

Features

QoS Engine

In the Features menu on the bar at the top of the page, click **QoS Engine** to configure connected clients Internet access priority.

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

Internet Speed Checkup

Click on the **Check Speed** button to launch the Internet Speedtest. A window will pop up to show you the results of the speedtest. When the test is complete, you can either choose **Detect Again** to run the speedtest again, or you can choose **Apply to QoS** to apply the results to the download and upload speeds.

Management Type

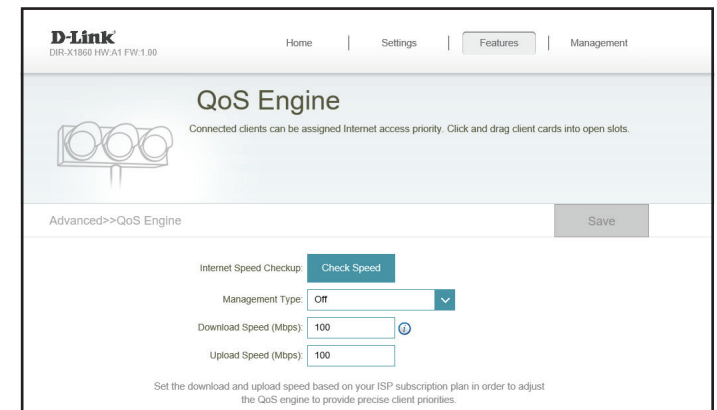
Use the drop-down menu to select the Management Type that the rule will be enabled for. This may be set to **Off** or **Manage By Device**.

Download Speed (Mbps)

Set the download speed based on your ISP subscription plan in order to adjust the QoS engine.

Upload Speed (Mbps)

Set the upload speed based on your ISP subscription plan in order to adjust the QoS engine.



This **Quality of Service (QoS) Engine** will allow you to prioritize particular clients over others, so that those clients receive higher bandwidth. For example, if one client is streaming a movie and another is downloading a non-urgent file, you might wish to assign the former device a higher priority than the latter so that the movie streaming is not disrupted by the traffic of the other devices on the network.

Under **Connected Clients**, you will see device cards representing each connected client. If some are off-screen, you can use the < and > buttons to scroll through the cards.

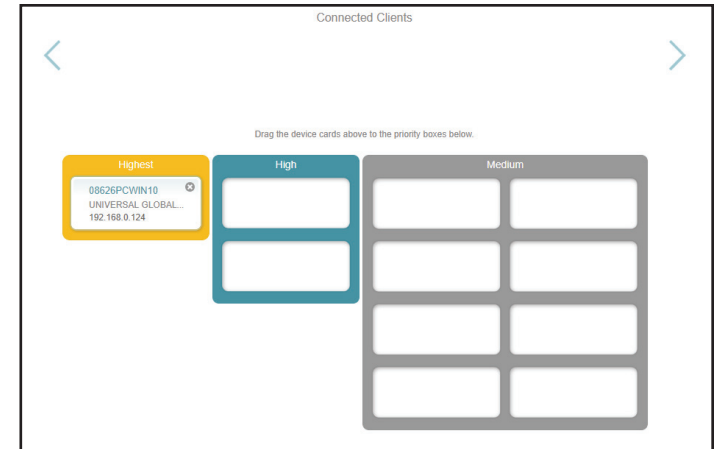
A maximum of **one** device can be assigned **Highest** priority.

A maximum of **two** devices can be assigned **High** priority.

A maximum of **eight** devices can be assigned **Medium** priority.

If no devices are explicitly assigned a priority, they will all be treated with equal priority. If some devices are not assigned a priority and others are, the unassigned devices will be treated with the lowest priority.

To assign a priority level to a device, drag the device card from the All Devices list over an empty slot and release the mouse button. The card will remain in the slot. If you want to remove a priority assignment from a device and return it to the All Devices list, click the cross icon in the top right of the device card.



Firewall Settings - Advanced

In the Features menu on the bar at the top of the page, click **Firewall** to configure the router's firewall settings. The firewall feature protects your network from malicious attacks over the Internet.

To configure the IPv4 firewall rules, click the **IPv4 Rules** link. Refer to **Firewall Settings - IPv4/IPv6 Rules** on page 68

To configure the IPv6 firewall rules, click the **IPv6 Rules** link. Refer to **Firewall Settings - IPv4/IPv6 Rules** on page 68

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

Enable DMZ Enable or disable Demilitarized Zone (DMZ). This completely exposes the client to threats over the Internet, and is not recommended in ordinary situations.

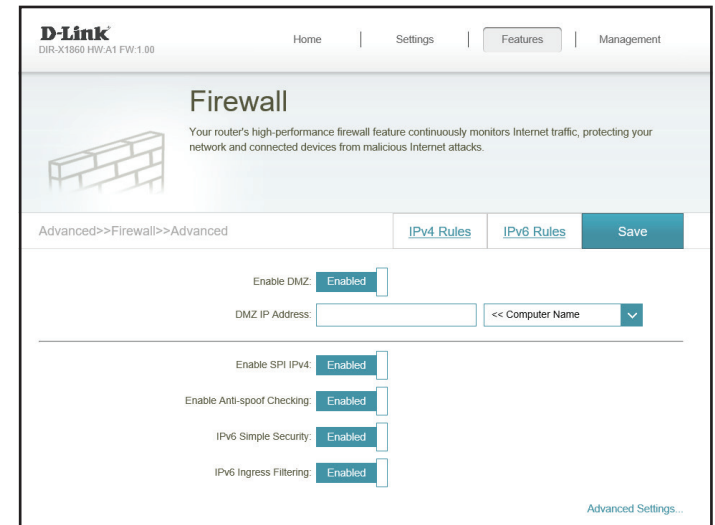
DMZ IP Address If you enabled DMZ, enter the IP address of the client you wish to expose, or use the drop-down menu to quickly select it.

Enable SPI IPv4 Enabling Stateful Packet Inspection (SPI) helps to prevent cyber attacks by validating that the traffic passing through the session conforms to the protocol.

Enable Anti-spoof Checking Enable this feature to help protect your network from certain kinds of "spoofing" attacks.

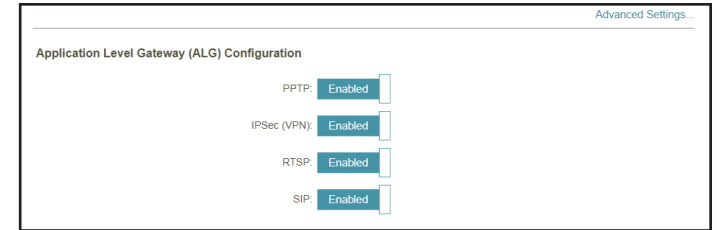
IPv6 Simple Security Enable or disable IPv6 simple security.

IPv6 Ingress Filtering Enable or disable IPv6 ingress filtering.



Advanced Settings... - Application Level Gateway (ALG) Configuration

- PPTP** Allows multiple machines on the LAN to connect to their corporate network using the PPTP protocol.
- IPSec (VPN)** Allows multiple VPN clients to connect to their corporate network using IPSec. Some VPN clients support traversal of IPSec through NAT. This Application Level Gateway (ALG) may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.
- RTSP** Allows applications that uses Real Time Streaming Protocol (RTSP) to receive streaming media from the Internet.
- SIP** Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This ALG may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this ALG off.



Firewall Settings - IPv4/IPv6 Rules

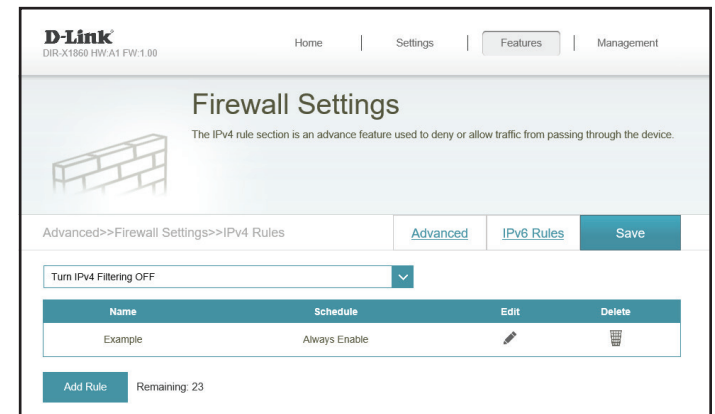
In the Features menu on the bar at the top of the page, click **Firewall** to configure the router's firewall settings, then click the **IPv4 Rules** link or the **IPv6 Rules** link to configure what kind of traffic is allowed to pass through the network.

To configure the Firewall Advanced settings, click the **Advanced** link. Refer to **Firewall Settings - Advanced** on page 66

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

To begin, use the drop-down menu to select whether you want to **ALLOW** or **DENY** the rules you create. You can also choose to turn filtering **OFF**.

If you wish to remove a rule, click on the trash can icon in the Delete column. If you wish to edit a rule, click on the pencil icon in the Edit column. If you wish to create a new rule, click the **Add Rule** button.



If you clicked on **Edit** or **Add Rule**, the following options will appear:

- Name** Enter a name for the rule.
- Source IP Address Range** Enter the source IP address range that the rule will apply to. Using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.
- Destination IP Address Range** Enter the destination IP address range that the rule will apply to. Using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.
- Protocol & Port Range** Select the protocol of the traffic to allow or deny (**Any, TCP, or UDP**) and then enter the range of ports that the rule will apply to.
- Schedule** Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Time & Schedule - Schedule** on page **81** for more information.

The screenshot shows a 'Create New Rule' dialog box with the following fields and values:

- Name: [Empty text box]
- Source IP Address Range: WAN (dropdown), [Empty text box]
- Destination IP Address Range: LAN (dropdown), [Empty text box]
- Protocol & Port Range: TCP (dropdown), [Empty text box]
- Schedule: Always Enable (dropdown)
- Apply button: [Teal button]

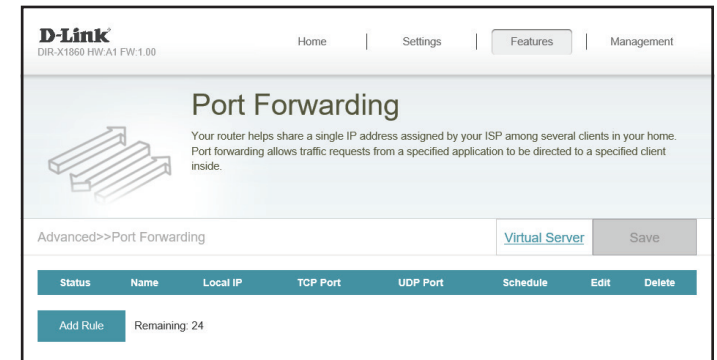
Port Forwarding

In the Features menu on the bar at the top of the page, click **Port Forwarding** 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.

To configure the Virtual Server settings, click the **Virtual Server** link. Refer to **Port Forwarding - Virtual Server** on page **72**

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

If you wish to remove a rule, click on the trash can icon in the Delete column. If you wish to edit a rule, click on the pencil icon in the Edit column. If you wish to create a new rule, click the **Add Rule** button.



If you clicked on **Edit** or **Add Rule**, the following options will appear:

- Name** Enter a name for the rule.
- Local IP** Enter the IP address of the computer on your local network that you want to allow the incoming service to. Alternatively, select the device from the drop-down menu.
- TCP Port** Enter the TCP ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma (for example: 24,1009,3000-4000).
- UDP Port** Enter the UDP ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma (for example: 24,1009,3000-4000).
- Schedule** Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Time & Schedule - Schedule** on page **81** for more information.

The screenshot shows a 'Create New Rule' dialog box with the following fields and options:

- Name:** A text input field.
- Local IP:** A text input field and a drop-down menu showing '<< Computer Name'.
- TCP Port:** A text input field.
- UDP Port:** A text input field.
- Schedule:** A drop-down menu showing 'Always Enable'.
- Apply:** A teal button at the bottom right.

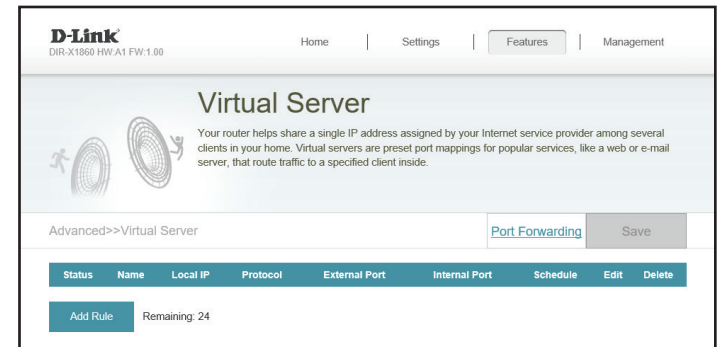
Port Forwarding - Virtual Server

In the Features menu on the bar at the top of the page, click **Port Forwarding** then click the **Virtual Server** link to configure its settings and specify a single public port on your router for redirection to an internal LAN IP address and Private LAN port. This might be necessary for certain applications to connect through the router.

To configure the Port Forwarding settings, click the **Port Forwarding** link. Refer to **Port Forwarding** on page 70

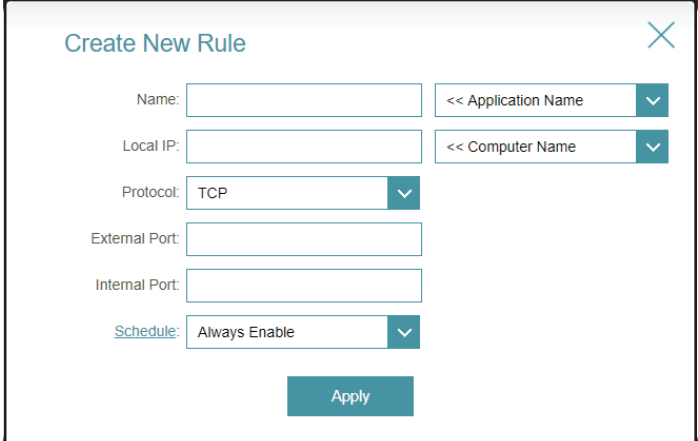
Click **Save** at any time to save the changes you have made on this page.

If you wish to remove a rule, click on the trash can icon in the Delete column. If you wish to edit a rule, click on the pencil icon in the Edit column. If you wish to create a new rule, click the **Add Rule** button.



If you clicked on **Edit** or **Add Rule**, the following options will appear:

- Name** Enter a name for the rule. Alternatively, select the protocol/ Application Name from the drop-down menu.
- Local IP** Enter the IP address of the computer on your local network that you want to allow the incoming service to. Alternatively, select the device from the drop-down menu.
- Protocol** Select the protocol of the traffic to allow or deny (**TCP, UDP, Both, or Other**).
- Protocol Number** If you entered **Other** above, enter the protocol number.
- External Port** Enter the public port you want to open.
- Internal Port** Enter the private port you want to open.
- Schedule** Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Time & Schedule - Schedule** on page **81** for more information.



The screenshot shows a 'Create New Rule' dialog box with the following fields and options:

- Name:** A text input field and a dropdown menu with '<< Application Name'.
- Local IP:** A text input field and a dropdown menu with '<< Computer Name'.
- Protocol:** A dropdown menu with 'TCP' selected.
- External Port:** A text input field.
- Internal Port:** A text input field.
- Schedule:** A dropdown menu with 'Always Enable' selected.
- Apply:** A teal button at the bottom right.

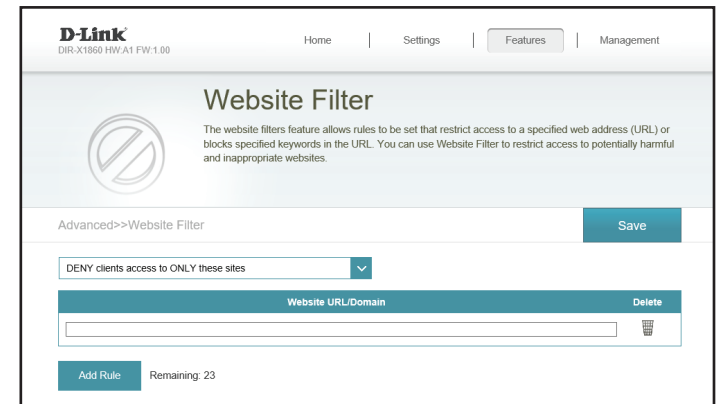
Website Filter

In the Features menu on the bar at the top of the page, click **Website Filter**. The website filters feature allows rules to be set that restrict access to a specified web address (URL) or blocks specified keywords in the URL. You can use Website Filter to restrict access to potentially harmful and inappropriate websites.

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

To begin, use the drop-down menu to select whether you want to **ALLOW** or **DENY** the access to the listed sites.

If you wish to remove a Website URL/Domain, click on the trash can icon in the Delete column. If you wish to list a new site to allow or deny access to, click the **Add Rule** button.



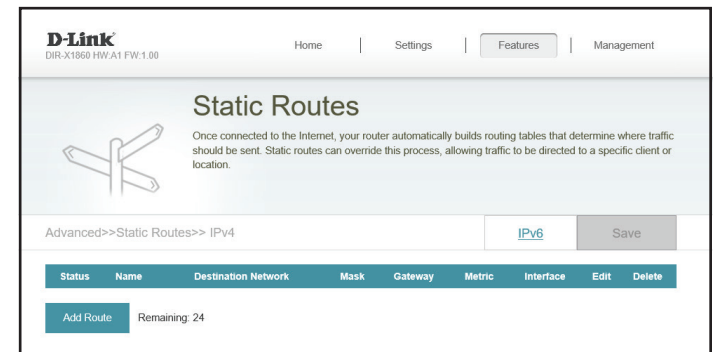
Static Route - IPv4

In the Features menu on the bar at the top of the page, click **Static Route** to define custom routes, controlling how data traffic is moved around your network.

To configure the Static Route IPv6 settings, click the **IPv6** link. Refer to **Static Route - IPv6** on page 76

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

If you wish to remove a route, click on the trash can icon in the Delete column. If you wish to edit a route, click on the pencil icon in the Edit column. If you wish to create a new route, click the **Add Route** button.



If you clicked on **Edit** or **Add Rule**, the following options will appear:

- Name** Enter a name for the rule.
- Destination Network** Enter the IP address of packets that will take this route.
- Mask** Enter the subnet mask of the route.
- Gateway** Enter your next hop gateway to be taken when this route is used.
- Metric** Enter a route metric value ranging from **0** to **15**. This value indicates the cost of using this route.
- Interface** Select the interface that the IP packet must use to transit out of the router when this route is used.

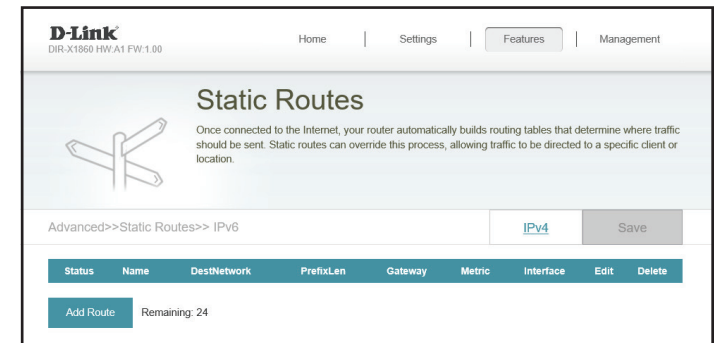
Static Route - IPv6

In the Features menu on the bar at the top of the page, click **Static Route** to access the IPv4 Static Route settings, then click **IPv6** to configure the IPv6 Static Routes.

To configure the Static Route IPv4 settings, click the **IPv4** link. Refer to **Static Route - IPv4** on page 75

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

If you wish to remove a route, click on the trash can icon in the Delete column. If you wish to edit a route, click on the pencil icon in the Edit column. If you wish to create a new route, click the **Add Route** button.



If you clicked on **Edit** or **Add Rule**, the following options will appear:

- Name** Enter a name for the rule.
- DestNetwork** This is the IP address of the router used to reach the specified destination.
- PrefixLen** Enter the IPv6 address prefix length of the packets that will take this route.
- Gateway** Enter your next hop gateway to be taken when this route is used.
- Metric** Enter a route metric value ranging from **0** to **15**. This value indicates the cost of using this route.
- Interface** Select the interface that the IP packet must use to transit out of the router when this route is used.

Dynamic DNS

In the Features menu on the bar at the top of the page, click **Dynamic DNS**. This setting allows your router to associate an easy-to-remember domain name such as [YourDomainName].com with the regularly changing IP address assigned by your Internet Service provider. This feature is helpful when running a virtual server.

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

- Enable Dynamic DNS** Enable or disable dynamic DNS. Enabling this feature will reveal further configuration options.
- Status** Displays the current dynamic DNS connection status.
- Server Address** Enter the address of your dynamic DNS server, or select one from the drop-down menu.
- Host Name** Enter the host name that you registered with your dynamic DNS service provider.
- User Name** Enter your dynamic DNS username.
- Password** Enter your dynamic DNS password.
- Time Out** Enter a time out time (in hours).

The screenshot shows the D-Link Dynamic DNS configuration interface. At the top, there are navigation links for Home, Settings, Features, and Management. The main heading is 'Dynamic DNS' with a sub-heading 'Dynamic Domain Name Service allows your router to associate an easy-to-remember domain name such as [YourDomainName].com with the regularly changing IP address assigned by your Internet Service provider. This feature is helpful when running a virtual server.' Below this, there is a 'Save' button. The configuration options are as follows:

- Enable Dynamic DNS: Enabled
- Status: Disconnected
- Server Address: dyndns.com
- Host Name:
- User Name:
- Password:
- Time Out: hours

At the bottom, there is a table with the following columns: Status, Host Name, IPv6 Address, Edit, Delete. Below the table, there is an 'Add Record' button and a 'Remaining: 10' indicator.

At the bottom of the page are the IPv6 host settings.

If you wish to remove a record, click on the trash can icon in the Delete column. If you wish to edit a record, click on the pencil icon in the Edit column. If you wish to create a new record, click the **Add Record** button.

Host Name Enter the host name that you registered with your dynamic DNS service provider.

IPv6 Address Enter the IPv6 address of the dynamic DNS server. Alternatively, select the server device in the drop-down menu.

Status	Host Name	IPv6 Address	Edit	Delete
Add Record	Remaining: 10			

Create New Record ✕

Host Name:

IPv6 Address: << Computer Name

Quick VPN

In the Features menu on the bar at the top of the page, click **Quick VPN**. This page will help you configure the Quick VPN feature of your router. For more information, refer to **Quick VPN** on page **102**. Before proceeding, ensure that your Internet connection is working properly. We recommend configuring Dynamic DNS before proceeding with Quick VPN setup. If your router is assigned an IP address from your ISP using DHCP, it may frequently change, requiring clients credentials to be set up again and a simple DDNS address will be easier than an IP address.

To configure the User settings and create, manage, and delete user accounts with user-defined access to certain router services, click the **User** link. Refer to **User** on page **86**

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

- L2TP over IPSec** Enable or disable the Quick VPN server.
- Username** Enter a username between 1 and 20 characters.
- Password** Enter a password between 1 and 20 characters.
- PSK** Enter a passkey between 6 and 64 characters.

VPN Profile for iOS Device and MAC OS X Click export to save the VPN profile settings file for iOS devices or Mac OS X.

Advanced Settings...

- Authentication Protocol** Choose the authentication protocol type: **MSCHAPv2**, **PAP**, or **CHAP**. **MSCHAPv2** is the default.
- MPPE** Select the encryption cipher strength: **None**, **RC4-40**, or **RC4-128**. **RC4-128** is the default.

The screenshot displays the D-Link Quick VPN configuration interface. At the top, the navigation bar includes 'Home', 'Settings', 'Features', and 'Management'. The main heading is 'Quick VPN', with a sub-heading: 'Quickly and easily create a profile for secure remote access to a Local Area Network (LAN). This profile can be used to configure other devices to connect to your LAN via a secure VPN tunnel.' Below this, there are 'User' and 'Save' buttons. The 'General' section contains:

- L2TP over IPSec:** A toggle switch set to 'Enabled'.
- Username:** A text input field containing 'vpn'.
- Password:** A text input field containing 'vpn'.
- PSK:** A text input field containing '12345678'.
- VPN Profile for iOS Device and Mac OS X:** An 'Export' button.

 An 'Advanced Settings...' link is located at the bottom right of the General section. The 'Advanced' section shows:

- Authentication Protocol:** A dropdown menu set to 'MSCHAPv2'.
- MPPE:** A dropdown menu set to 'None'.

Management

Time & Schedule - Time

In the Management menu on the bar at the top of the page, click **Time & Schedule**. The **Time** page allows you to configure, update, and maintain the correct time on the internal system clock. From here you can set the time zone and the Network Time Protocol (NTP) server.

To configure the Schedule settings, click the **Schedule** link. Refer to **Time & Schedule - Schedule** on page 81

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

Time Configuration

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

Time Displays the current date and time of the router.

The screenshot shows the 'Time' configuration page in the D-Link management interface. At the top, there's a navigation bar with 'Home', 'Settings', 'Features', and 'Management'. The main heading is 'Time', followed by a sub-heading 'Time Configuration'. Below this, there are two sections: 'Time Configuration' and 'Automatic Time Configuration'. In the 'Time Configuration' section, 'Time Zone' is set to 'Asia/Taipei' and 'Time' is '2019/11/07 02:19:02 PM'. In the 'Automatic Time Configuration' section, 'NTP Server' is set to 'D-Link NTP Server'.

Automatic Time Configuration

NTP Server Select from the drop-down menu to either use the D-Link NTP Server to synchronize the time and date for your router, or choose Manual to set the NTP server's IP address.

The screenshot shows the 'Automatic Time Configuration' section. It features an 'NTP Server' label followed by a text input field and a dropdown menu currently set to 'Manual'.

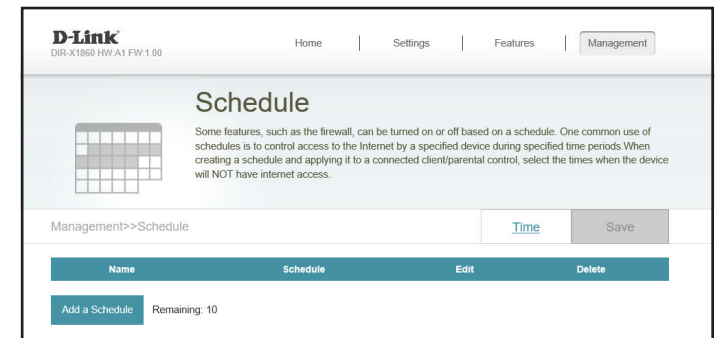
Time & Schedule - Schedule

In the Management menu on the bar at the top of the page, click **Time & Schedule** to access the Time page, then click the **Schedule** link. The **Schedule** page allows you to control some of the router functions through a pre-configured schedule.

To configure the Time settings, click the **Time** link. Refer to **Time & Schedule - Time** on page 80

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

If you wish to remove a schedule, click on the trash can icon in the Delete column. If you wish to edit a schedule, click on the pencil icon in the Edit column. If you wish to create a new schedule, click the **Add a Schedule** button.

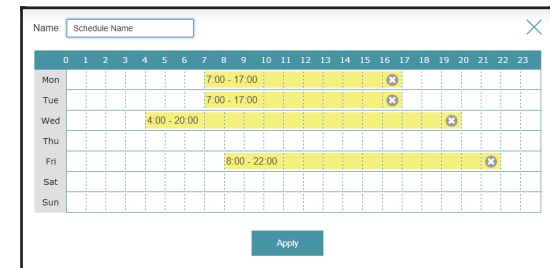
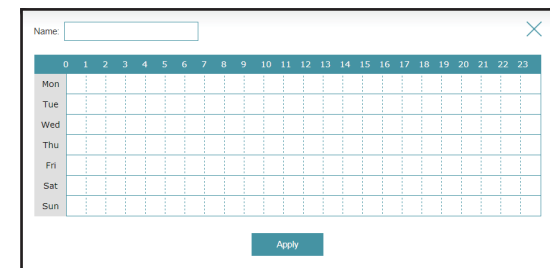


First, enter the name of your schedule in the **Name** field.

Each box represents one hour, with the time at the top of each column. To add a time period to the schedule, simply click on the starting hour and drag to the ending hour. You can add multiple days to the schedule, but only one period per day.

To remove a time period from the schedule, click on the cross icon.

Click **Apply** when you are done.



System Log

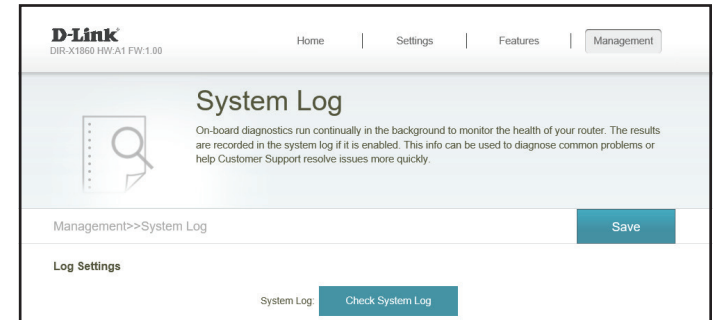
In the Management menu on the bar at the top of the page, click **System Log**. The router keeps a running log of events. This log can be sent to a Syslog server, or sent to your email address.

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

Log Settings

System Log

Click the **Check System Log** button to download a text file containing the system log.



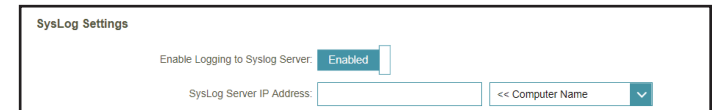
SysLog Settings

Enable Logging to Syslog Server

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

SysLog Server IP Address

Configurable if **Enable Logging to Syslog Server** is enabled. Enter the IP address for the Syslog server. If the Syslog server is connected to the router, select it from the drop-down menu to automatically populate the field.



Email Settings

Enable E-mail Notification Enable this option if you want the logs to be automatically sent to an email address.

If you enabled **Enable E-mail Notification**, the following options will appear:

From E-mail Address Enter the email address your SysLog messages will be sent from.

To E-mail Address Enter the email address your SysLog messages will be sent to.

SMTP Server Address Enter your SMTP server address.

SMTP Server Port Enter your SMTP server port.

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

Account Name Enter your SMTP account name.

Password Enter your SMTP account's password.

E-mail Log When Full or On Schedule

Send When Log Full If enabled, this option will set the router to send the log when it is full.

Send on Schedule If enabled, this option will set the router to send according to a set schedule.

Schedule If you enable Send On Schedule, use the drop-down menu to select a schedule to apply. The schedule may be set to Always Enable, or you can create your own schedules in the Schedules section. Refer to **Time & Schedule - Schedule** on page **81** for more information.

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 85

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.

The screenshot shows the D-Link DIR-X1550 Web UI. At the top, there is a navigation bar with 'Home', 'Settings', 'Features', and 'Management' (selected). Below the navigation bar, the page title is 'Admin'. A key icon is displayed next to the title. A message states: 'The admin account can change all router settings. To keep your router secure, you should give the admin account a strong password.' Below this, there is a breadcrumb 'Management >> Admin' and two buttons: 'System' and 'Save'. The 'Admin Password' section contains a 'Password' field with a masked input. Below that is a link for 'Advanced Settings...'. The 'Administration' section has a toggle for 'Enable Remote Management' (currently 'Disabled') and a 'Remote Admin Port' field. The 'LED Control' section has a toggle for 'Status LED' (currently 'On').

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 84

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.

The screenshot shows the D-Link System Admin interface. At the top, there is a navigation bar with 'Home', 'Settings', 'Features', and 'Management'. Below this is the 'System' page header with a gear icon and a description: 'This page lets you save your router's current settings to a file, restore your settings from a file, restore your router to factory default settings, or reboot the device. Please note that restoring the settings to the factory defaults will erase all settings, including any rules you have created.' Below the header, there are two tabs: 'Admin' (selected) and 'Save'. The main content area is titled 'System' and contains three sections: 'Save Settings To Local Hard Drive' with a 'Save' button, 'Load Settings From Local Hard Drive' with a 'Select File' button, and 'Restore To Factory Default Settings' with a 'Restore' button. Below this is the 'Auto Reboot Configuration' section, which includes a 'Reboot The Device' button and an 'Auto Reboot' dropdown menu currently set to 'Never'.

This screenshot shows the 'Auto Reboot Configuration' section. It features a 'Reboot The Device' button and an 'Auto Reboot' dropdown menu set to 'Daily'. Below this, there is a 'Time' field set to '12 AM' and a '00' field for minutes, with a '(Hour/ Minute)' label.

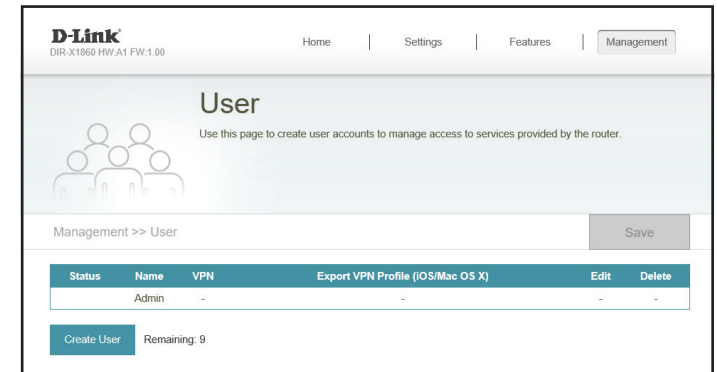
This screenshot shows the 'Auto Reboot Configuration' section with the 'Auto Reboot' dropdown menu set to 'Weekly'. Below this, there is a 'Day of week' dropdown menu set to 'Mon' and a 'Time' field set to '12 AM' and a '00' field for minutes, with a '(Hour/ Minute)' label.

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.

Create New User

User Name:

Password:

VPN

Status:

OK

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

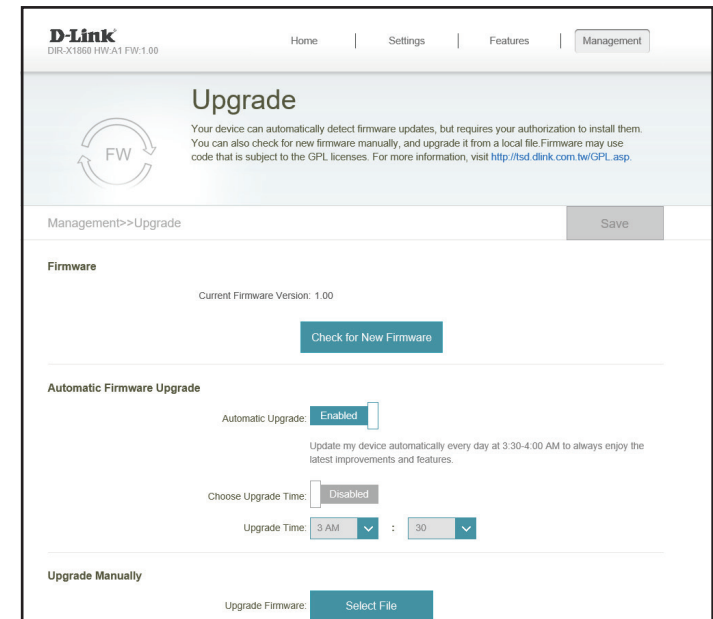
Automatic Upgrade If enabled, the router will automatically check for and upgrade to the newest firmware.

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.

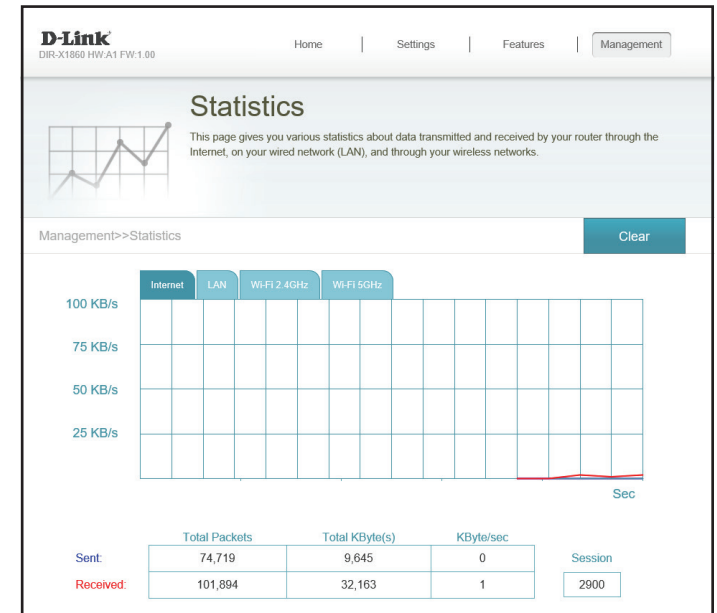


Statistics

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.

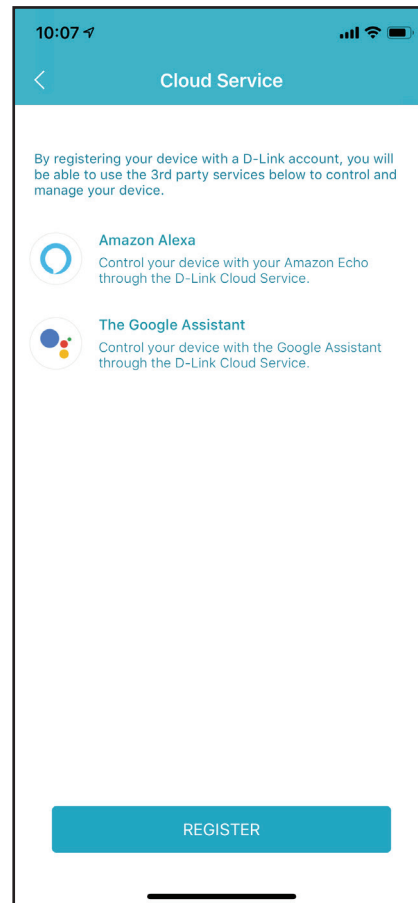
You can view the **Internet**, **LAN**, **Wi-Fi 2.4 GHz**, or **Wi-Fi 5 GHz** by clicking on the respective tabs at the top. The graph will update in real time. To clear the information on the graph, click **Clear** near the top of the page.

The traffic counter will reset if the device is rebooted.



Third Party Services

With the DIR-X1550, 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

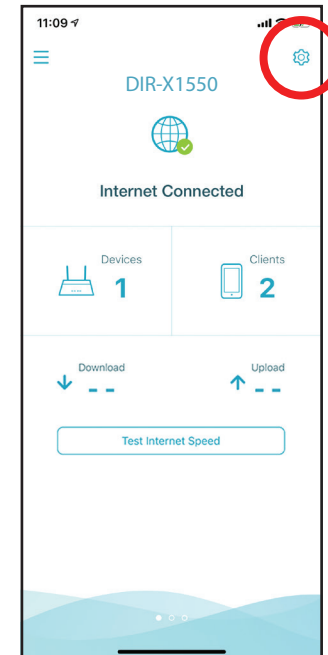
Launch the **D-Link Wi-Fi** app.



D-Link Wi-Fi

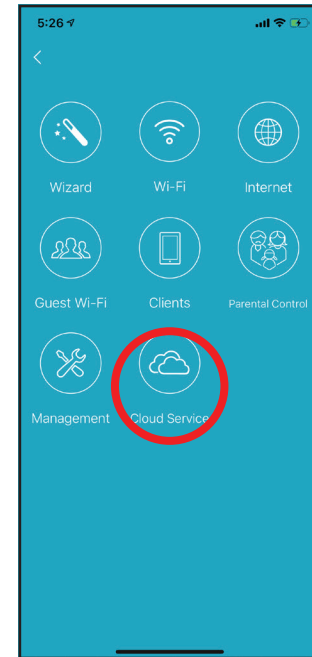
Step 2

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



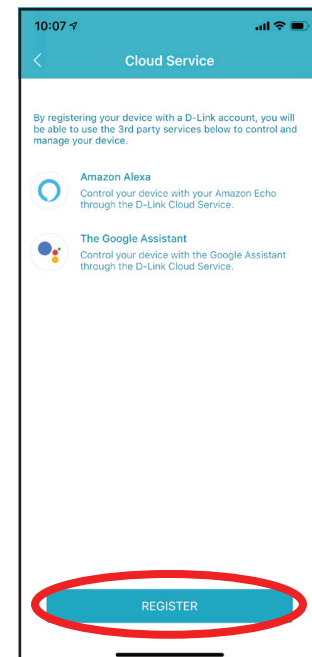
Step 3

Tap the **Cloud Service** icon.



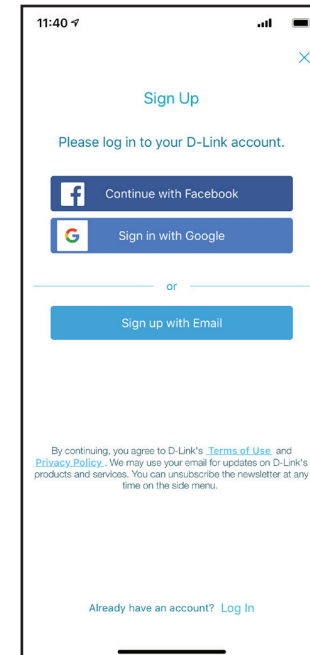
Step 4

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

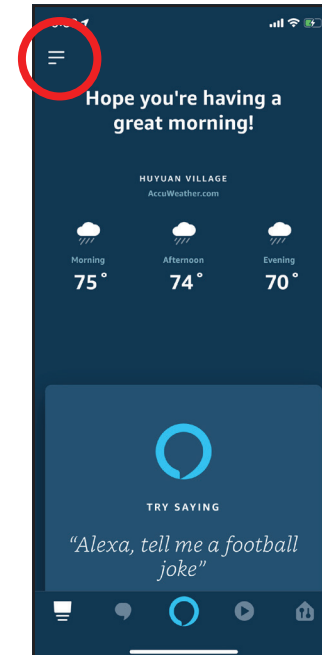
Launch the **Amazon Alexa** app.



Amazon Alexa

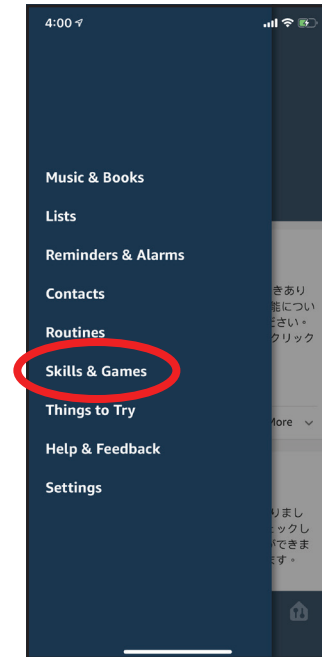
Step 2

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



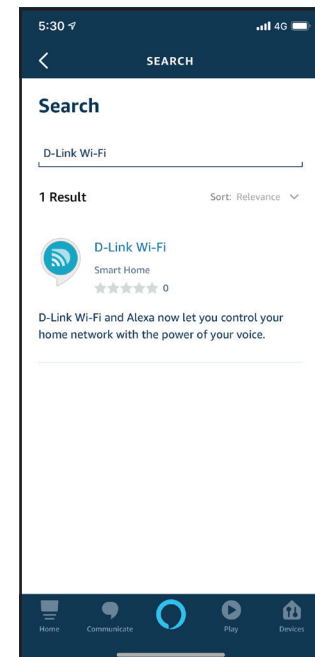
Step 3

Tap on **Skills & Games**.



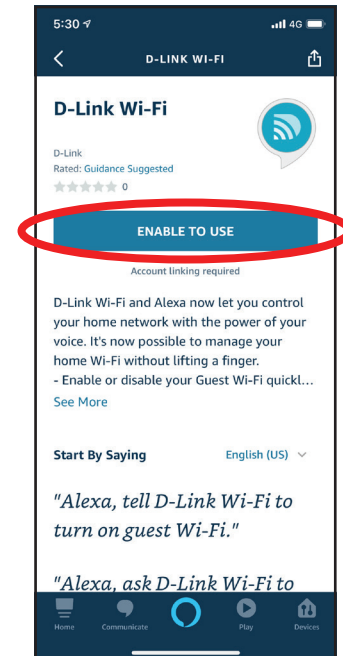
Step 4

Search for "D-Link Wi-Fi". Tap on the search result.



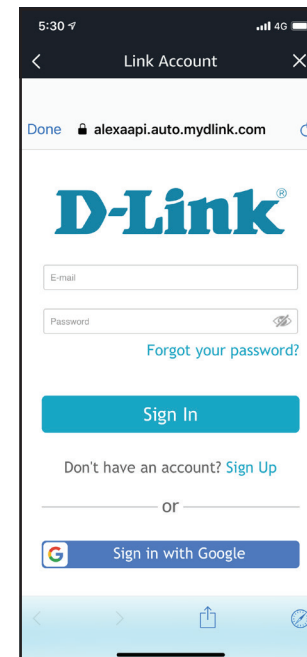
Step 5

Tap **Enable** to link the skill.



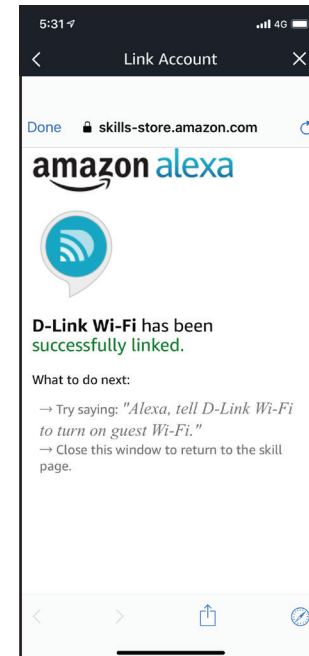
Step 6

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 **97** 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

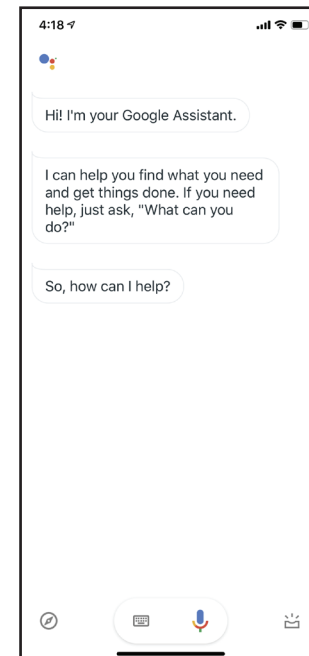
Launch the **Google Assistant** app.



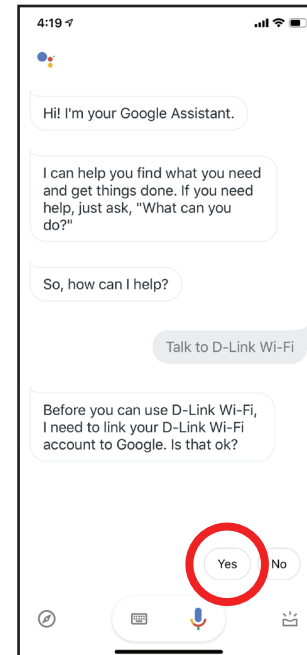
Assistant

Step 2

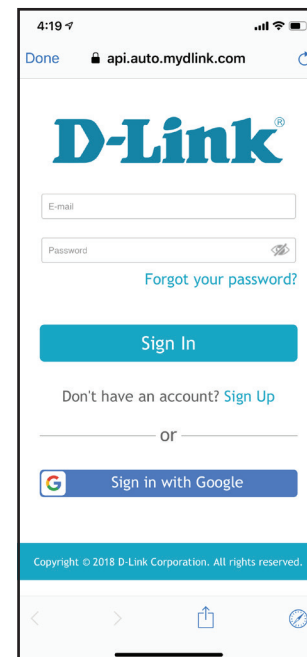
Tell your Google Assistant to **"Talk to D-Link Wi-Fi."**



Step 3
Tap **Yes**.

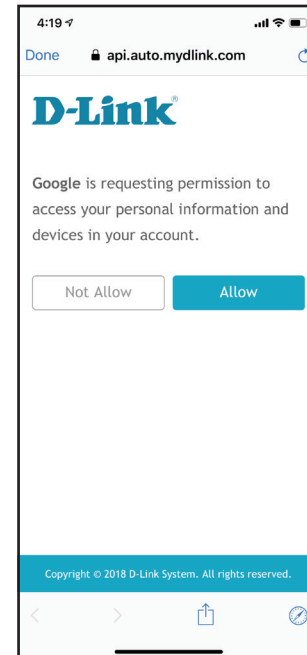


Step 4
Sign in using your D-Link account details.



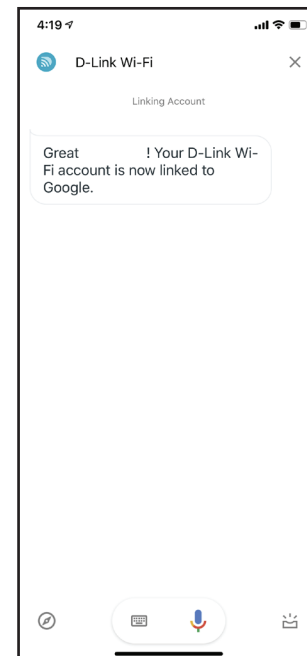
Step 5

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 101 for tasks that you can ask your Google Assistant to perform.



The Google Assistant Voice Commands

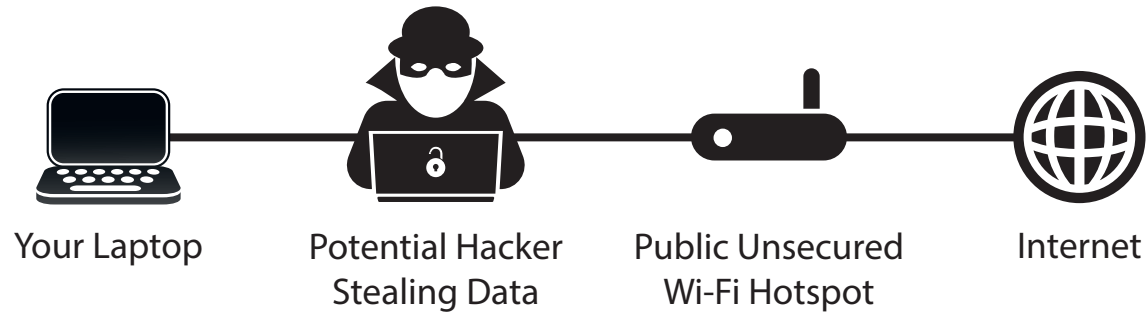
With D-Link Wi-Fi enabled as a skill for the Google Assistant, you can ask your Google Assistant to do any of these tasks:

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."

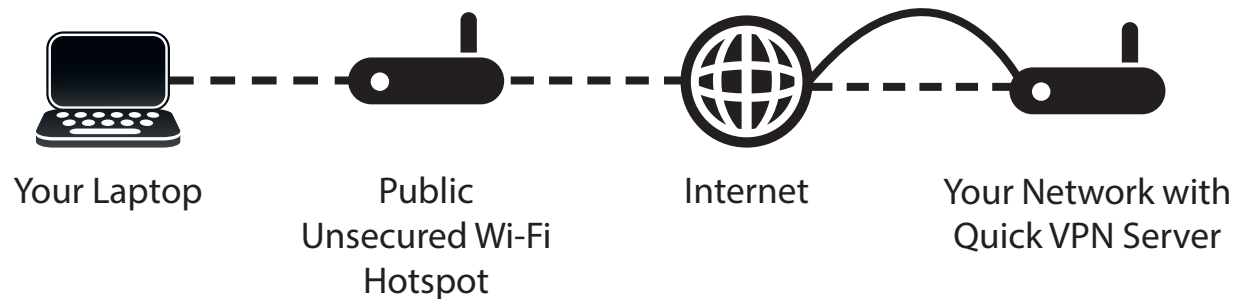
Quick VPN

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



With Quick VPN



———— Unencrypted Data

- - - - - 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.
- Your 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

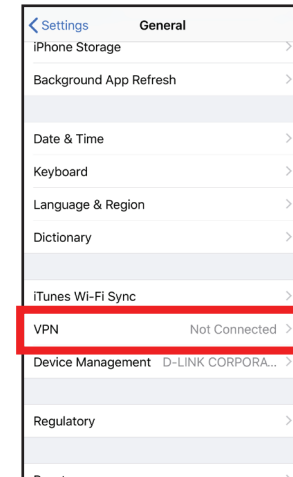
VPN Setup Instructions

This section provides Quick VPN setup instructions for iOS devices. Refer to **Quick VPN** on page **79** 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.

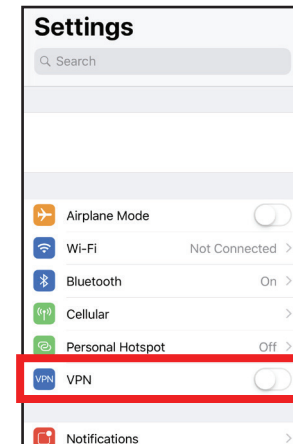
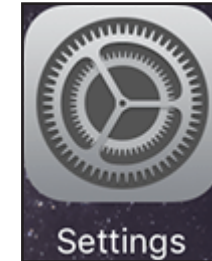
Your iOS device is now configured to connect to your Quick VPN server.

The screenshot shows the 'Quick VPN' configuration screen. At the top, there are three buttons: 'Cancel', 'Quick VPN', and 'Done'. The main content area contains the following fields and controls:

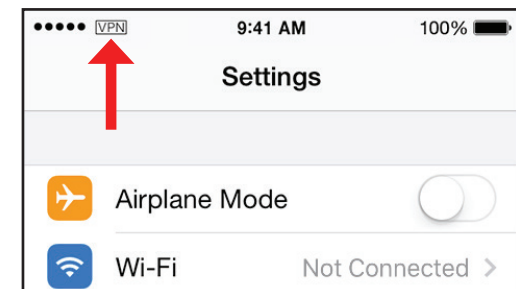
- Type:** IPsec
- Description:** Quick VPN
- Server:** IP/DDNS_address_of_QuickVPN
- Account:** vpn
- Password:** Masked with three dots.
- Use Certificate:** A toggle switch that is currently turned off.
- Group Name:** An empty text field.
- Secret:** Masked with six dots.
- PROXY:** A section with three buttons: 'Off' (selected), 'Manual', and 'Auto'.

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.



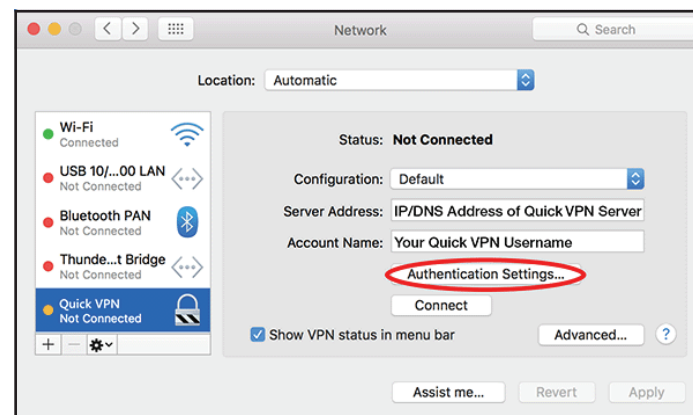
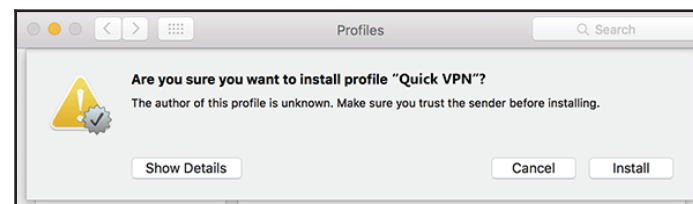
Mac OS X VPN Setup Instructions

This section provides Quick VPN setup instructions for OS X using the **Export** Profile function. Refer to **Quick VPN** on page **79** for your router setup instructions.

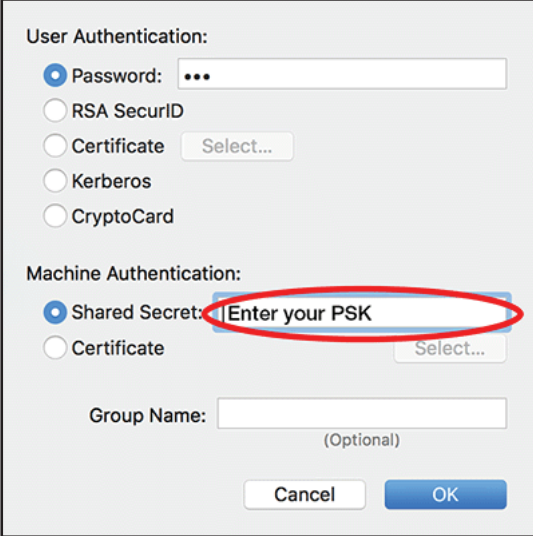
Open the exported profile. The Install Profile dialogue will appear; click **Continue** and **Install**.

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**.



The image shows a configuration dialog box for VPN authentication. It is divided into two main sections: "User Authentication" and "Machine Authentication".

- User Authentication:** This section contains five radio button options:
 - Password: [text box with three dots]
 - RSA SecurID
 - Certificate [Select...]
 - Kerberos
 - CryptoCard
- Machine Authentication:** This section contains two radio button options:
 - Shared Secret: [text box containing "Enter your PSK", which is circled in red]
 - Certificate [Select...]

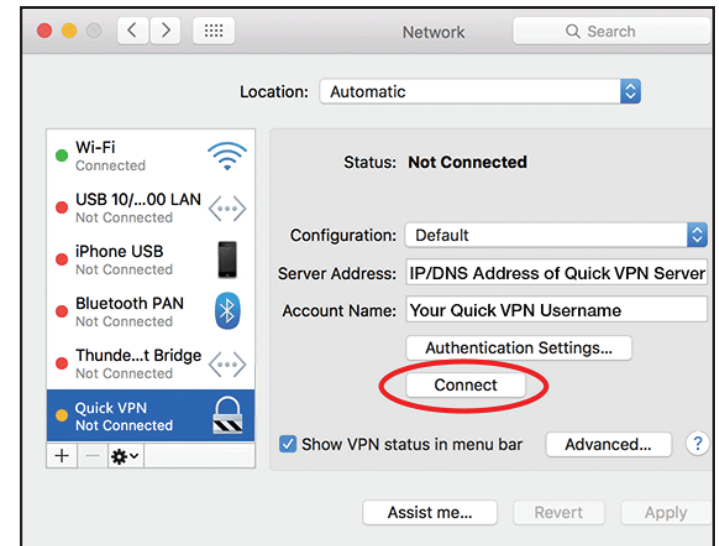
At the bottom of the dialog, there is a "Group Name:" label followed by a text box and the text "(Optional)". Below the text box are two buttons: "Cancel" and "OK".

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 **Apple > System Preferences... > Network**.

Select the Quick VPN connection and click on the **Connect** or **Disconnect** button.



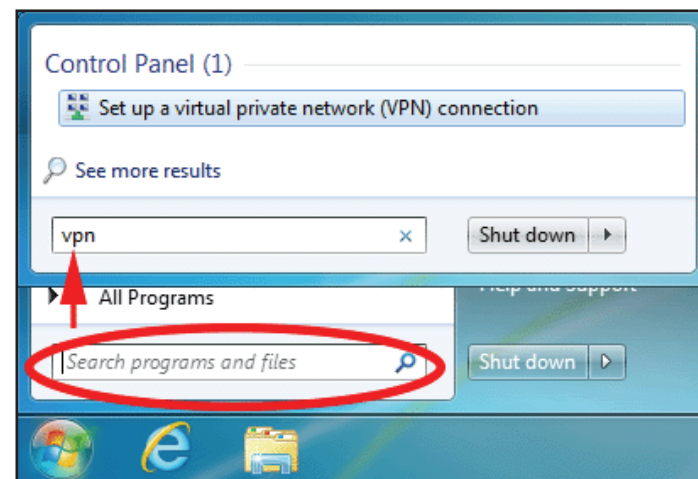
Windows 7

VPN Setup Instructions

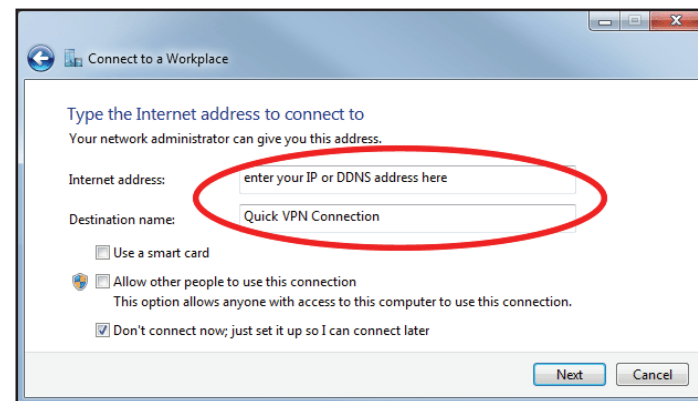
This section provides Quick VPN setup instructions for Windows 7. Refer to **Quick VPN** on page **79** for your router setup instructions.

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

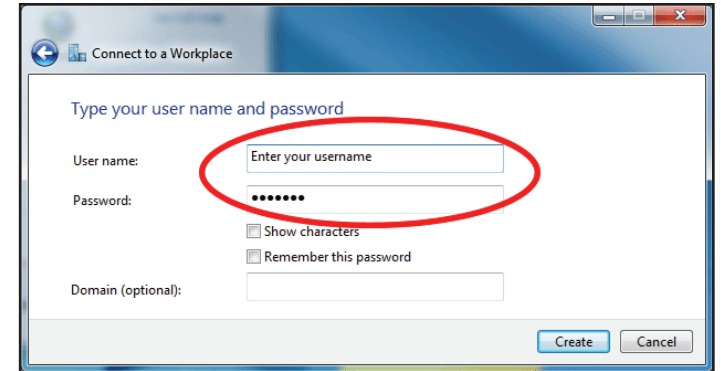
Select **Set up a virtual private network (VPN) connection**.



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**.

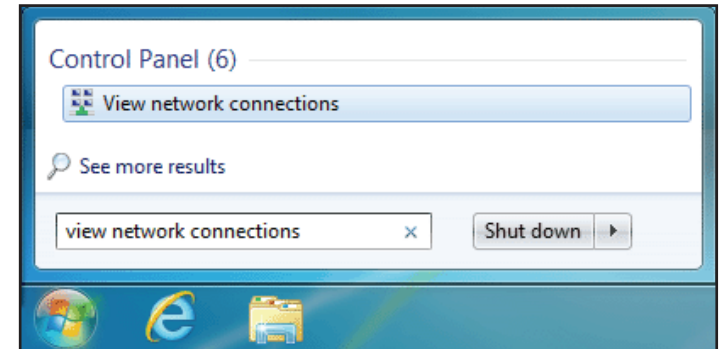


Enter your **Username**. If you would like windows to save your password, enter your **Password** and check **Remember this password**. Click **Create** to continue.



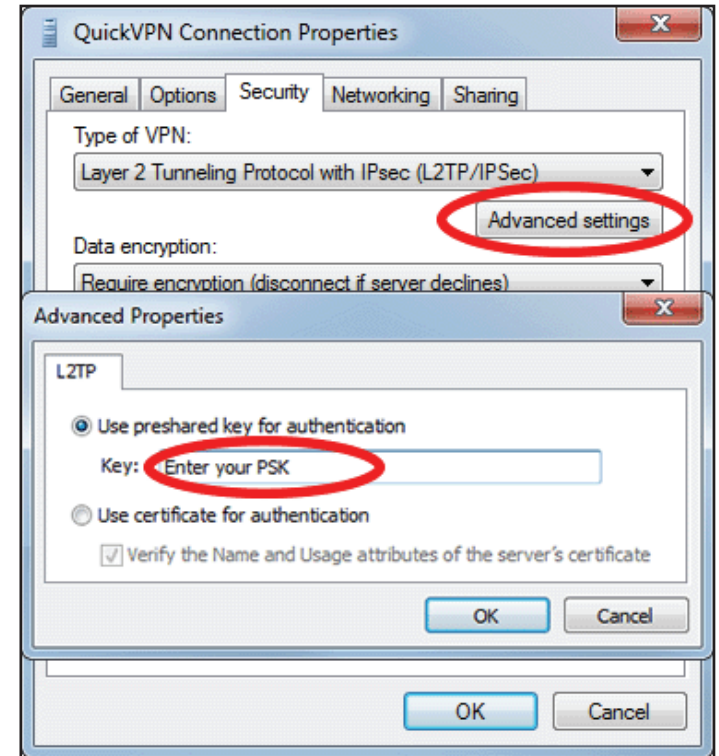
Do not click **Connect Now**.

Click **Close**. Click the **Start** button and type **view network connections** into the **Search programs and files** text box. Select **View network connections**.



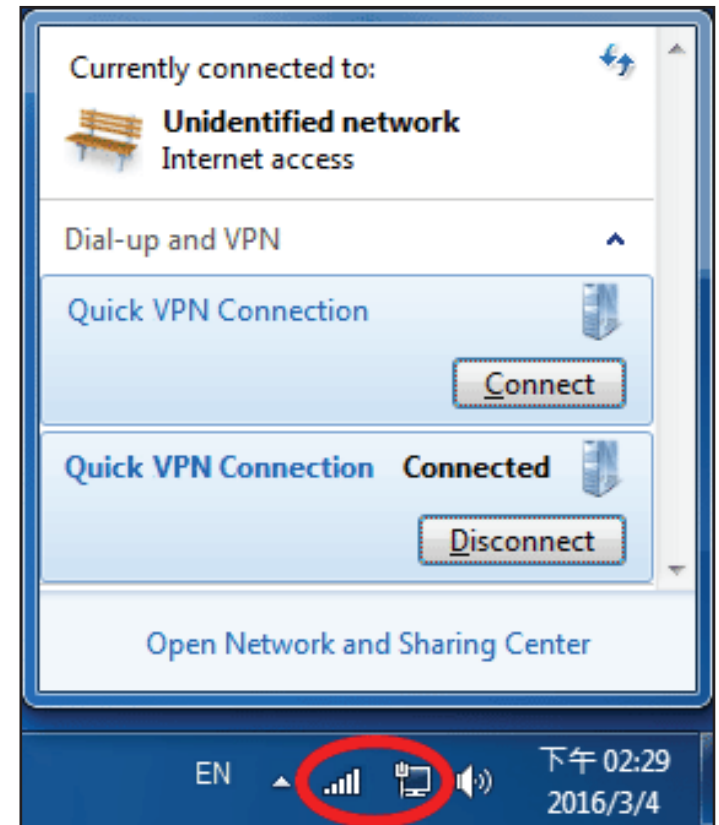
Click **Advanced settings**. Enter your **Passkey** in the **Key** text box under **Use preshared key for authentication**. Click **OK** to close **Advanced Properties** and click **OK** to close **Quick VPN Connection Properties**.

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

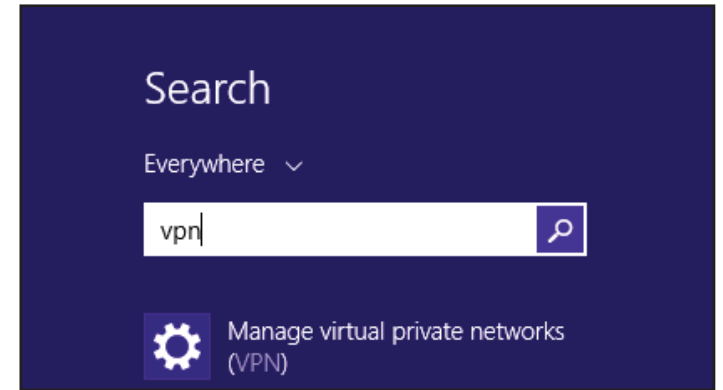
VPN Setup Instructions

This section provides Quick VPN setup instructions for Windows 8.1/8. Refer to **Quick VPN** on page **79** for your router setup instructions.

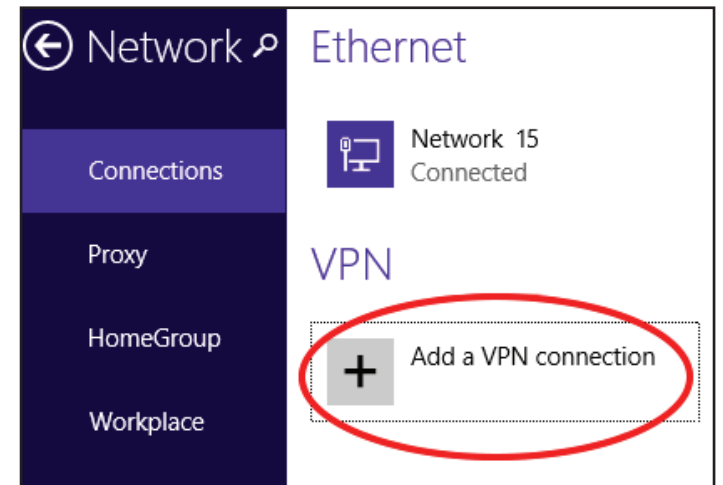
This section provides Quick VPN setup instructions for Windows 8.1/8.

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

Select **Manage virtual private networks**.



From the Network Settings page, click **Add a VPN Connection**.

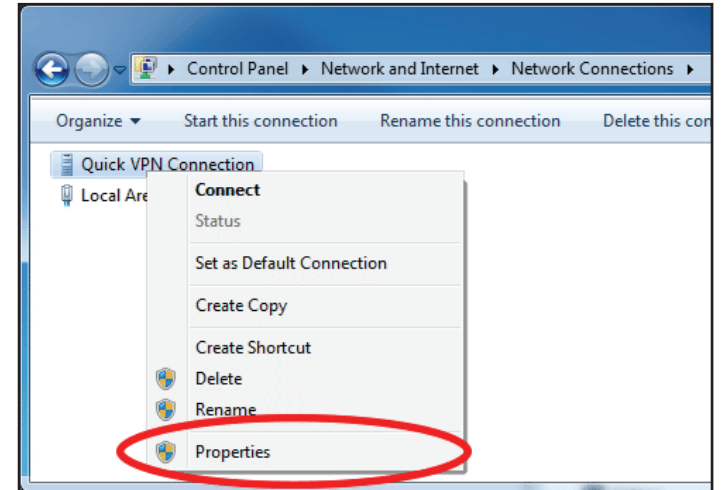


- 1 Select **Microsoft** from **VPN Provider**.
- 2 Create a name for your VPN connection.
- 3 Enter your **IP/DDNS address** of your Quick VPN server.
- 4 Select **User name and password** from **Type of sign-in info**.
- 5 If you would like windows to remember your sign-in information, enter your **User name, Password**, and select **Remember my sign-in info**
- 6 Choose **Save**.

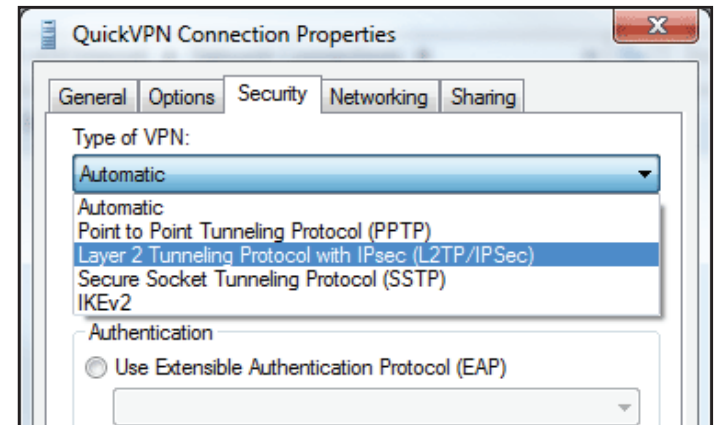
The screenshot shows the 'Add a VPN connection' dialog box with the following fields and options:

- 1** VPN provider: Microsoft
- 2** Connection name: Quick VPN
- 3** Server name or address: IP/DDNS Address of Quick VPN Server
- 4** Type of sign-in info: User name and password
- 5** User name (optional): Username
- 5** Password (optional): [Redacted]
- Remember my sign-in info
- 6** Save
- Cancel

Right-click on the Quick VPN Connection you just created and left-click on **Properties**.

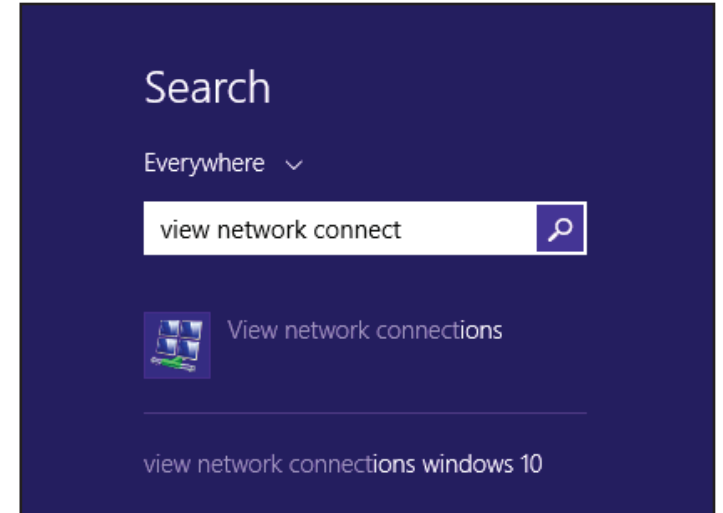


Select the **Security** tab. For the **Type of VPN**, select **Layer 2 Tunneling with IPsec (L2TP/IPSec)**.



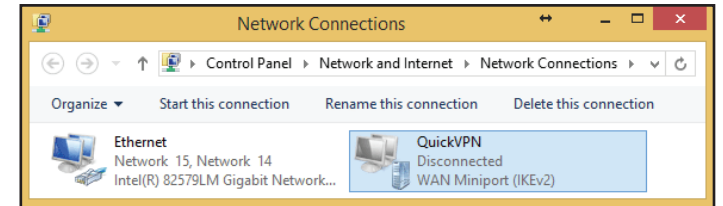
Click the **Start** button and type **view network connections**.

Select **View network connections**.



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

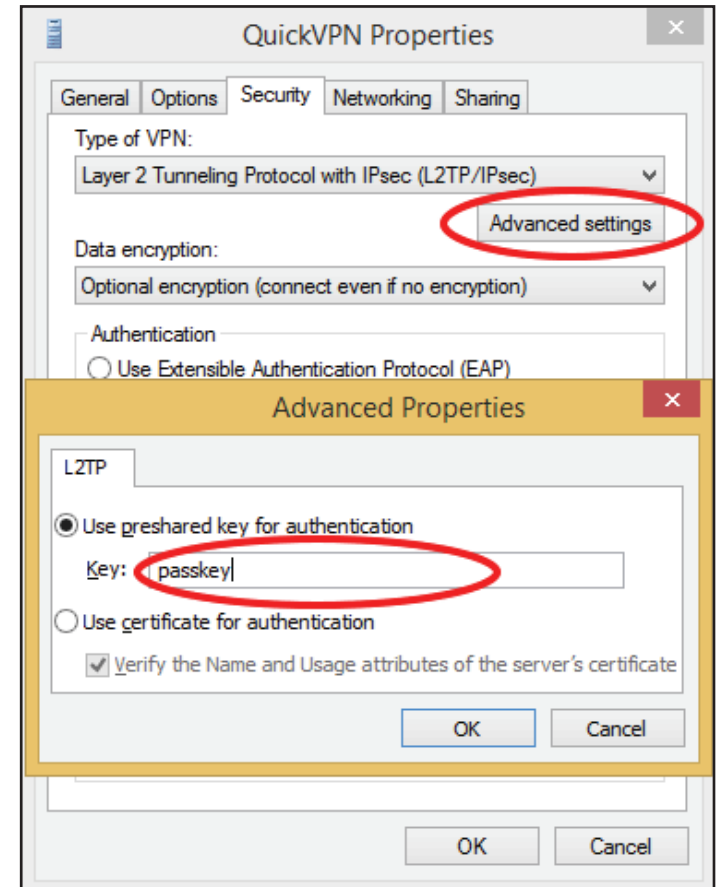
For the **Type of VPN**, select **Layer 2 Tunneling with IPsec (L2TP/IPSec)**.



Click **Advanced settings**. Enter your **Passkey** in the **Key** text box under **Use preshared key for authentication**.

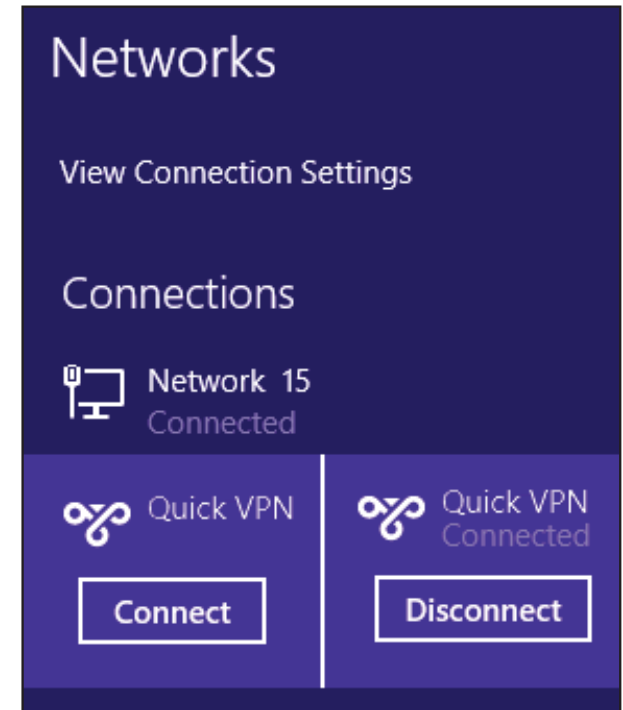
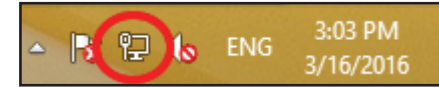
Click **OK** to close **Advanced Properties** and click **OK** to close **Quick VPN Properties**.

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.

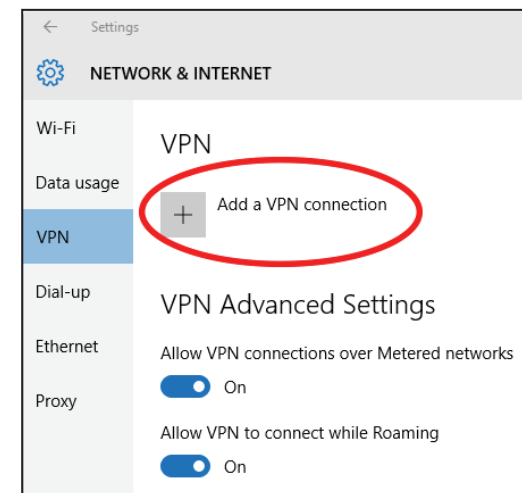
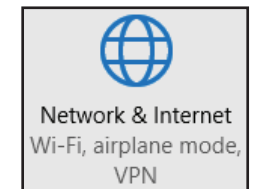
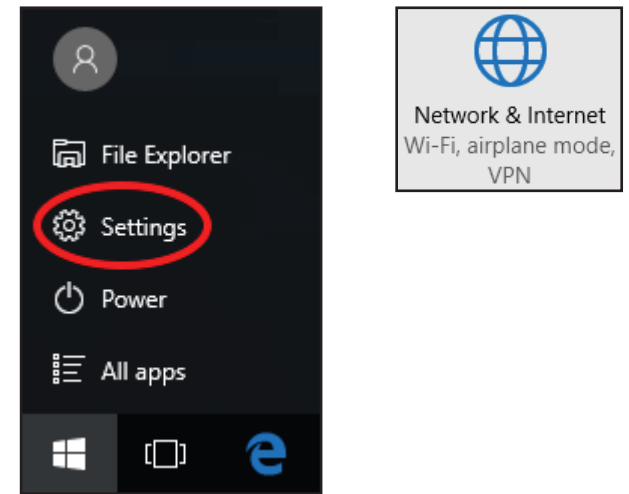


Windows 10 VPN Setup Instructions

This section provides Quick VPN setup instructions for Windows 7. Refer to **Quick VPN** on page **79** 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.

Add a VPN connection

VPN provider
1 Windows (built-in) ▾

Connection name
2 Quick VPN

Server name or address
3 IP/DDNS Address of Quick VPN Server

VPN type
4 L2TP/IPsec with pre-shared key ▾

Pre-shared key
5 Passkey

Type of sign-in info
6 User name and password ▾

User name (optional)
Username

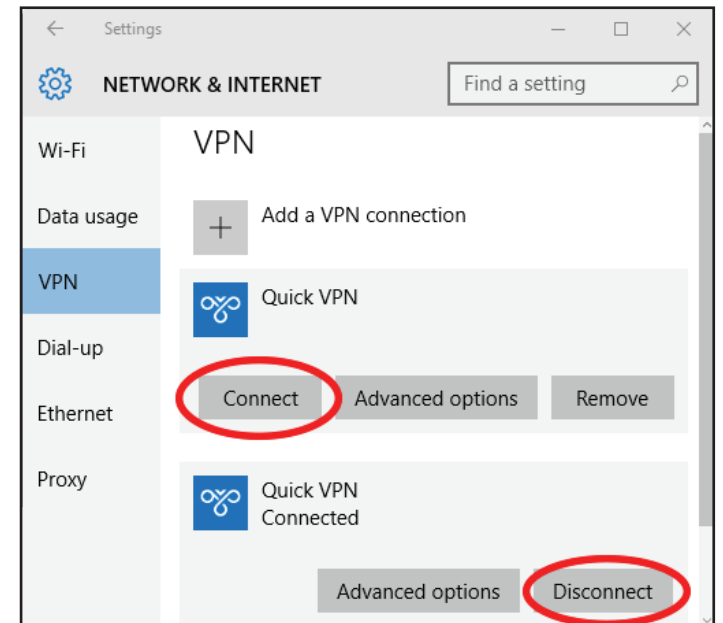
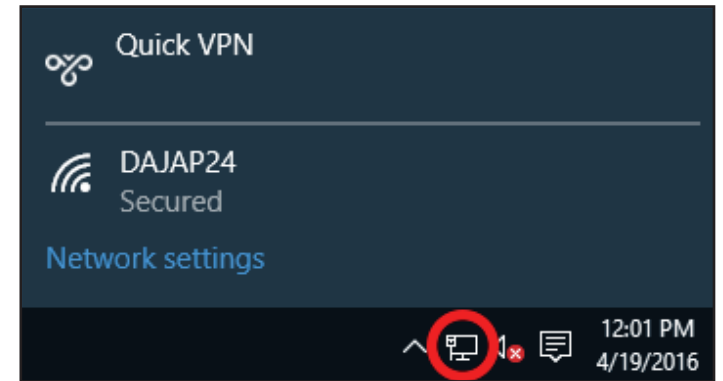
Password (optional)
••••••••

Remember my sign-in info

7 Save Cancel

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.

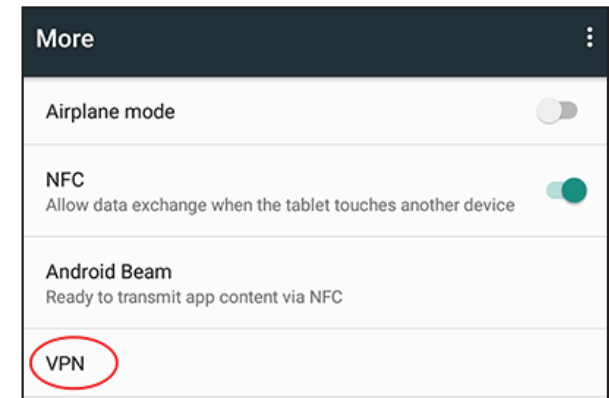
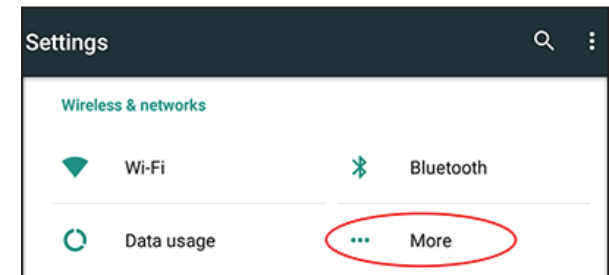


Android

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 **79** 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.

VPN

Edit VPN profile

Name
1 Quick VPN

Type
2 L2TP/IPSec PSK

Server address
3 Quick VPN IP/DDNS address

L2TP secret
(not used)

IPSec identifier
(not used)

IPSec pre-shared key
4

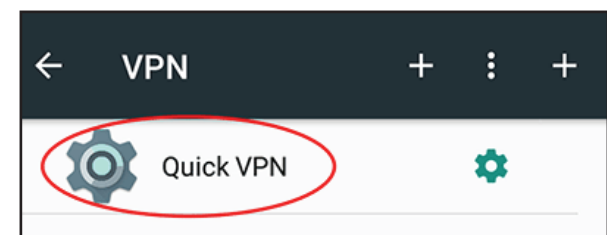
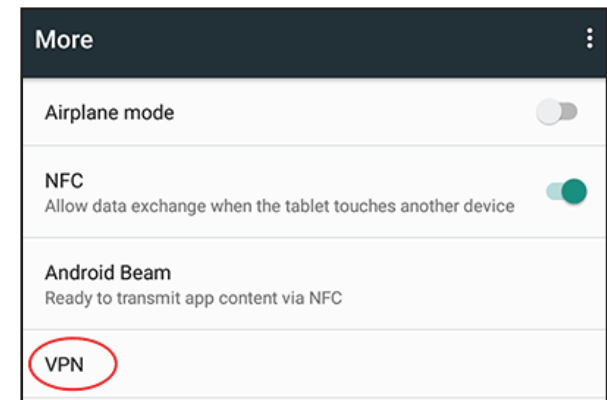
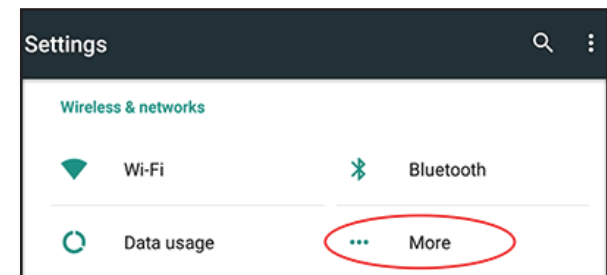
Show advanced options

5

CANCEL SAVE

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