System Admin - Admin

In the Management menu on the bar at the top of the page, click **System Admin** to access the Admin page. This page will allow you to change the administrator (Admin) password.

To configure the System settings, click the **System** link. Refer to **System Admin - System** on page **87**

Click **Save** at any time to save the changes you have made on this page.

Admin Password	
Password	Enter a new password for the administrator account. You will need to enter this password whenever you configure the router using a web browser or the D-Link Wi-Fi app.
Advanced Settings... - Administration	
Enable Remote Management	Click the toggle to enable remote management for your router.
Remote Admin Port	Specify the port number for accessing the web configuration settings UI.
LED Control	
Status LED	Turn the LED status lights on or off.

System Admin - System

In the Management menu on the bar at the top of the page, click **System Admin** to access the Admin page, then click **System**. This page allows you to save the router's current configuration, load a previously saved configuration, reset the router to its factory default settings, or reboot the router.

To configure the Admin settings, click the **Admin** link. Refer to **System Admin - Admin** on page **86**

Click **Save** at any time to save the changes you have made on this page.

System	
Save Settings to Local Hard Drive	This option will save the current router configuration settings to a file on your computer.
Load Settings from Local Hard Drive	This option will load a previously saved router configuration file. This will overwrite the router's current configuration.
Restore to Factory Default Settings	This option will restore the router back to the default configurations stored in the firmware. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save Settings To Local Hard Drive** button above.

Auto Reboot Configuration	
Reboot the Device	Click to reboot the router immediately.
Auto Reboot	You may set the router to automatically reboot at a set time. The options are **Never, Daily,** or **Weekly**. You may set the hour, the minute, and the day you wish to have the router automatically reboot at.

User

In the Management menu on the bar at the top of the page, click **User**. The User section is used to create, manage, and delete user accounts with user-defined access to certain router services.

Click **Save** at any time to save the changes you have made on this page.

If you wish to remove a user, click on the trash can icon in the Delete column. If you wish to edit a user, click on the pencil icon in the Edit column. If you wish to create a new user, click the **Create User** button.
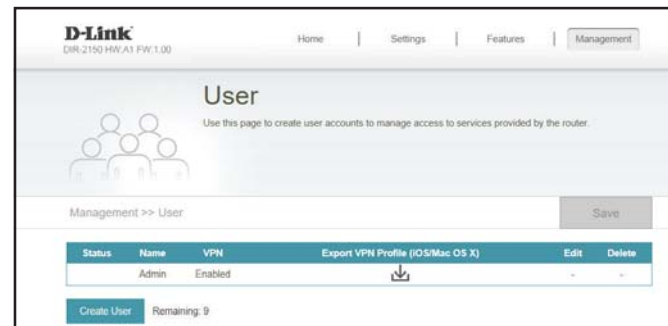
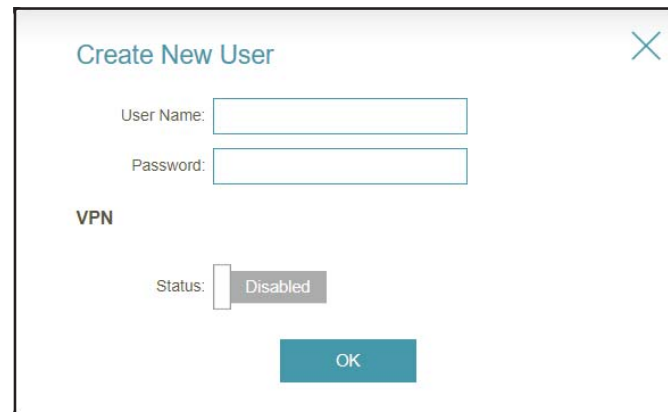|	
User Name	Enter a username for the new user account.
Password	Enter a password for the new user account.
VPN	
Status	Enable or disable Virtual Private Network (VPN) functionality for this user.

Upgrade

In the Management menu on the bar at the top of the page, click **Upgrade**. This page will allow you to upgrade the router's firmware, either automatically or manually. To manually upgrade the firmware, you must first download the relevant file from **http://support.dlink.com**.

Click **Save** at any time to save the changes you have made on this page.

Firmware	
Current Firmware Version	The current firmware's version will be displayed.
Check for New Firmware	Click this button to prompt the router to automatically check for a new firmware version. If a newer version is found, it will prompt you to install it.
Automatic Firmware Upgrade	
Automatic Upgrade	If enabled, the router will automatically check for and upgrade to the newest firmware.
Choose Upgrade Time	Enable this function to set the router to automatically upgrade its firmware at a set time.
Upgrade Time	Configurable if **Choose Upgrade Time** is enabled. Set the hour and minute to automatically upgrade by using the drop-down menus.
Upgrade Firmware	
Upgrade Firmware	If you wish to upgrade manually, first download the firmware file you wish to upgrade to. Next, click the **Select File** button and browse to the file to install the new firmware.
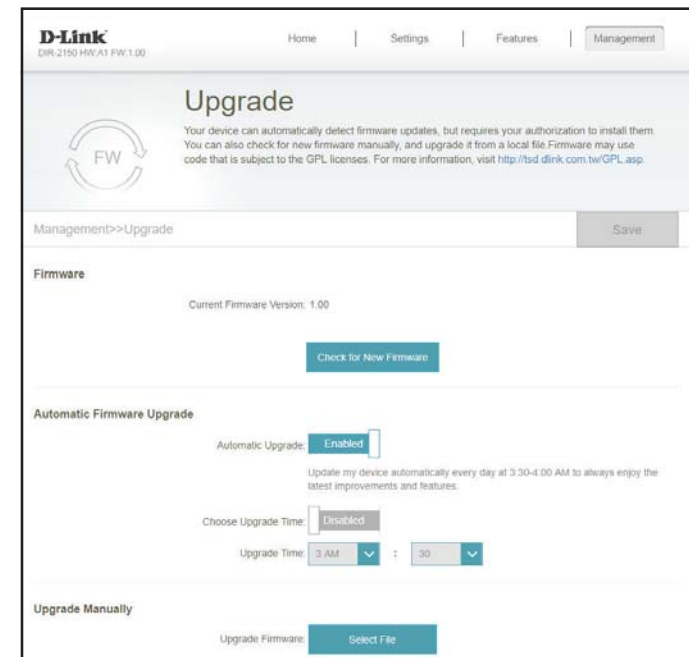
Statistics

In the Management menu on the bar at the top of the page, click **Statistics**. On the Statistics page you can view the amount of packets that pass through the router on the Internet, LAN, Wi-Fi 2.4 GHz and Wi-Fi 5GHz networks.

To view the Extender statistics, click the **Extender** link. Refer to **Statistics - Extender** on page **89**

You can view the **Internet**, **LAN**, **Wi-Fi 2.4 GHz**, or **Wi-Fi 5 GHz** by clicking on the respective tabs at the top. The graph will update in real time. To clear the information on the graph, click **Clear** near the top of the page.

The traffic counter will reset if the device is rebooted.
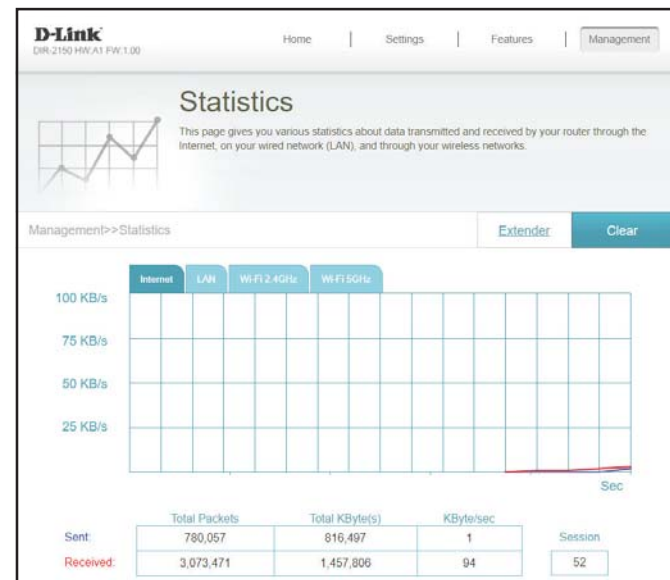
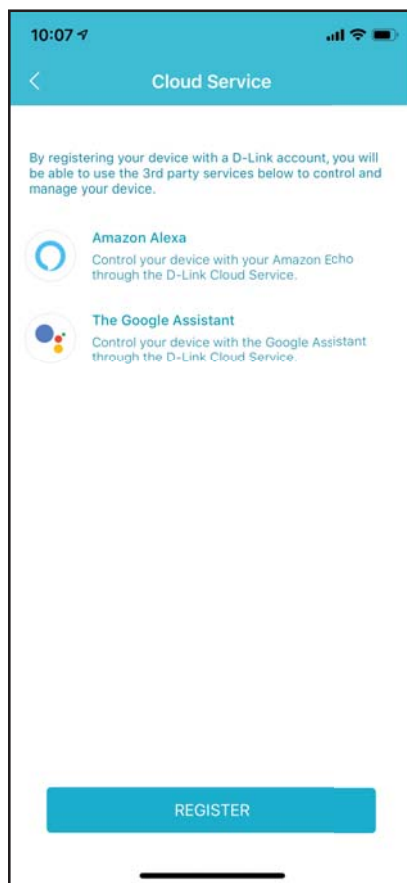# Third Party Services

With the DIR-1260, you can command your router's functionality with your voice through Amazon Alexa and the Google Assistant, enabling you to control your network with voice commands. Features include enabling and disabling your Wi-Fi guest zone without having to go into the UI, rebooting the router and checking your router for firmware upgrades. In order to use third party services to control and manage your device, please register your device with D-Link Cloud Service.

Registering a D-Link Cloud Service Account

In order to use third party services to control and manage your device, you will first need to register your device with D-Link Cloud Service. Follow the steps below if you do not have a D-Link Cloud Service account.

Step 1
Launch the **D-Link Wi-Fi** app.

D-Link Wi-Fi

Step 2
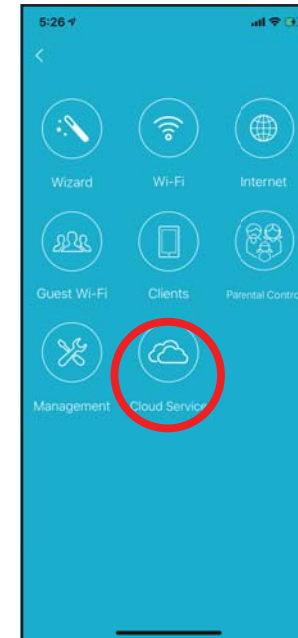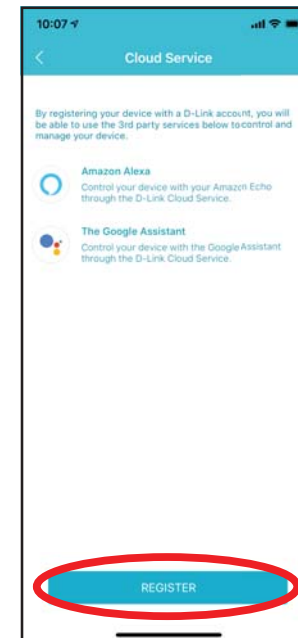Tap the settings gear icon on the top right corner of the screen.
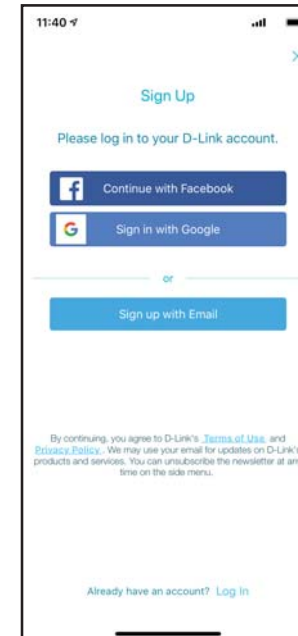
Step 3

Tap the **Cloud Service** icon.

Step 4

Tap the **Register** button.

Step 5

In this menu, you can sign up for a D-Link account using Facebook, Google or an Email address. If you already have a D-Link account, you can tap the **Log In** link at the bottom of the screen to be redirected to the login page.

Amazon Alexa Setup

You will need the Amazon Alexa app, an Amazon account, an Amazon Alexa device and a D-Link Cloud Service account to use this feature.

Note: *The screenshots may be different depending on your mobile device's OS version. The following steps show the iOS interface. If you are using an Android device, the appearance may be different from that of the screenshots, but the process is the same.*

Step 1
Launch the **Amazon Alexa** app.

Amazon Alexa

Step 2
Tap the menu icon on the top left-hand corner of the home screen.
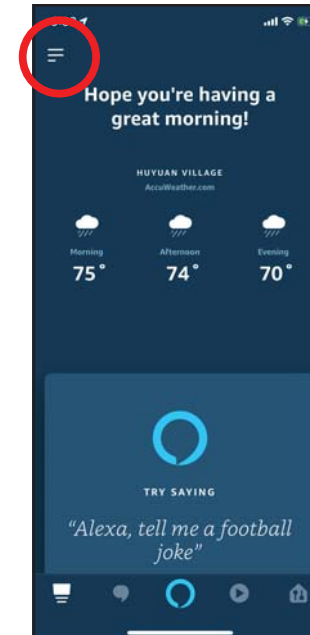
Step 3

Tap on **Skills & Games**.
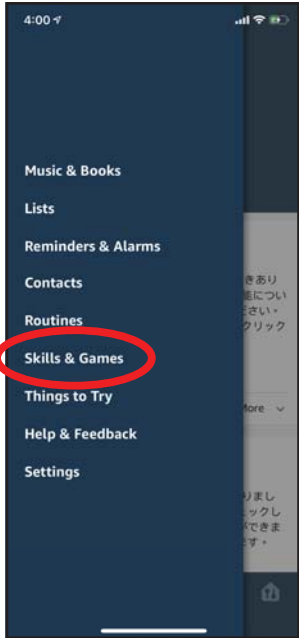
Step 4

Search for "D-Link Wi-Fi". Tap on the search result.
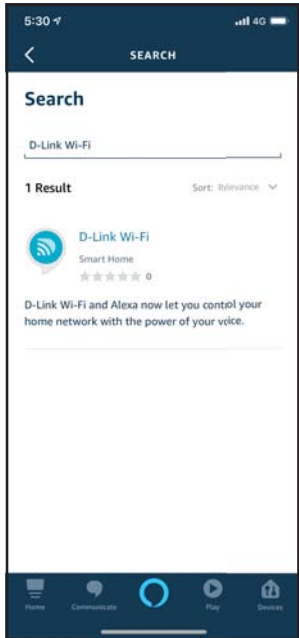
Step 5
Tap **Enable** to link the skill.
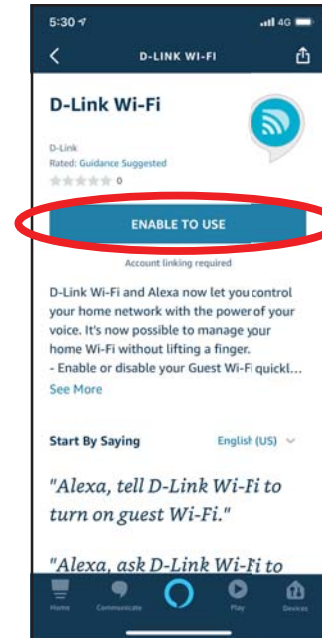
Step 6
Sign in using your D-Link account details.

Step 7
Congratulations! D-Link Wi-Fi has been successfully linked as a skill for your Amazon device. Close the window by tapping **Done** on the top left corner of the screen. Refer to **Amazon Alexa Voice Commands** on page **99** for tasks that you can ask your Amazon Alexa to perform.

Amazon Alexa Voice Commands

With D-Link Wi-Fi enabled as a skill for Alexa, you can ask Alexa to do any of these tasks:

Task	Command
Enable the guest zone.	"Alexa, ask D-Link Wi-Fi to enable my guest zone."
Disable the guest zone.	"Alexa, ask D-Link Wi-Fi to disable my guest zone."
Find out the guest zone credentials.	"Alexa, ask D-Link Wi-Fi what are my guest network credentials."
Reboot the router.	"Alexa, ask D-Link Wi-Fi to reboot the router."
Upgrade the router.	"Alexa, ask D-Link Wi-Fi to upgrade my router."

The Google Assistant Setup

You will need the Google Assistant app, a Google account and a D-Link Cloud Service account to use this feature.

Note: *The screenshots may be different depending on your mobile device's OS version. The following steps show the iOS interface. If you are using an Android device, the appearance may be different from that of the screenshots, but the process is the same.*

Step 1
Launch the **Google Assistant** app.

Assistant

Step 2
Tell your Google Assistant to "**Talk to D-Link Wi-Fi**."
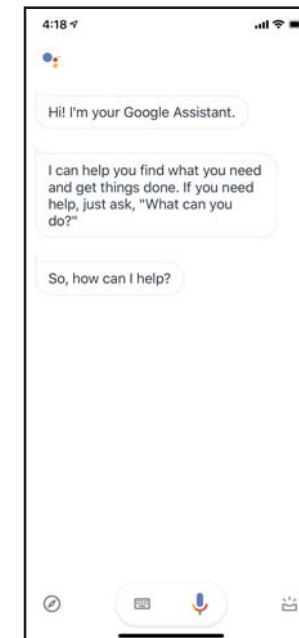
Step 3
Tap **Yes**.

Step 4
Sign in using your D-Link account details.
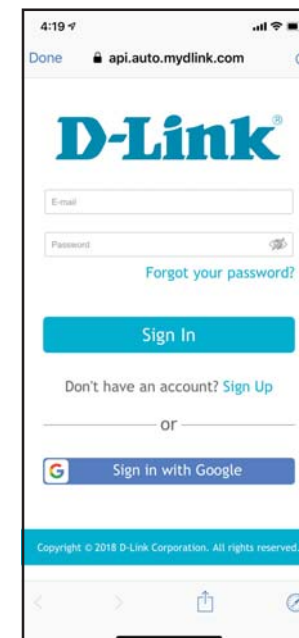
Step 5
Tap **Allow** to continue setup..
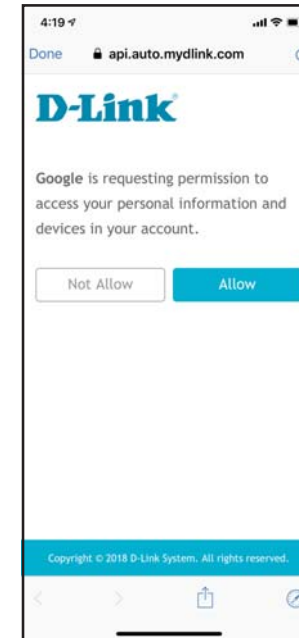
Step 6
Congratulations! D-Link Wi-Fi has been successfully linked to your Google Assistant. Refer to **The Google Assistant Voice Commands** on page **103** for tasks that you can ask your Google Assistant to perform.

The Google Assistant Voice Commands

With D-Link Wi-Fi enabled as a skill for the Google Assistant, you can ask your Google Assistant to do any of these tasks:

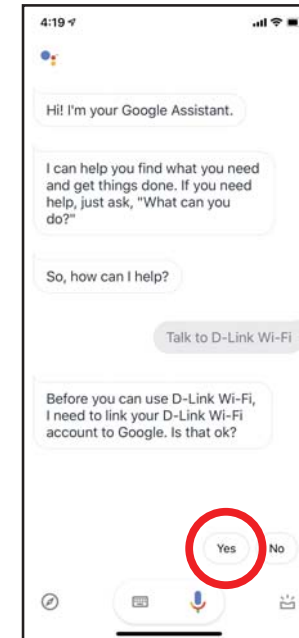| Task	Command
Enable the guest zone.	"OK Google, talk to D-Link Wi-Fi to enable my guest zone."
Disable the guest zone.	"OK Google, talk to D-Link Wi-Fi to disable my guest zone."
Find out the guest zone credentials.	"OK Google, talk to D-Link Wi-Fi to tell me my guest zone credentials."
Reboot the router.	"OK Google, talk to D-Link Wi-Fi to reboot the router."
Upgrade the router.	"OK Google, talk to D-Link Wi-Fi to upgrade my router."

Quick VPN

This router is equipped with D-Link's Quick VPN technology. Virtual Private Networking (VPN) creates a connection between devices across the Internet. Using Quick VPN allows you to securely connect your computer or mobile device to places with free, untrusted Wi-Fi hotspots in places like coffee shops and hotels by encrypting and relaying it through your home Internet connection. This extra 'hop' reduces the chances of hackers stealing your information, such as logins, passwords, and credit card numbers. When traveling, Quick VPN lets you watch sports and use video streaming services without experiencing blackouts or filtering. You can surf the whole Internet unfiltered and unblocked, just as you would at home.

Without Quick VPN

| Your Laptop | Potential Hacker Stealing Data | Public Unsecured Wi-Fi Hotspot | Internet |

With Quick VPN

| Your Laptop | Public Unsecured Wi-Fi Hotspot | Internet | Your Network with Quick VPN Server |
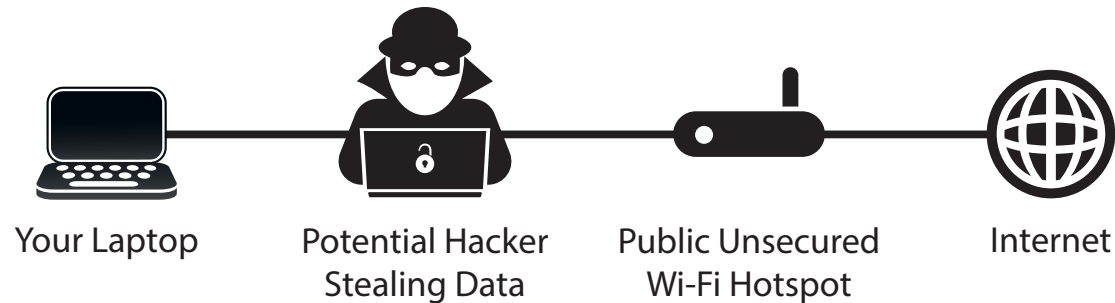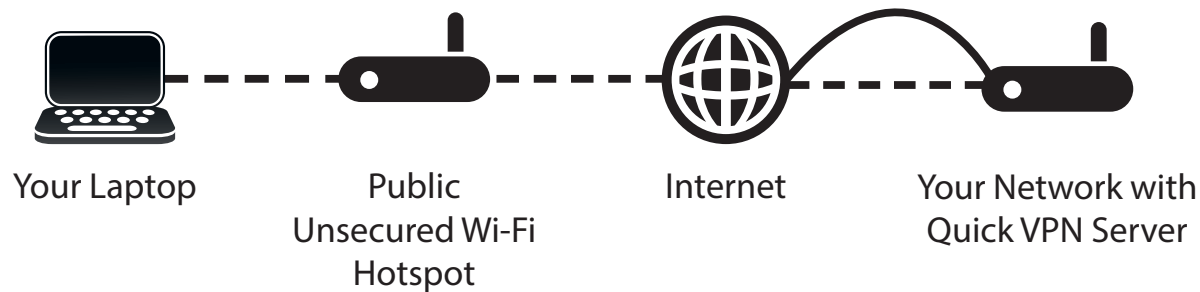
——————— UnencryptedData   – – – – – – – Encrypted Data

Important Information

The following instructions explain and help you to configure your D-Link Quick VPN enabled router and devices to create a Virtual Private Network (VPN). This feature is provided for advanced users who wish to connect remotely and use their router's Internet connection to add a layer of security while using untrusted networks. Configure the Quick VPN Server on your router first and then set up client devices to connect through your router's WAN connection.

• Quick VPN only provides an added layer of security against specific types of snooping attacks and does not guarantee complete data integrity or protection. Only traffic in the tunnel between your router and device will be encrypted, WAN traffic will leave your D-Link Quick VPN enabled router unencrypted.

• Keep your Quick VPN Username, Password, and Passkey safe. Keep your Quick VPN Username, Password, and Passkey safe. It is recommended that you change these credentials periodically.

• A device connected via Quick VPN tunnel may experience lower data throughput and higher latency due to a number of factors including: Internet conditions, local and remote network Wi-Fi and WAN bandwidth limitations, and increased latency. This may negatively impact real time voice and video communication.

• Quick VPN supports up to five concurrent VPN client sessions using the same login and password are supported. Quick VPN uses L2TP/IPsec with MSCHAPv2, PAP, or CHAP authentication.

• You device may warn you that your information may be intercepted, since you control the Quick VPN server, you may ignore this.

• UDP Ports 500, 4500, 1701 and IP Port 50 must be open in order for Quick VPN to work.

• L2TP/IPsec VPN usage may be restricted in some countries and on some networks. If you have trouble using Quick VPN on some networks, but not others and are not violating network access rules, try contacting your ISP or network administrator.

• Devices connected via Quick VPN are assigned addresses on a separate subnet (ex. 192.168.1.x). Some network resources may be unavailable when connecting via Quick VPN.

• If your Internet connection uses DHCP, it is strongly recommended that you first set up Dynamic DNS (DDNS), such as D-Link DDNS, to eliminate the need to reconfigure client devices in the event your ISP assigns you a new WAN IP address.
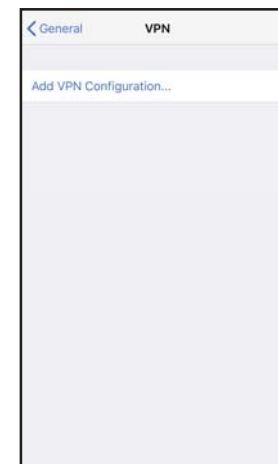
iOS Devices
VPN Setup Instructions

This section provides Quick VPN setup instructions for iOS devices. Refer to **Quick VPN** on page **81** for your router setup instructions.

Go into **Settings** on your compatible iOS device.
Scroll to and tap **General**.
Scroll to and tap **VPN**.
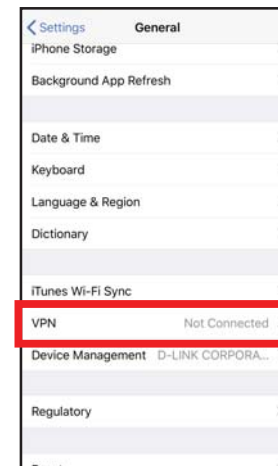
Tap **Add VPN Configuration...**

You should see a pop up window asking you to fill out the details of your VPN connection.

Type: Choose **IPSec**. Tap **Back** to return to the Add Configuration page.

Description: For reference purposes only, used to differentiate between multiple VPN connections.

Server: Enter the IP/DDNS address of your Quick VPN server.
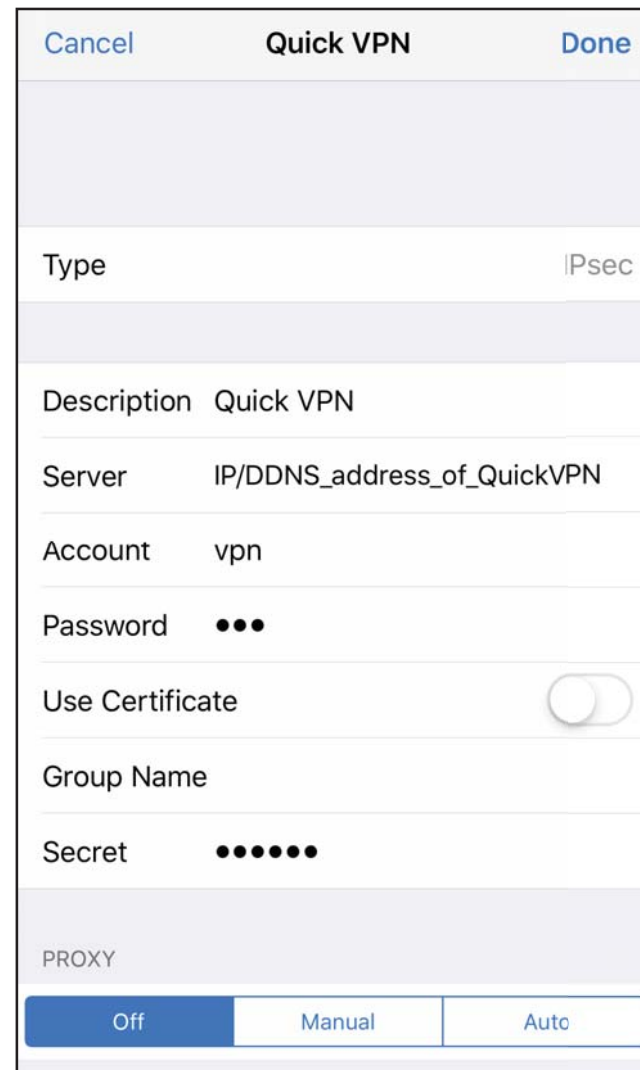
Account: Enter the Username used to authenticate login to VPN server

Password: Enter Password used to authenticate login to VPN server

Secret: Enter your Passkey (PSK).

Tap **Done** at the top right corner of the page to finish adding the configuration.

Your iOS device is now configured to connect to your Quick VPN server.

Connect or Disconnect

To connect or disconnect from to your Quick VPN server, open **Settings** and tap the button next to **VPN**.
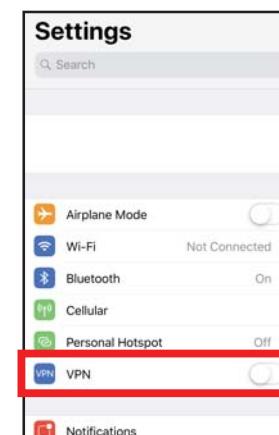
The VPN icon will appear in the notification area at the top of your screen indicating that your device is currently connected to the Quick VPN server.
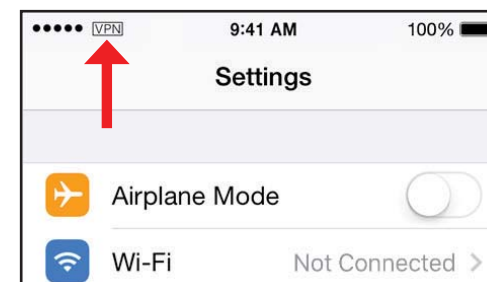
Mac OS X
VPN Setup Instructions

This section provides Quick VPN setup instructions for OS X using the **Export** Profile function. Refer to **Quick VPN** on page **81** for your router setup instructions.
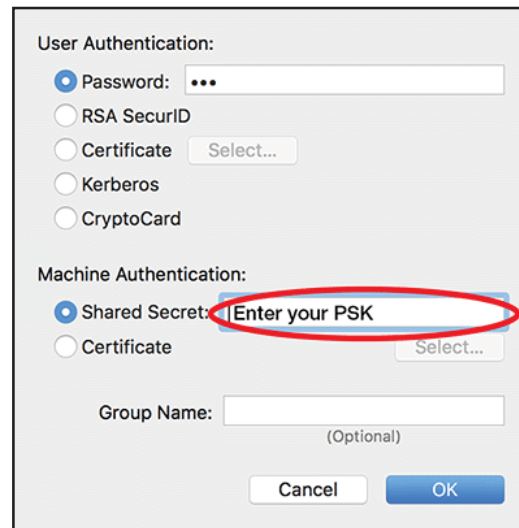
Open the exported profile. The Install Profile dialogue will appear; click **Continue** and **Install**.

Enter your user account password when prompted. Close the **Profiles** dialogue.

Go to > **System Preferences**... > **Network** and select the Quick VPN connection and click **Authentication Settings**.
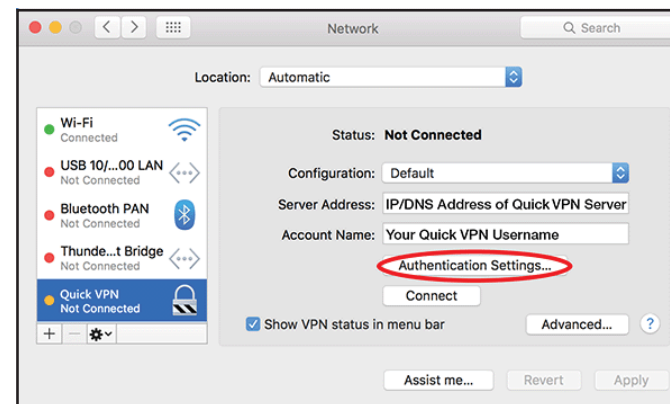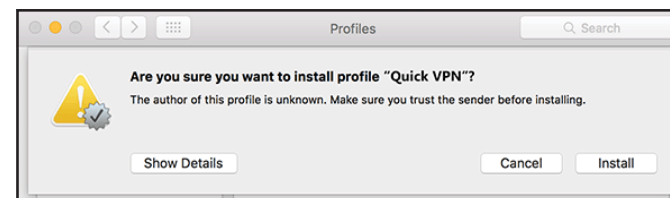
Enter your **Passkey** in the **Shared Secret** text box and click **OK, Apply,** then **OK**.

Your Mac is now configured to connect to your Quick VPN server.

Connect or Disconnect

To connect to or disconnect from your Quick VPN server, go to > **System Preferences**... > **Network**.

Select the Quick VPN connection and click on the **Connect** or **Disconnect** button.
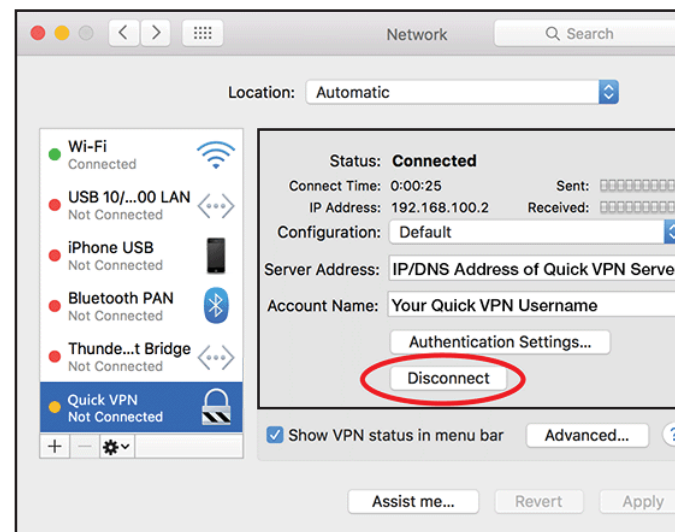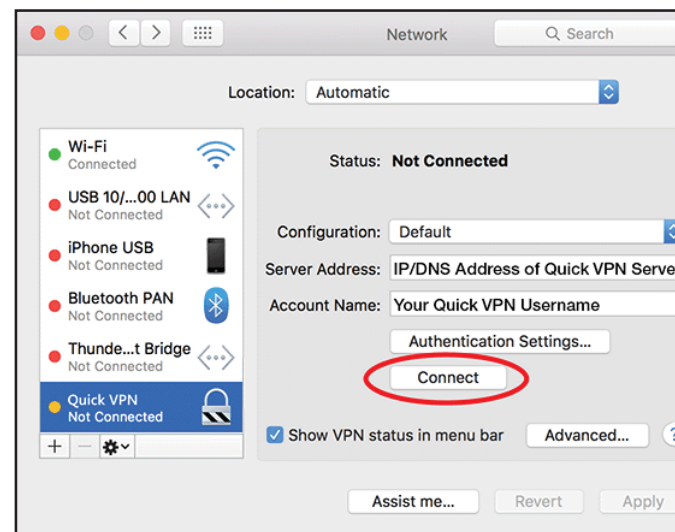
Windows 7
VPN Setup Instructions

This section provides Quick VPN setup instructions for Windows 7. Refer to **Quick VPN** on page **81** for your router setup instructions.

Click the **Start** button and type **vpn** into the **Search programs and files** box.

Select **Set up a virtual private network (VPN) connection.**
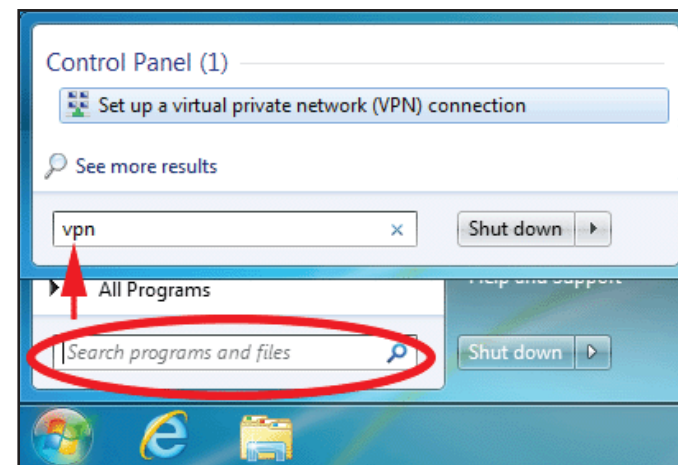
Enter the **IP/DDNS address** of your Quick VPN server in the **Internet address** box, create a name for your connection in the **Destination Name**, check **Don't Connect now; just set it up so I can connect later**, and click **Next**.
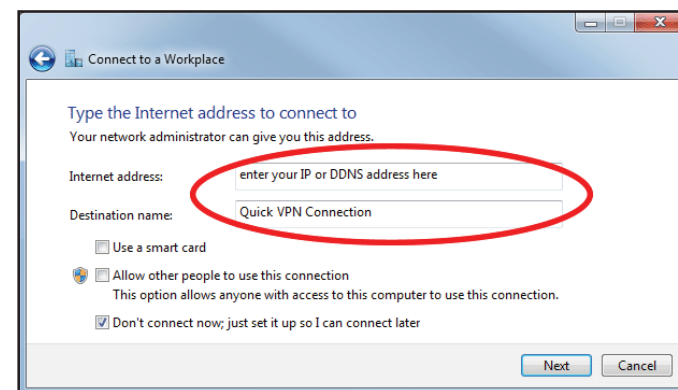
Enter your **Username**. If you would like windows to save your password, enter your **Password** and check **Remember this password**. Click **Create** to continue.
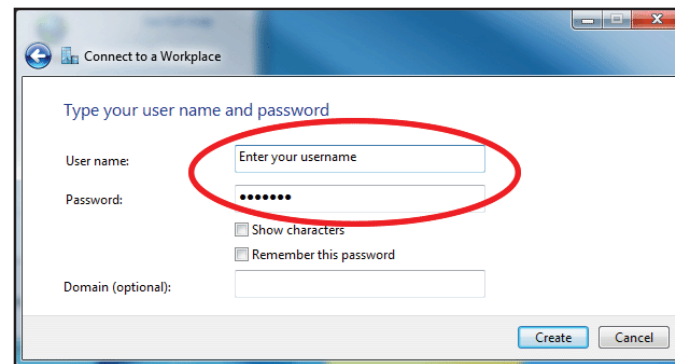
Do not click **Connect Now**.

Click **Close**. Click the **Start** button and type **view network connections** into the **Search programs and files** text box. Select **View network connections.**
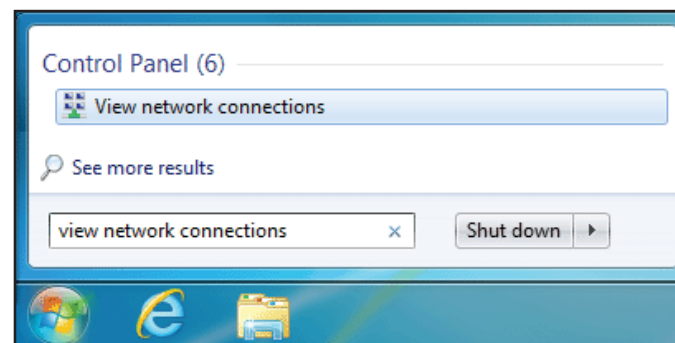
Click **Advanced settings.** Enter your **Passkey** in the **Key** text box under **Use preshared key for authentication**. Click **OK** to close **Advanced Properties** and click **OK** to close **Quick VPN Connection Properties.**

Your Windows 7 system is now configured to connect to your Quick VPN server.
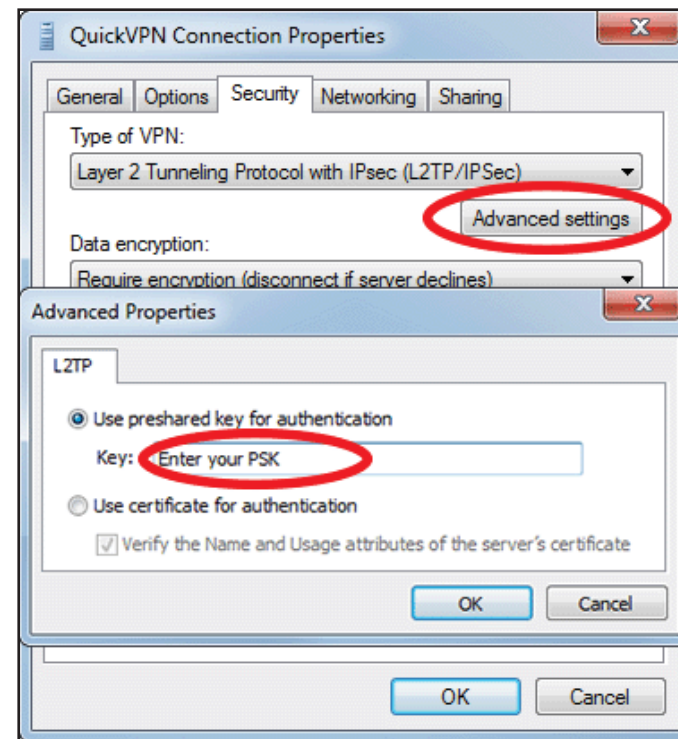
Connect or Disconnect

To connect to or disconnect from your Quick VPN server, click on the **Network Settings** icon in the notification area of the Windows taskbar and from the **Dial Up and VPN** section click on your Quick VPN connection and click on the **Connect** or **Disconnect** button.

Windows 8.1/8
## VPN Setup Instructions

This section provides Quick VPN setup instructions for Windows 8.1/8. Refer to **Quick VPN** on page **81** for your router setup instructions.

This section provides Quick VPN setup instructions for Windows 8.1/8.

Click the **Start** button and type **vpn**.

Select **Manage virtual private networks.**
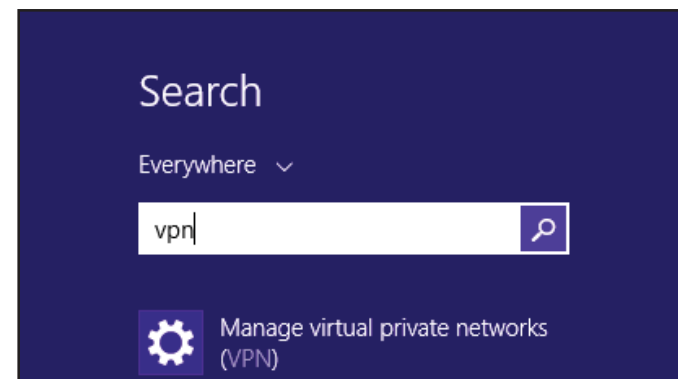
From the Network Settings page, click **Add a VPN Connection**.
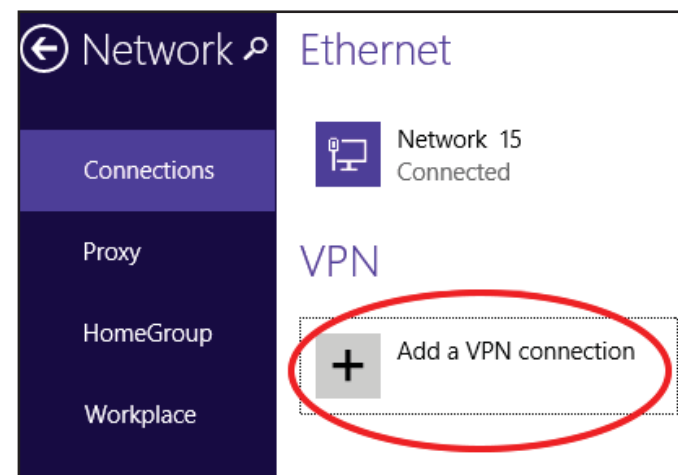
1 Select **Microsoft** from **VPN Provider**.

2 Create a name for your VPN connection.

3 Enter your **IP/DDNS address** of your Quick VPN server.

4 Select **User name and password** from **Type of sign-in info**.

5 If you would like windows to remember your sign-in information, enter your **User name, Password,** and select **Remember my sign-in info**

6 Choose **Save**.

Right-click on the Quick VPN Connection you just created and left-click on **Properties**.
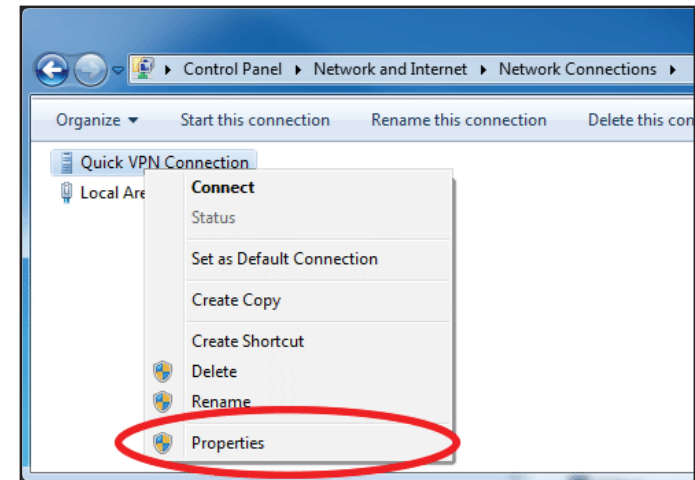
Select the **Security** tab. For the **Type of VPN**, select **Layer 2 Tunneling with IPsec (L2TP/IPSec).**
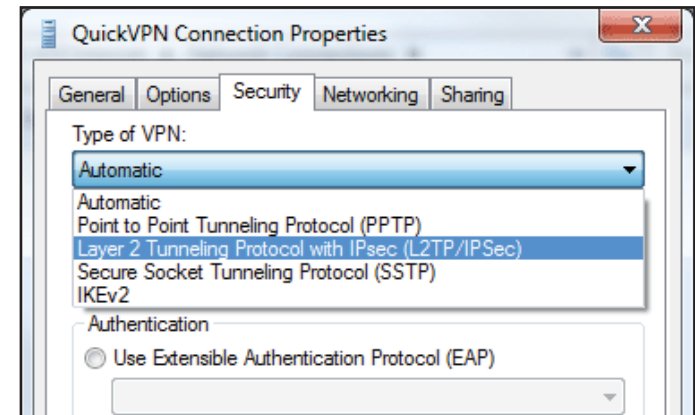
Click the **Start** button and type **view network connections**.

Select **View network connections.**
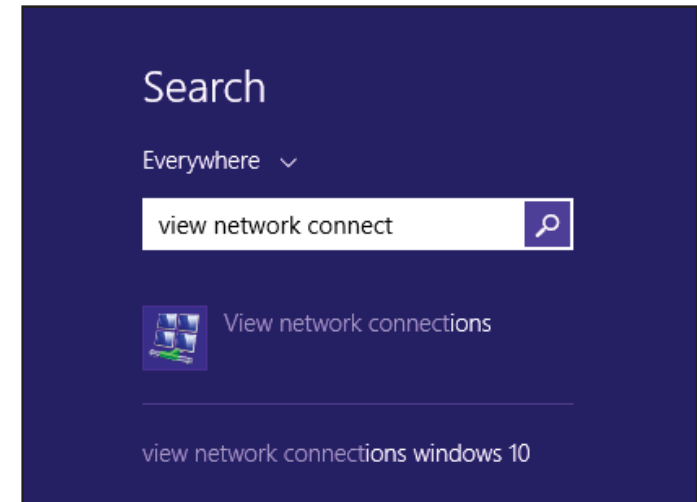
Right-click your **Quick VPN Connection** and left-click **Properties**.
Select the **Security** tab.

For the **Type of VPN**, select **Layer 2 Tunneling with IPsec (L2TP/IPSec).**
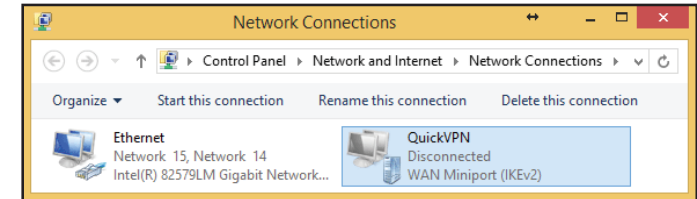
Click **Advanced settings.** Enter your **Passkey** in the **Key** text box under **Use preshared key for authentication**.

Click **OK** to close **Advanced Properties** and click **OK** to close **Quick VPN Properties.**

Your Windows 8.1/8 system is now configured to connect to your Quick VPN server.
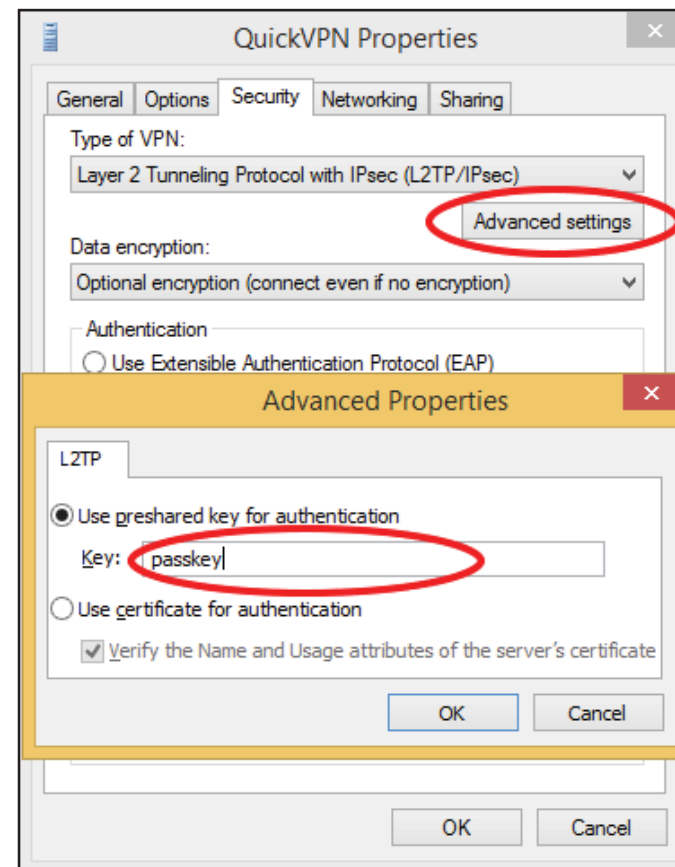
Connect or Disconnect

To connect to or disconnect from your Quick VPN server, click on the **Network Settings** icon in the notification area of the Windows taskbar. Click on your Quick VPN connection and click on the **Connect** or **Disconnect** button.
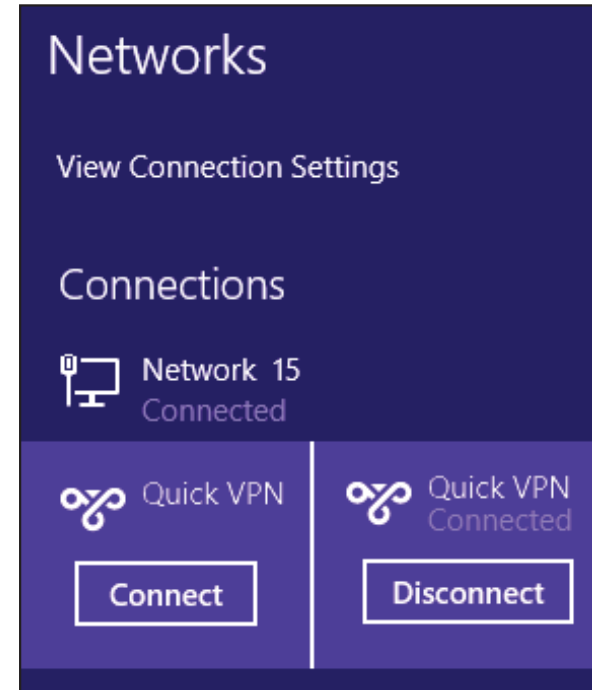
Windows 10
VPN Setup Instructions

This section provides Quick VPN setup instructions for Windows 7. Refer to **Quick VPN** on page **81** for your router setup instructions.

This section provides Quick VPN setup instructions for Windows 10.

Click **Start > Settings** > **Network & Internet** >
Network and Sharing Center > VPN > Add a VPN Connection.
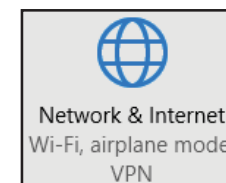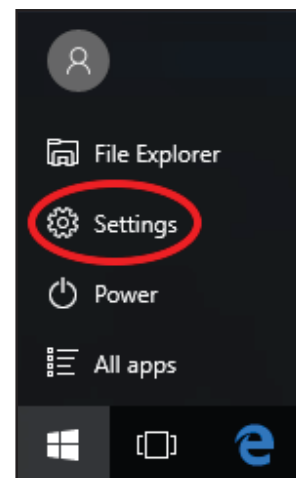
1 Select **Windows (built-in)** from the **VPN Provider** drop down menu.

2 Create a name for your VPN connection.

3 Enter your **IP/DDNS address** of your Quick VPN server.

4 Select **L2TP/IPSec with pre-shared key** from **VPN type**.

5 Enter the **Passkey.**

6 Select **User name and password** from **Type of sign-in info**.

If you would like windows to remember your sign-in information, enter your **User name, Password,** and select **Remember my sign-in info**

7 Choose **Save**.

Your Windows 10 system is now configured to connect to your Quick VPN server.

Connect or Disconnect

To connect to or disconnect from your Quick VPN server, click on the **Network Settings** icon in the notification area of the Windows taskbar and click on your Quick VPN connection. The **Network & Internet** Settings page will open. Click on the **Connect** or **Disconnect** button.
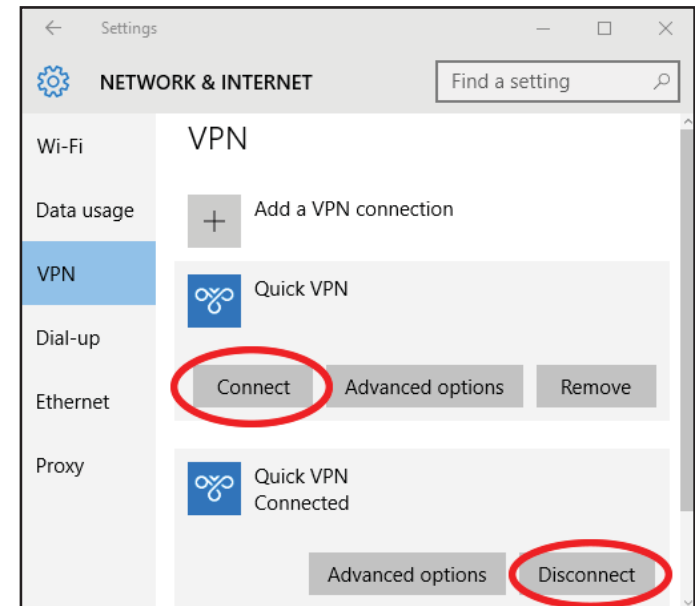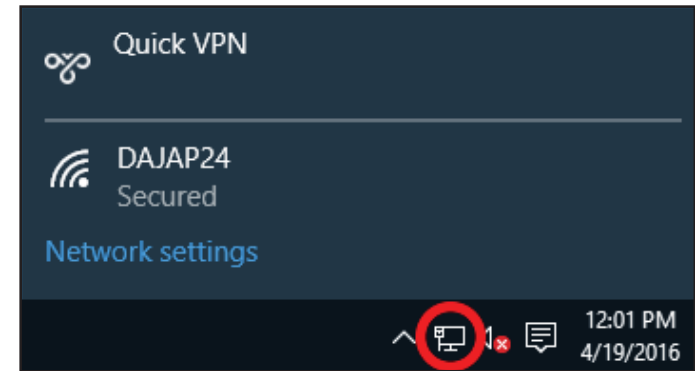
Android
VPN Setup Instructions

This section provides Quick VPN setup instructions for Android devices. Your device's screens may vary. Refer to **Quick VPN** on page **81** for your router setup instructions.

Go to **Settings** > **More** from the **Wireless & networks** > **VPN > +**
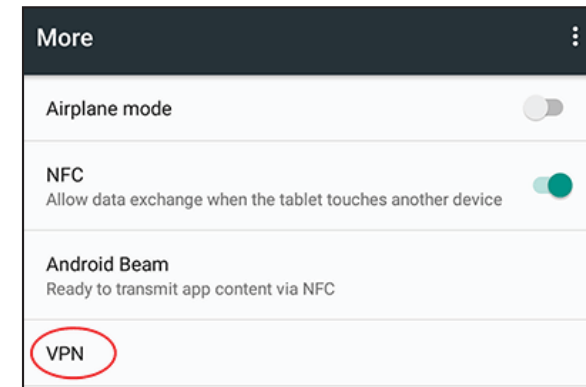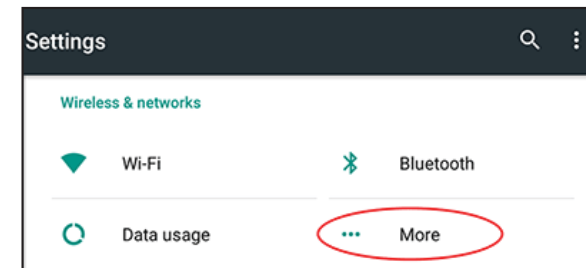
1 Enter a name for your VPN connection.

2 Select **L2TP/IPSec** PSK for **Type.**

3 Enter the **IP/DDNS address** of your Quick VPN server.

4 Enter your **Passkey** in **IPSec pre-shared key** field.

5 Choose **Save**.

Your Android device is now configured to connect to your Quick VPN server.

Connect or Disconnect

To connect to or disconnect from your Quick VPN server, go to **Settings** > **More** from the **Wireless & networks** > **VPN** and select the **Quick VPN** connection you created.
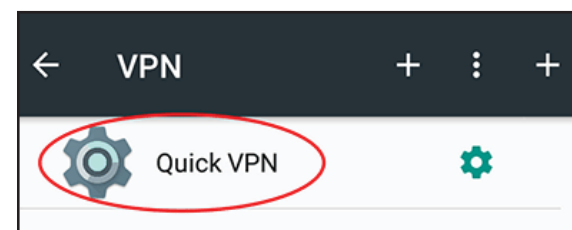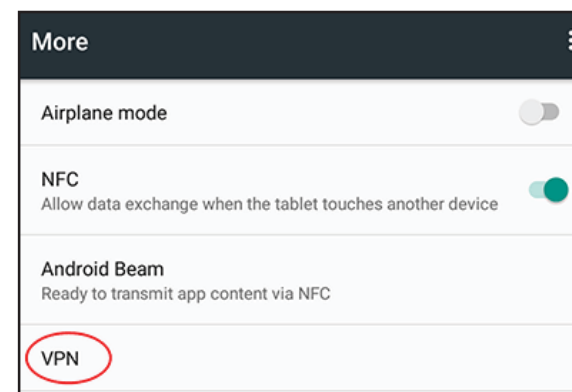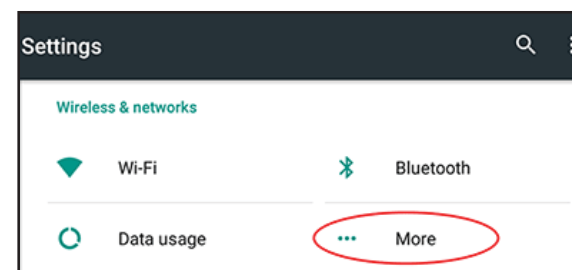
To connect, enter your **Username** and **Password** and select **CONNECT**.

Connect to Quick VPN

Username

Your Quick VPN Username

Password

•••••••••••••••••••••••

☐ Save account information

CANCEL   CONNECT

To disconnect, select **DISCONNECT**.

VPN is connected

Session: **Quick VPN**
Duration: **00:00:09**
Sent: **97 bytes / 5 packets**
Received: **64 bytes / 4 packets**

DISCONNECT   CANCEL

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 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 router for about 1 second. The wireless LEDs will start to blink.
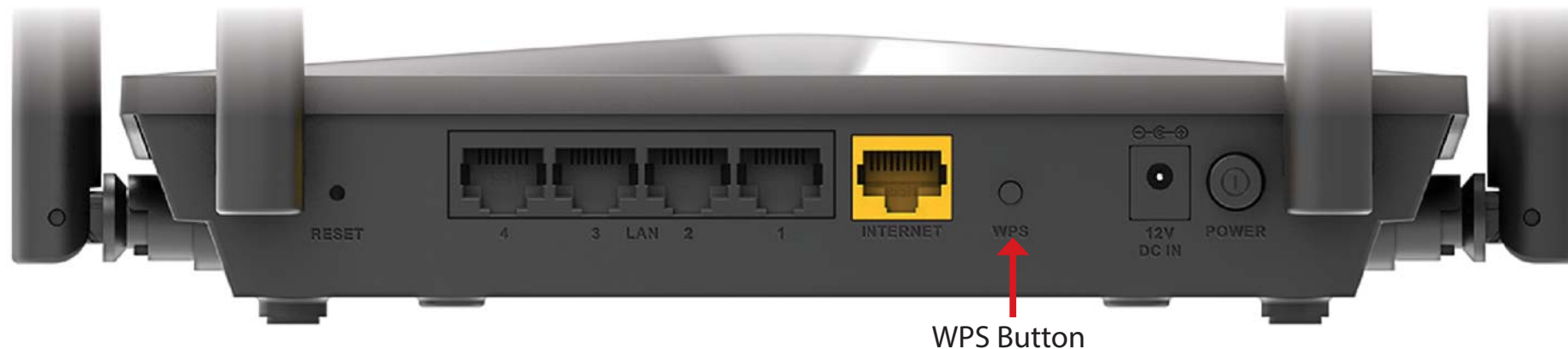
WPS Button

Step 2 - Within 2 minutes, press the WPS button on your wireless device (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® 10

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

Wireless Icon

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

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

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

You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.
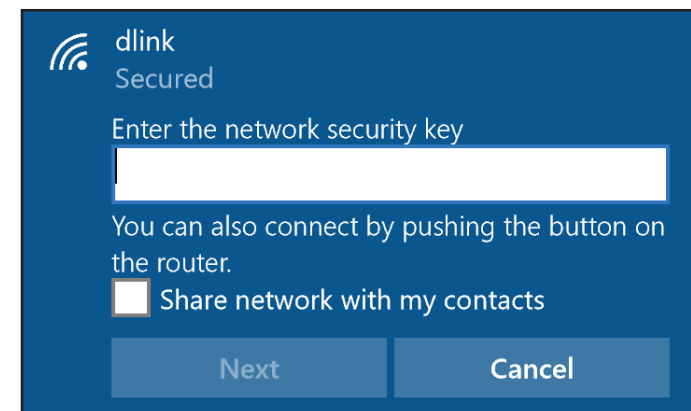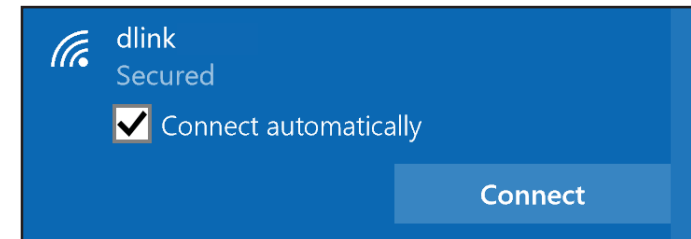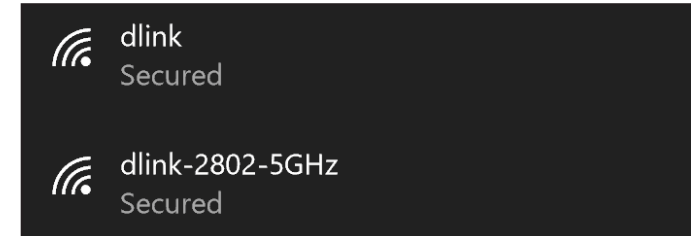
Windows® 8 - WPA/WPA2

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

Wireless Icon

Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the extender's network by clicking on the network name.
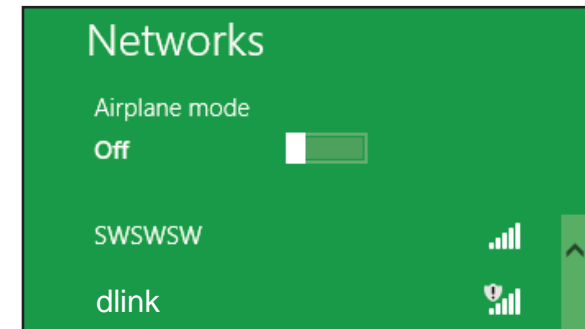
You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.
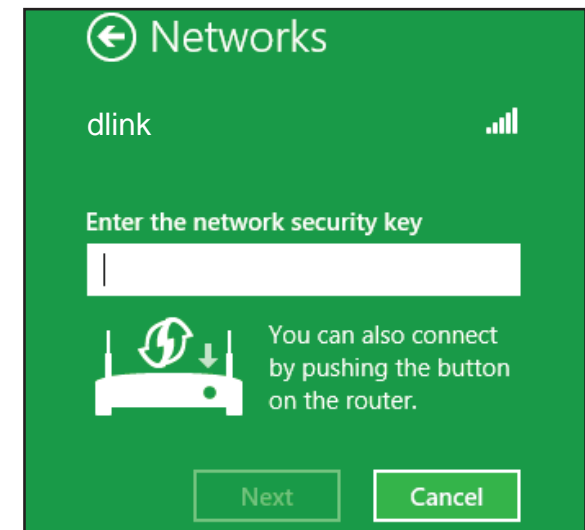
If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at this point to enable the WPS function.

When you have established a successful connection with a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.
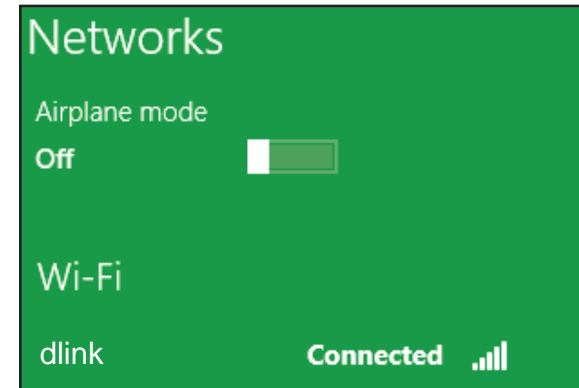
Windows® 7
WPA/WPA2

It is recommended 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.

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

Wireless Icon

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

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 **Networking Basics** on page **142** for more information.

The following window appears while your computer tries to connect to the router.
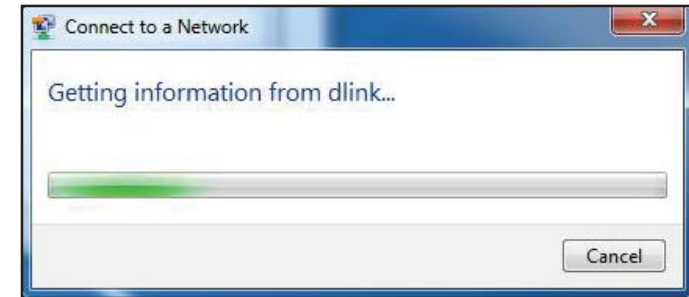
Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **OK**. You can also connect by pushing the WPS button on the router.

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.
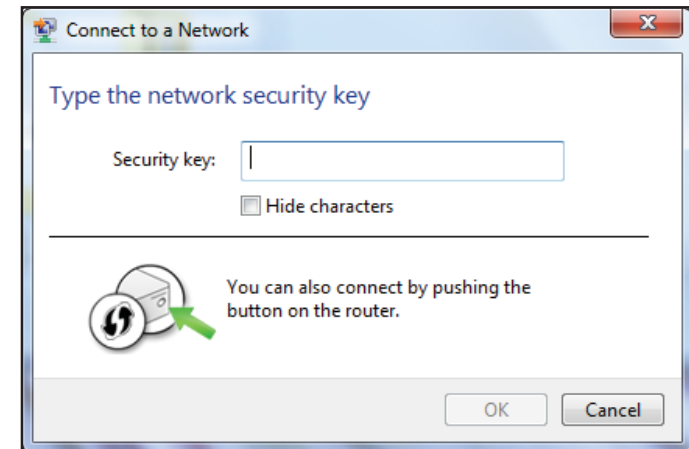
Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the router. Read the following descriptions if you are having problems.

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® 10 or higher
  - Mozilla Firefox 28 or higher
  - Google™ Chrome 28 or higher
  - Apple Safari 6 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 and Norton Personal 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 recessed button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is **192.168.0.1**. When logging in, leave the password box empty.

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 as 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 USB 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 wireless network USB 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 USB adapters. All the adapters must be in Ad-hoc mode to communicate.

Networking Basics

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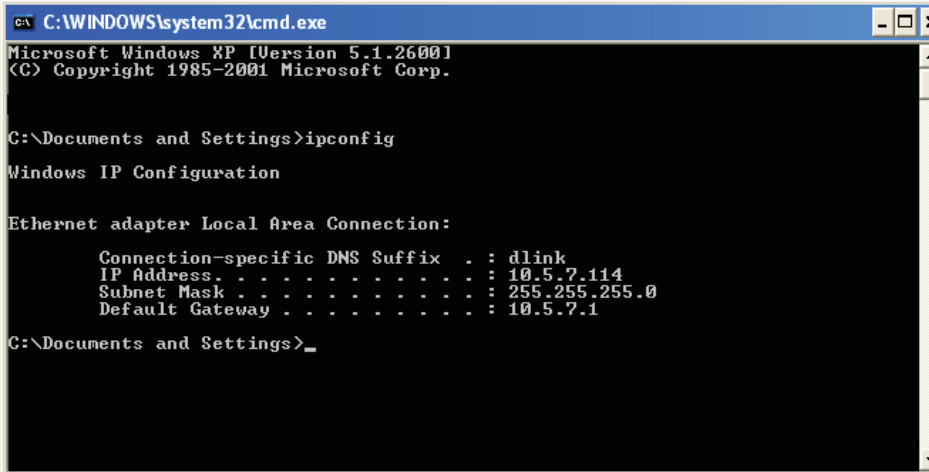
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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.

Statically Assign an IP address

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

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

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

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

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.

5. Click **OK** twice to save your settings.
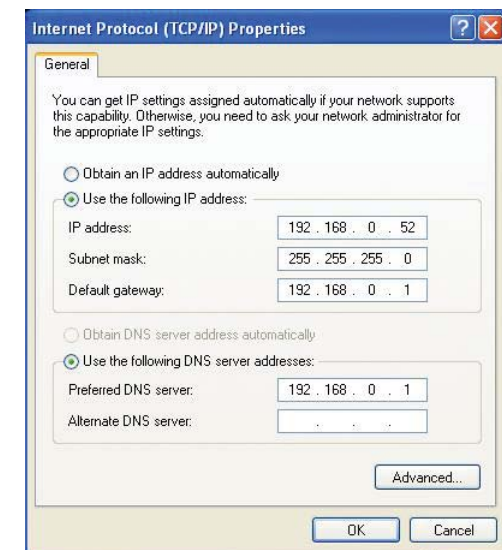
Wireless Security

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

  • The latest Wi-Fi security with 128-bit encryption
  • WPA2 (Wi-Fi Protected Access 2) • WPA2-PSK (Pre-Shared Key)
  • WPA (Wi-Fi Protected Access) • 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
- Wireless Interface (2.4 GHz): IEEE 802.11n/g/b
- Wireless Interface (5 GHz): IEEE 802.11 ac/n/a
- Four 10/100/1000 Mbps LAN ports
- One 10/100/1000 Mbps WAN port

Antenna Types
- Four external antennas

Standards
- IEEE 802.11ac[1,2,3]
- IEEE 802.11b
- IEEE 802.11n
- IEEE 802.11a
- IEEE 802.11g
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.1p
- IEEE 802.1q

Security
- WPA/WPA2-Personal
- The latest Wi-Fi security with 128-bit encryption
- Wi-Fi Protected Setup (WPS)

Power
- Input: 100 to 240 V AC, 50 / 60 Hz
- Output: 12 V, 1 A

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

Humidity
- Operating: 10% to 90% maximum, non-condensing
- Storage: 5% to 95% maximum, non-condensing

Certifications
- IC
- FCC
- CE
- NCC
- RCM

Dimensions
- L x W x H: 205 x 132 x 36 mm (8.05 x 5.19 x 1.41 in)

Weight
- 340 g (0.75 lbs)

[1] Maximum wireless signal rate derived from IEEE Standard 802.11a, 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 factors will adversely affect wireless signal range.
[2] Frequency Range varies depending on country's regulation.
[3] The router does not include 5.25-5.35 GHz & 5.47-5.725 GHz in some regions.

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.
This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24cm between the radiator & your body.
Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Industry Canada statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).
Operation is subject to the following two conditions:
1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

- This Class B digital apparatus complies with Canadian ICES-003.
- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.
- Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

- The County Code Selection feature is disabled for products marketed in the US/ Canada.
- La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

Radiation Exposure Statement:
This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 24cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 24cm entre le radiateur et votre corps.

Caution:
(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
(iv) where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

Avertissement:
Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :
(i) les dispositifs fonctionnant dans la bande 5150-5250MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
(iv) lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués