RFC2364 PPP over ATM ALL5 (PPPoA)
- RFC2516 PPP over Ethernet (PPPoE)
- RFC1662 PPP in HDLC-like Framing
- RFC1332 PPP Internet Protocol Control Protocol
- RFC1577/2225 Classical IP and ARP over ATM (IPoA)
- RFC894 A Standard for the Transmission of IP Datagrams over Ethernet Networks
- RFC1042 A standard for the Transmission of IP Datagrams over IEEE 802 Networks
- MER (a.k.a IP over Ethernet over AAL5)
- Support ALG (Application Level Gateways)

## Routing Features

- RFC768 User Datagram Protocol (UDP)
- RFC791 Internet Protocol (IP)

- RFC792 Internet Control Message Protocol (ICMP)
- RFC793 Transmission Control Protocol (TCP)
- RFC826 An Ethernet Address Resolution Protocol (ARP)
- RFC862 Echo Protocol
- Support IP routing
- Support for transparent bridging
- Support for source and destination routing
- Support for port forwarding
- Support for Dynamic DNS
- Support for DNS as Client/Relay
- Support for DNS fallback
- Support for DHCP server/client
- Support for UPnP
- Support for NAT,NAPT
- Support for DMZ
- Support for IP QoS
- Support for IGMP proxy
- Support for IPv6
- Support for VPN Passthrough
  - IPSec, L2TP, PPTP client

### Voice-over-IP (VoIP) Features

- Media Transport and Control
  - RTP/RTCP
  - G.711, G.729, G.726
  - T.38 FAX relay
- Signalling
  - SIP 2.0
  - SDP
  - In-band (voice encoded) or out-of-band (over RTP) transport of DTMF signaling
- Supplementary Services
  - CLIP, CNIP, CLIR
  - Call Forwarding

- Call Hold / Resume
- Call Waiting / Call Transfer
- MWI
- Dial plan

### Management Features

- Device Configuration, Management and Update
- Web based GUI
- Embedded web server
- Command Line Interface via serial port, telnet, or SSH
- SNMP v1/v2
- PSI configuration file upload and download
- Menu-driven CLI via serial port or telnet
- Universal Plug and Play (UPnP) Internet Gateway Device (IGDv1.0)
- WAN Management Protocol (TR-069)
- Date/time update from SNTP Internet Time Server

### Security Features

- Service access control based on incoming interface: WAN or LAN
- Service access control based on source IP addresses
- PAP (RFC1334), CHAP (RFC1994), MSCHAPv1, MSCHAPv2 for PPP session (PPPoE, PPPoA)
- Stateful Packet Inspection (SPI) Firewall
  - IP Fragment Overlap Protection Protects from DOS attacks from WAN: SYN flooding, IP surfing, Ping of Death, fragile, UDP ECHO (port 7), Tear Drop, Land, Smurf, Unreachable
  - IP filter, Parental control, Access Control

### Dimensions

- 210 x 170 x 49.5 mm (8.28 x 6.69 x 1.95 in)

### Weight

- 520 g (10.34 oz)

**Power Supply**

- 12 V DC, 2.0 A

**Temperature**

- Operating: 5 to 40 °C (41 to 104 °F)
- Storage: -20 to 70 °C (-4 to 149 °F)

**Humidity**

- Operating: 10% to 95% non-condensing
- Storage: 5% to 95% non-condensing

**Certifications**

- CE
- RoHS
- Wi-Fi Certified
- WPS Setup



	<b>Frequency Band(s)</b> <b>Frequenzband</b> <b>Fréquence bande(s)</b> <b>Bandas de Frecuencia</b> <b>Frequenza/e</b> <b>Frequentie(s)</b>	<b>Max. Output Power (EIRP)</b> <b>Max. Output Power</b> <b>Consommation d'énergie max.</b> <b>Potencia máxima de Salida</b> <b>Potenza max. Output</b> <b>Max. Output Power</b>
5 G	5.15 – 5.25 GHz	200 mW
	5.25 – 5.35 GHz	200 mW
	5.47 – 5.725 GHz	1 W
2.4 G	2.4 – 2.4835 GHz	100 mW

## European Community Declaration of Conformity:

Česky [Czech]	Tímto D-Link Corporation prohlašuje, že tento produkt, jeho příslušenství a software jsou v souladu se směrnicí 2014/53/EU. Celý text ES prohlášení o shodě vydaného EU a o firmwaru produktu lze stáhnout na stránkách k produktu <a href="http://www.dlink.com">www.dlink.com</a> .
Dansk [Danish]	D-Link Corporation erklaerer herved, at dette produkt, tilbehør og software er i overensstemmelse med direktiv 2014/53/EU. Den fulde tekst i EU-overensstemmelseserklæringen og produktfirmware kan wnloades fra produktsiden hos <a href="http://www.dlink.com">www.dlink.com</a> .
Deutsch [German]	Hiermit erklärt die D-Link Corporation, dass dieses Produkt, das Zubehör und die Software der Richtlinie 2014/53/EU entsprechen. Der vollständige Text der Konformitätserklärung der Europäischen Gemeinschaft sowie die Firmware zum Produkt stehen Ihnen zum Herunterladen von der Produktseite im Internet auf <a href="http://www.dlink.com">www.dlink.com</a> zur Verfügung.
Eesti [Estonian]	Käesolevaga kinnitab D-Link Corporation, et see toode, tarvikud ja tarkvara on kooskõlas direktiiviga 2014/53/EL. Euroopa Liidu vastavusdeklaratsiooni täistekst ja toote püsivara on allalaadimiseks saadaval tootelehel <a href="http://www.dlink.com">www.dlink.com</a> .
English	Hereby, D-Link Corporation, declares that this product, accessories, and software are in compliance with directive 2014/53/EU. The full text of the EU Declaration of Conformity and product firmware are available for download from the product page at <a href="http://www.dlink.com">www.dlink.com</a>
Español [Spanish]	Por la presente, D-Link Corporation declara que este producto, accesorios y software cumplen con las directivas 2014/53/UE. El texto completo de la declaración de conformidad de la UE y el firmware del producto están disponibles y se pueden descargar desde la página del producto en <a href="http://www.dlink.com">www.dlink.com</a> .
Ελληνική [Greek]	Με την παρούσα, η D-Link Corporation δηλώνει ότι αυτό το προϊόν, τα αξεσουάρ και το λογισμικό συμμορφώνονται με την Οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης της ΕΕ και το υλικολογισμικό του προϊόντος είναι διαθέσιμα για λήψη από τη σελίδα του προϊόντος στην τοποθεσία <a href="http://www.dlink.com">www.dlink.com</a> .
Français [French]	Par les présentes, D-Link Corporation déclare que ce produit, ces accessoires et ce logiciel sont conformes aux directives 2014/53/UE. Le texte complet de la déclaration de conformité de l'UE et le programme du produit sont disponibles au téléchargement sur la page des produits à <a href="http://www.dlink.com">www.dlink.com</a> .
Italiano [Italian]	Con la presente, D-Link Corporation dichiara che questo prodotto, i relativi accessori e il software sono conformi alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE e il firmware del prodotto sono disponibili per il download dalla pagina del prodotto su <a href="http://www.dlink.com">www.dlink.com</a> .

Latviski [Latvian]	Ar šo uzņēmums D-Link Corporation apliecina, ka šis produkts, piederumi un programmatūra atbilst direktīvai 2014/53/ES. ES atbilstības deklarācijas pilno tekstu un produkta aparātprogrammatūru var lejupielādēt attiecīgā produkta lapā vietnē <a href="http://www.dlink.com">www.dlink.com</a> .
Lietuvių [Lithuanian]	Šiuo dokumentu „D-Link Corporation“ pareiškia, kad šis gaminys, priedai ir programinė įranga atitinka direktyvą 2014/53/ES. Visa ES atitikties deklaracijos tekstą ir gaminio programinę aparatinę įrangą galima atsiųsti iš gaminio puslapio adresu <a href="http://www.dlink.com">www.dlink.com</a> .
Nederlands [Dutch]	Hierbij verklaart D-Link Corporation dat dit product, accessoires en software voldoen aan de richtlijnen 2014/53/EU. De volledige tekst van de EU conformiteitsverklaring en productfirmware is beschikbaar voor download van de productpagina op <a href="http://www.dlink.com">www.dlink.com</a> .
Malti [Maltese]	Bil-prezenti, D-Link Corporation tiddikkjara li dan il-prodott, l-accessorji, u s-software huma konformi mad-Direttiva 2014/53/UE. Tista' tniżżeż it-test shiħ tad-dikjarazzjoni ta' konformità tal-UE u l-firmware tal-prodott mill-paġna tal-prodott fuq <a href="http://www.dlink.com">www.dlink.com</a> .
Magyar [Hungarian]	Ezennel a D-Link Corporation kijelenti, hogy a jelen termék, annak tartozékaí és szoftvere megfelelnek a 2014/53/EU sz. rendeletek rendelkezéseinek. Az EU Megfelelőségi nyilatkozat teljes szövege és a termék firmware a termék oldaláról töltethető le a <a href="http://www.dlink.com">www.dlink.com</a> címen.
Polski [Polish]	D-Link Corporation niniejszym oświadcza, że ten produkt, akcesoria oraz oprogramowanie są zgodne z dyrektywami 2014/53/EU. Pełen tekst deklaracji zgodności UE oraz oprogramowanie sprzętowe do produktu można pobrać na stronie produktu w witrynie <a href="http://www.dlink.com">www.dlink.com</a> .
Português [Portuguese]	Desta forma, a D-Link Corporation declara que este produto, os acessórios e o software estão em conformidade com a diretiva 2014/53/UE. O texto completo da declaração de conformidade da UE e do firmware
Slovensko[Slovenian]	Podjetje D-Link Corporation s tem izjavlja, da so ta izdelek, dodatna oprema in programska oprema skladni z direktivami 2014/53/EU. Celotno besedilo izjave o skladnosti EU in vdelana programska oprema sta na voljo za prenos na strani izdelka na <a href="http://www.dlink.com">www.dlink.com</a> .
Slovensky [Slovak]	Spoločnosť D-Link týmto vyhlasuje, že tento produkt, príslušenstvo a softvér sú v súlade so smernicou 214/53/EÚ. Úplné znenie vyhlásenia EÚ o zhode a firmvéri produktu sú k dispozícii na prevzatie zo stránky produktu <a href="http://www.dlink.com">www.dlink.com</a> .
Suomi [Finnish]	D-Link Corporation täten vakuuttaa, että tämä tuote, lisävarusteet ja ohjelmisto ovat direktiivin 2014/53/EU vaatimusten mukaisia. Täydellinen EU-vaatimustenmukaisuusvakuutus samoin kuin tuotteen laiteohjelmisto ovat ladattavissa osoitteesta <a href="http://www.dlink.com">www.dlink.com</a> .

Svenska [Swedish]	D-Link Corporation försäkrar härmed att denna produkt, tillbehör och programvara överensstämmer med direktiv 2014/53/EU. Hela texten med EU-försäkran om överensstämmelse och produkt-firmware kan hämtas från produktsidan på <a href="http://www.dlink.com">www.dlink.com</a> .
Íslenska [Icelandic]	Hér með lýsir D-Link Corporation því yfir að þessi vara, fylgihlutir og hugbúnaður eru í samræmi við tilskipun 2014/53/EB. Sækja má ESB-samræmisfirlýsinguna í heild sinni og fastbúnað vörunnar af vefsíðu vörunnar á <a href="http://www.dlink.com">www.dlink.com</a> .
Norsk [Norwegian]	Herved erklærer D-Link Corporation at dette produktet, tilbehøret og programvaren er i samsvar med direktivet 2014/53/EU. Den fullstendige teksten i EU-erklæring om samsvar og produktets fastvare er tilgjengelig for nedlasting fra produktsiden på <a href="http://www.dlink.com">www.dlink.com</a> .

**Warning Statement:**

The power outlet should be near the device and easily accessible.

## **NOTICE OF WIRELESS RADIO LAN USAGE IN THE EUROPEAN COMMUNITY (FOR WIRELESS PRODUCT ONLY):**

- This device is restricted to indoor use when operated in the European Community using channels in the 5.15-5.35 GHz band to reduce the potential for interference.
- This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries. This equipment may be operated in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, and CY.

### **Usage Notes:**

- To remain in conformance with European National spectrum usage regulations, frequency and channel limitations will be applied on the products according to the country where the equipment will be deployed.
- This device is restricted from functioning in Ad-hoc mode while operating in 5 GHz. Ad-hoc mode is direct peer-to-peer communication between two client devices without an Access Point.
- Access points will support DFS (Dynamic Frequency Selection) and TPC (Transmit Power Control) functionality as required when operating in 5 GHz band within the EU.
- Please refer to the product manual or datasheet to check whether your product uses 2.4 GHz and/or 5 GHz wireless.

## **HINWEIS ZUR VERWENDUNG VON DRAHTLOS-NETZWERK (WLAN) IN DER EUROPÄISCHEN GEMEINSCHAFT ( NUR FÜR EIN DRAHTLOSES PRODUKT )**

- Der Betrieb dieses Geräts in der Europäischen Gemeinschaft bei Nutzung von Kanälen im 5,15-5,35 GHz Frequenzband ist ausschließlich auf Innenräume beschränkt, um das Interferenzpotential zu reduzieren.
- Bei diesem Gerät handelt es sich um einen Einsatz in allen EU-Mitgliedsstaaten und in EFTA-Ländern - ausgenommen Frankreich. Der Betrieb dieses Geräts ist in den folgenden Ländern erlaubt: AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

### **Gebrauchshinweise:**

- Um den in Europa geltenden nationalen Vorschriften zum Nutzen des Funkspektrums weiterhin zu entsprechen, werden Frequenz und Kanalbeschränkungen, dem jeweiligen Land, in dem das Gerät zum Einsatz kommt, entsprechend, auf die Produkte angewandt.
- Die Funktionalität im Ad-hoc-Modus bei Betrieb auf 5 GHz ist für dieses Gerät eingeschränkt. Bei dem Ad-hoc-Modus handelt es sich um eine Peer-to-Peer-Kommunikation zwischen zwei Client-Geräten ohne einen Access Point.
- Access Points unterstützen die Funktionen DFS (Dynamic Frequency Selection) und TPC (Transmit Power Control) wie erforderlich bei Betrieb auf 5 GHz innerhalb der EU.
- Bitte schlagen Sie im Handbuch oder Datenblatt nach, ob Ihr Gerät eine 2,4 GHz und / oder 5 GHz Verbindung nutzt.

## **AVIS CONCERNANT L'UTILISATION DE LA RADIO SANS FIL LAN DANS LA COMMUNAUTÉ EUROPÉENNE (UNIQUEMENT POUR LES PRODUITS SANS FIL)**

- Cet appareil est limité à un usage intérieur lorsqu'il est utilisé dans la Communauté européenne sur les canaux de la bande de 5,15 à 5,35 GHz afin de réduire les risques d'interférences.
- Cet appareil est un système de transmission à large bande (émetteur-récepteur) de 2,4 GHz, destiné à être utilisé dans tous les États-membres de l'UE et les pays de l'AELE. Cet équipement peut être utilisé dans les pays suivants : AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

### **Notes d'utilisation:**

- Pour rester en conformité avec la réglementation nationale européenne en matière d'utilisation du spectre, des limites de fréquence et de canal seront appliquées aux produits selon le pays où l'équipement sera déployé.
- Cet appareil ne peut pas utiliser le mode Ad-hoc lorsqu'il fonctionne dans la bande de 5 GHz. Le mode Adhoc fournit une communication directe pair à pair entre deux périphériques clients sans point d'accès.
- Les points d'accès prendront en charge les fonctionnalités DFS (Dynamic Frequency Selection) et TPC (Transmit Power Control) au besoin lors du fonctionnement dans la bande de 5 GHz au sein de l'UE.
- Merci de vous référer au guide d'utilisation ou de la fiche technique afin de vérifier si votre produit utilise 2.4 GHz et/ou 5 GHz sans fil.

## **AVISO DE USO DE LA LAN DE RADIO INALÁMBRICA EN LA COMUNIDAD EUROPEA (SOLO PARA EL PRODUCTO INALÁMBRICO)**

- El uso de este dispositivo está restringido a interiores cuando funciona en la Comunidad Europea utilizando canales en la banda de 5,15-5,35 GHz, para reducir la posibilidad de interferencias.
- Este dispositivo es un sistema de transmisión (transceptor) de banda ancha de 2,4 GHz, pensado para su uso en todos los estados miembros de la UE y en los países de la AELC. Este equipo se puede utilizar en AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

### **Notas de uso:**

- Para seguir cumpliendo las normas europeas de uso del espectro nacional, se aplicarán limitaciones de frecuencia y canal en los productos en función del país en el que se pondrá en funcionamiento el equipo.
- Este dispositivo tiene restringido el funcionamiento en modo Ad-hoc mientras funcione a 5 Ghz. El modo Ad-hoc es la comunicación directa de igual a igual entre dos dispositivos cliente sin un punto de acceso.
- Los puntos de acceso admitirán la funcionalidad DFS (Selección de frecuencia dinámica) y TPC (Control de la potencia de transmisión) si es necesario cuando funcionan a 5 Ghz dentro de la UE.
- Por favor compruebe el manual o la ficha de producto para comprobar si el producto utiliza las bandas inalámbricas de 2.4 GHz y/o la de 5 GHz.

## **AVVISO PER L'USO DI LAN RADIO WIRELESS NELLA COMUNITÀ EUROPEA (SOLO PER PRODOTTI WIRELESS)**

- Nella Comunità europea, l'uso di questo dispositivo è limitato esclusivamente agli ambienti interni sui canali compresi nella banda da 5,15 a 5,35 GHz al fine di ridurre potenziali interferenze. Questo dispositivo è un sistema di trasmissione a banda larga a 2,4 GHz (ricetrasmettente), destinato all'uso in tutti gli stati membri dell'Unione europea e nei paesi EFTA.
- Questo dispositivo può essere utilizzato in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

### **Note per l'uso**

- Al fine di mantenere la conformità alle normative nazionali europee per l'uso dello spettro di frequenze, saranno applicate limitazioni sulle frequenze e sui canali per il prodotto in conformità alle normative del paese in cui il dispositivo viene utilizzato.
- Questo dispositivo non può essere attivato in modalità Ad-hoc durante il funzionamento a 5 Ghz. La modalità Ad-hoc è una comunicazione diretta peer-to-peer fra due dispositivi client senza un punto di accesso.
- I punti di accesso supportano le funzionalità DFS (Dynamic Frequency Selection) e TPC (Transmit Power Control) richieste per operare a 5 Ghz nell'Unione europea.
- Ti invitiamo a fare riferimento al manuale del prodotto o alla scheda tecnica per verificare se il tuo prodotto utilizza le frequenze 2,4 GHz e/o 5 GHz.

## **KENNISGEVING VAN DRAADLOOS RADIO LAN-GEBRUIK IN DE EUROPESE GEMEENSCHAP (ALLEEN VOOR DRAADLOOS PRODUCT)**

- Dit toestel is beperkt tot gebruik binnenshuis wanneer het wordt gebruikt in de Europese Gemeenschap gebruik makend van kanalen in de 5.15-5.35 GHz band om de kans op interferentie te beperken.
- Dit toestel is een 2.4 GHz breedband transmissiesysteem (transceiver) dat bedoeld is voor gebruik in alle EU lidstaten en EFTA landen. Deze uitrusting mag gebruikt worden in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

### **Gebruiksaanwijzingen:**

- Om de gebruiksvoorschriften van het Europese Nationale spectrum na te leven, zullen frequentie- en kanaalbeperkingen worden toegepast op de producten volgens het land waar de uitrusting gebruikt zal worden.
- Dit toestel kan niet functioneren in Ad-hoc mode wanneer het gebruikt wordt in 5 GHz. Ad-hoc mode is directe peer-to-peer communicatie tussen twee klantenapparaten zonder een toegangspunt.
- Toegangspunten ondersteunen DFS (Dynamic Frequency Selection) en TPC (Transmit Power Control) functionaliteit zoals vereist bij gebruik in 5 GHz binnen de EU.
- Raadpleeg de handleiding of de datasheet om te controleren of uw product gebruik maakt van 2.4 GHz en/of 5 GHz.

## SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damage. Remember to consult the product user instructions for more details.

- Static electricity can be harmful to electronic components. Discharge static electricity from your body (i.e. touching grounded bare metal) before touching the product.
- Do not attempt to service the product and never disassemble the product. For some products with a user replaceable battery, please read and follow the instructions in the user manual.
- Do not spill food or liquid on your product and never push any objects into the openings of your product.
- Do not use this product near water, areas with high humidity, or condensation unless the product is specifically rated for outdoor application.
- Keep the product away from radiators and other heat sources.
- Always unplug the product from mains power before cleaning and use a dry lint free cloth only.

## SICHERHEITSVORSCHRIFTEN

Die folgenden allgemeinen Sicherheitsvorschriften dienen als Hilfe zur Gewährleistung Ihrer eigenen Sicherheit und zum Schutz Ihres Produkts. Weitere Details finden Sie in den Benutzeranleitungen zum Produkt.

- Statische Elektrizität kann elektronischen Komponenten schaden. Um Schäden durch statische Aufladung zu vermeiden, leiten Sie elektrostatische Ladungen von Ihrem Körper ab, (z. B. durch Berühren eines geerdeten blanken Metallteils), bevor Sie das Produkt berühren.
- Unterlassen Sie jeden Versuch, das Produkt zu warten, und versuchen Sie nicht, es in seine Bestandteile zu zerlegen. Für einige Produkte mit austauschbaren Akkus lesen Sie bitte das Benutzerhandbuch und befolgen Sie die dort beschriebenen Anleitungen.
- Vermeiden Sie, dass Speisen oder Flüssigkeiten auf Ihr Produkt gelangen, und stecken Sie keine Gegenstände in die Gehäuseschlitzte oder -öffnungen Ihres Produkts.
- Verwenden Sie dieses Produkt nicht in unmittelbarer Nähe von Wasser und nicht in Bereichen mit hoher Luftfeuchtigkeit oder Kondensation, es sei denn, es ist speziell zur Nutzung in Außenbereichen vorgesehen und eingestuft.
- Halten Sie das Produkt von Heizkörpern und anderen Quellen fern, die Wärme erzeugen.
- Trennen Sie das Produkt immer von der Stromzufuhr, bevor Sie es reinigen und verwenden Sie dazu ausschließlich ein trockenes fusselfreies Tuch.

## **CONSIGNES DE SÉCURITÉ**

Les consignes générales de sécurité ci-après sont fournies afin d'assurer votre sécurité personnelle et de protéger le produit d'éventuels dommages. Veuillez consulter les consignes d'utilisation du produit pour plus de détails.

- L'électricité statique peut endommager les composants électroniques. Déchargez l'électricité statique de votre corps (en touchant un objet en métal relié à la terre par exemple) avant de toucher le produit.
- N'essayez pas d'intervenir sur le produit et ne le démontez jamais. Pour certains produits contenant une batterie remplaçable par l'utilisateur, veuillez lire et suivre les consignes contenues dans le manuel d'utilisation.
- Ne renversez pas d'aliments ou de liquide sur le produit et n'insérez jamais d'objets dans les orifices.
- N'utilisez pas ce produit à proximité d'un point d'eau, de zones très humides ou de condensation sauf si le produit a été spécifiquement conçu pour une application extérieure.
- Éloignez le produit des radiateurs et autres sources de chaleur.
- Débranchez toujours le produit de l'alimentation avant de le nettoyer et utilisez uniquement un chiffon sec non pelucheux.

## **INSTRUCCIONES DE SEGURIDAD**

Las siguientes directrices de seguridad general se facilitan para ayudarle a garantizar su propia seguridad personal y para proteger el producto frente a posibles daños. No olvide consultar las instrucciones del usuario del producto para obtener más información.

- La electricidad estática puede resultar nociva para los componentes electrónicos. Descargue la electricidad estática de su cuerpo (p. ej., tocando algún metal sin revestimiento conectado a tierra) antes de tocar el producto.
- No intente realizar el mantenimiento del producto ni lo desmonte nunca. Para algunos productos con batería reemplazable por el usuario, lea y siga las instrucciones del manual de usuario.
- No derrame comida o líquidos sobre el producto y nunca deje que caigan objetos en las aberturas del mismo.
- No utilice este producto cerca del agua, en zonas con humedad o condensación elevadas a menos que el producto esté clasificado específicamente para aplicación en exteriores.
- Mantenga el producto alejado de los radiadores y de otras fuentes de calor.
- Desenchufe siempre el producto de la alimentación de red antes de limpiarlo y utilice solo un paño seco sin pelusa.

## ISTRUZIONI PER LA SICUREZZA

Le seguenti linee guida sulla sicurezza sono fornite per contribuire a garantire la sicurezza personale degli utenti e a proteggere il prodotto da potenziali danni. Per maggiori dettagli, consultare le istruzioni per l'utente del prodotto.

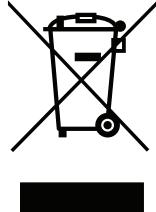
- L'elettricità statica può essere pericolosa per i componenti elettronici. Scaricare l'elettricità statica dal corpo (ad esempio toccando una parte metallica collegata a terra) prima di toccare il prodotto.
- Non cercare di riparare il prodotto e non smontarlo mai. Per alcuni prodotti dotati di batteria sostituibile dall'utente, leggere e seguire le istruzioni riportate nel manuale dell'utente.
- Non versare cibi o liquidi sul prodotto e non spingere mai alcun oggetto nelle aperture del prodotto.
- Non usare questo prodotto vicino all'acqua, in aree con elevato grado di umidità o soggetto a condensa a meno che il prodotto non sia specificatamente approvato per uso in ambienti esterni.
- Tenere il prodotto lontano da caloriferi e altre fonti di calore.
- Collegare sempre il prodotto dalla presa elettrica prima di pulirlo e usare solo un panno asciutto che non lasci filacce.

## VEILIGHEIDSINFORMATIE

De volgende algemene veiligheidsinformatie werd verstrekt om uw eigen persoonlijke veiligheid te waarborgen en uw product te beschermen tegen mogelijke schade. Denk eraan om de gebruikersinstructies van het product te raadplegen voor meer informatie.

- Statische elektriciteit kan schadelijk zijn voor elektronische componenten. Ontlaad de statische elektriciteit van uw lichaam (d.w.z. het aanraken van geaard bloot metaal) voordat u het product aanraakt.
- U mag nooit proberen het product te onderhouden en u mag het product nooit demonteren. Voor sommige producten met door de gebruiker te vervangen batterij, dient u de instructies in de gebruikershandleiding te lezen en te volgen.
- Mors geen voedsel of vloeistof op uw product en u mag nooit voorwerpen in de openingen van uw product duwen.
- Gebruik dit product niet in de buurt van water, gebieden met hoge vochtigheid of condensatie, tenzij het product specifiek geclassificeerd is voor gebruik buitenhuis.
- Houd het product uit de buurt van radiatoren en andere warmtebronnen.
- U dient het product steeds los te koppelen van de stroom voordat u het reinigt en gebruik uitsluitend een droge pluisvrije doek.

# Disposing of and Recycling Your Product

**ENGLISH**

This symbol on the product or packaging means that according to local laws and regulations this product should not be disposed of in household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it has reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health.

## D-Link and the Environment

At D-Link, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimise this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

D-Link recommends that you always switch off or unplug your D-Link products when they are not in use. By doing so you will help to save energy and reduce CO<sub>2</sub> emissions.

To learn more about our environmentally responsible products and packaging please visit [www.dlinkgreen.com](http://www.dlinkgreen.com).

**EN****DEUTSCH**

Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher Gesetze und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen ist. Bringen Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt das Ende seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren. Durch ein auf diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die menschliche Gesundheit zu schützen.

**DE**

## D-Link und die Umwelt

D-Link ist sich den möglichen Auswirkungen seiner Geschäftstätigkeiten und seiner Produkte auf die Umwelt bewusst und fühlt sich verpflichtet, diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundlichkeit her und verwendet wiederverwertbare, schadstoffarme Materialien bei Produktherstellung und Verpackung.

D-Link empfiehlt, Ihre Produkte von D-Link, wenn nicht in Gebrauch, immer auszuschalten oder vom Netz zu nehmen. Auf diese Weise helfen Sie, Energie zu sparen und CO<sub>2</sub>-Emissionen zu reduzieren.

Wenn Sie mehr über unsere umweltgerechten Produkte und Verpackungen wissen möchten, finden Sie entsprechende Informationen im Internet unter [www.dlinkgreen.com](http://www.dlinkgreen.com).

## FRANÇAIS



## FR

Ce symbole apposé sur le produit ou son emballage signifie que, conformément aux lois et réglementations locales, ce produit ne doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet effet par les autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière, vous aidez à préserver l'environnement et à protéger la santé de l'homme.

## D-Link et l'environnement

Chez D-Link, nous sommes conscients de l'impact de nos opérations et produits sur l'environnement et nous engageons à le réduire. Pour limiter cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et faiblement toxiques, tant dans ses produits que ses emballages.

D-Link recommande de toujours éteindre ou débrancher vos produits D-Link lorsque vous ne les utilisez pas. Vous réaliserez ainsi des économies d'énergie et réduirez vos émissions de CO<sub>2</sub>.

Pour en savoir plus sur les produits et emballages respectueux de l'environnement, veuillez consulter le [www.dlinkgreen.com](http://www.dlinkgreen.com).

## ESPAÑOL



## ES

Este símbolo en el producto o el embalaje significa que, de acuerdo con la legislación y la normativa local, este producto no se debe desechar en la basura doméstica sino que se debe reciclar. Llévelo a un punto de recogida designado por las autoridades locales una vez que ha llegado al fin de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su embalaje de esta forma, contribuye a preservar el medio ambiente y a proteger la salud de los seres humanos.

## D-Link y el medio ambiente

En D-Link, comprendemos y estamos comprometidos con la reducción del impacto que puedan tener nuestras actividades y nuestros productos en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posible, utilizando materiales reciclables y de baja toxicidad tanto en los productos como en el embalaje.

D-Link recomienda apagar o desenchufar los productos D-Link cuando no se estén utilizando. Al hacerlo, contribuirá a ahorrar energía y a reducir las emisiones de CO<sub>2</sub>.

Para obtener más información acerca de nuestros productos y embalajes ecológicos, visite el sitio [www.dlinkgreen.com](http://www.dlinkgreen.com).

## ITALIANO



IT

La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle normative locali, questo prodotto non deve essere smaltito nei rifiuti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, portare il prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i prodotti da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a salvaguardare la salute umana.

## D-Link e l'ambiente

D-Link cerca da sempre di ridurre l'impatto ambientale dei propri stabilimenti e dei propri prodotti. Allo scopo di ridurre al minimo tale impatto, D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a basso tasso di tossicità sia per i prodotti che per gli imballaggi.

D-Link raccomanda di spegnere sempre i prodotti D-Link o di scollarne la spina quando non vengono utilizzati. In questo modo si contribuirà a risparmiare energia e a ridurre le emissioni di anidride carbonica.

Per ulteriori informazioni sui prodotti e sugli imballaggi D-Link a ridotto impatto ambientale, visitate il sito all'indirizzo [www.dlinkgreen.com](http://www.dlinkgreen.com).

## NEDERLANDS



NL

Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden weggegooid met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduur heeft bereikt, dient u het naar een inzamelpunt te brengen dat hier toe werd aangeduid door uw plaatselijke autoriteiten, sommige autoriteiten accepteren producten zonder dat u hiervoor dient te betalen. Door het product en de verpakking op deze manier te recycelen helpt u het milieu en de gezondheid van de mens te beschermen.

## D-Link en het milieu

Bij D-Link spannen we ons in om de impact van onze handelingen en producten op het milieu te beperken. Om deze impact te beperken, ontwerpt en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in product en verpakking.

D-Link raadt aan om steeds uw D-Link producten uit te schakelen of uit de stekker te halen wanneer u ze niet gebruikt. Door dit te doen bespaart u energie en beperkt u de CO<sub>2</sub>-emissies.

Breng een bezoek aan [www.dlinkgreen.com](http://www.dlinkgreen.com) voor meer informatie over onze milieouverantwoorde producten en verpakkingen.

### POLSKI



Ten symbol umieszczony na produkcie lub opakowaniu oznacza, że zgodnie z miejscowym prawem i lokalnymi przepisami niniejszego produktu nie wolno wyrzucać jak odpady czy śmieci z gospodarstwa domowego, lecz należy go poddać procesowi recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie produkty nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze. Poprzez proces recyklingu i dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko naturalne i dbać o ludzkie zdrowie.

## D-Link i środowisko

D-Link podchodzimy w sposób świadomy do ochrony otoczenia oraz jesteśmy zaangażowani w zmniejszanie wpływu naszych działań i produktów na środowisko naturalne. W celu zminimalizowania takiego wpływu firma D-Link konstruuje i wytwarza swoje produkty w taki sposób, aby były one jak najbardziej przyjazne środowisku, stosując do tych celów materiały nadające się do powtórnego wykorzystania, charakteryzujące się małą toksycznością zarówno w przypadku samych produktów jak i opakowań.

Firma D-Link zaleca, aby Państwo zawsze prawidłowo wyłączali z użytku swoje produkty D-Link, gdy nie są one wykorzystywane. Postępując w ten sposób pozwalają Państwo oszczędzać energię i zmniejszać emisje CO<sub>2</sub>.

Aby dowiedzieć się więcej na temat produktów i opakowań mających wpływ na środowisko prosimy zapoznać się ze stroną Internetową [www.dlinkgreen.com](http://www.dlinkgreen.com).

### ČESKY



Tento symbol na výrobku nebo jeho obalu znamená, že podle místně platných předpisů se výrobek nesmí vyhazovat do komunálního odpadu, ale odeslat k recyklaci. Až výrobek doslouží, odneste jej prosím na sběrné místo určené místními úřady k tomuto účelu. Některá sběrná místa přijímají výrobky zdarma. Recyklací výrobku i obalu pomáháte chránit životní prostředí i lidské zdraví.

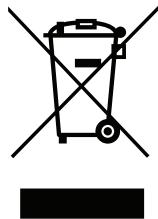
## D-Link a životní prostředí

Ve společnosti D-Link jsme si vědomi vlivu našich provozů a výrobků na životní prostředí a snažíme se o minimalizaci těchto vlivů. Proto své výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické materiály.

Společnost D-Link doporučuje, abyste své výrobky značky D-Link vypnuli nebo vytáhli ze zásuvky vždy, když je nepoužíváte. Pomůžete tak šetřit energii a snížit emise CO<sub>2</sub>.

Více informací o našich ekologických výrobcích a obalech najdete na adrese [www.dlinkgreen.com](http://www.dlinkgreen.com).

**MAGYAR**



Ez a szimbólum a terméken vagy a csomagoláson azt jelenti, hogy a helyi törvényeknek és szabályoknak megfelelően ez a termék nem semmisíthető meg a háztartási hulladékkal együtt, hanem újrahasznosításra kell küldeni. Kérjük, hogy a termék élettartamának elteltét követően vigye azt a helyi hatóság által kijelölt gyűjtőhelyre. A termékek egyes helyeken ingyen elhelyezhetők. A termék és a csomagolás újrahasznosításával segíti védeni a környezetet és az emberek egészségét.

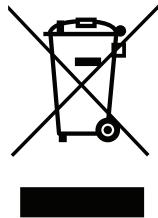
## A D-Link és a környezet

A D-Linknél megértjük és elkötelezettek vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére. Az ezen hatás csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony károsanyagtartalmú termékeket gyárt és csomagolásokat alkalmaz.

A D-Link azt javasolja, hogy minden kapcsolja ki vagy húzza ki a D-Link termékeket a tápforrásból, ha nem használja azokat. Ezzel segít az energia megtakarításában és a széndioxid kibocsátásának csökkentésében.

Környezetbarát termékeinkről és csomagolásainkról további információkat a [www.dlinkgreen.com](http://www.dlinkgreen.com) weboldalon tudhat meg.

**NORSK**



Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal kastes sammen med husholdningsavfall, men leveres inn til gjenvinning. Vennligst ta det til et innsamlingssted anviset av lokale myndigheter når det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne produktet og forpakningen hjelper du til å verne miljøet og beskytte folks helse.

**HU**

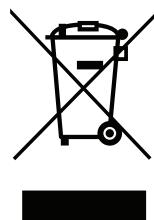
## D-Link og miljøet

Hos D-Link forstår vi oss på og er forpliktet til å minske innvirkningen som vår drift og våre produkter kan ha på miljøet. For å minimalisere denne innvirkningen designet og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske materialer både i produktene og forpakningen.

D-Link anbefaler at du alltid slår av eller frakobler D-Link-produkter når de ikke er i bruk. Ved å gjøre dette hjelper du å spare energi og å redusere CO<sub>2</sub>-utslipp.

For mer informasjon angående våre miljøansvarlige produkter og forpakninger kan du gå til [www.dlinkgreen.com](http://www.dlinkgreen.com).

**DANSK**



**DK**

Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bortskaffes som husholdningsaffald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted som angivet af de lokale myndigheder, når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet og dets emballage til genbrug på denne måde bidrager du til at beskytte miljøet og den menneskelige sundhed.

## D-Link og miljøet

Hos D-Link forstår vi og bestræber os på at reducere enhver indvirkning, som vores aktiviteter og produkter kan have på miljøet. For at minimere denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvendelige materialer med lavt giftighedsniveau i både produkter og emballage.

D-Link anbefaler, at du altid slukker eller frakobler dine D-Link-produkter, når de ikke er i brug. Ved at gøre det bidrager du til at spare energi og reducere CO<sub>2</sub>-udledningerne.

Du kan finde flere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på [www.dlinkgreen.com](http://www.dlinkgreen.com).

**SUOMI**



**FI**

Tämä symboli tuotteen pakkauksessa tarkoittaa, että paikallisten laki ja säännösten mukaisesti tästä tuotetta ei pidä hävittää yleisen kotitalousjätteen seassa vaan se tulee toimittaa kierrättäväksi. Kun tuote on elinkaarensa päässä, toimita se lähipäään viranomaisten hyväksymään kierrätyspisteesseen. Kierrättämällä käytetyn tuotteen ja sen pakkauksen autat tukemaan sekä ympäristön että ihmisten terveyttä ja hyvinvointia.

## D-Link ja ympäristö

D-Link ymmärtää ympäristönsuojelun tärkeyden ja on sitoutunut vähentämään tuotteistaan ja niiden valmistuksesta ympäristölle mahdollisesti aiheutuvia haittavaikutuksia. Nämä negatiiviset vaikutukset minimoidakseen D-Link suunnittelee ja valmistaa tuotteensa mahdollisimman ympäristöystävällisiksi käytämällä kierrätettäviä, alhaisia pitoisuuksia haitallisia aineita sisältäviä materiaaleja sekä tuotteissaan että niiden pakauksissa.

Suosittemme, että irrotat D-Link-tuotteesi virtualähteestä tai sammumat ne aina, kun ne eivät ole käytössä. Toimimalla näin autat säästämään energiota ja vähentämään hiilidioksidipäästöjä.

Lue lisää ympäristöystävällisistä D-Link-tuotteista ja pakauksistamme osoitteesta [www.dlinkgreen.com](http://www.dlinkgreen.com).

### SVENSKA



Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte skall kastas i hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsamlingsplats, vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att bevara miljön och skydda människors hälsa.

### D-Link och miljön

På D-Link förstår vi och är fast beslutna att minska den påverkan våra verksamheter och produkter kan ha på miljön. För att minska denna påverkan utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara material med låg gifthalt i både produkter och förpackningar.

D-Link rekommenderar att du alltid stänger av eller kopplar ur dina D-Link produkter när du inte använder dem. Genom att göra detta hjälper du till att spara energi och minska utsläpp av koldioxid.

För mer information om våra miljöansvariga produkter och förpackningar [www.dlinkgreen.com](http://www.dlinkgreen.com).

### SE

### PORTUGUÊS



Este símbolo no produto ou embalagem significa que, de acordo com as leis e regulamentações locais, este produto não deverá ser eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha designado pelas suas autoridades locais quando este tiver atingido o fim da sua vida útil, alguns destes pontos aceitam produtos gratuitamente. Ao reciclar o produto e respectiva embalagem desta forma, ajuda a preservar o ambiente e protege a saúde humana.

### PT

## A D-Link e o ambiente

Na D-Link compreendemos e comprometemo-nos com a redução do impacto que as nossas operações e produtos possam ter no ambiente. Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente possível, utilizando materiais recicláveis e não tóxicos tanto nos produtos como nas embalagens.

A D-Link recomenda que desligue os seus produtos D-Link quando estes não se encontrarem em utilização. Com esta acção ajudará a poupar energia e reduzir as emissões de CO<sub>2</sub>.

Para saber mais sobre os nossos produtos e embalagens responsáveis a nível ambiental visite [www.dlinkgreen.com](http://www.dlinkgreen.com).