Getting Started with Pi-hole - Your Network-wide ad blocker

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Pi-supply and Pi-hole have partnered together to bring you a complete Pi-hole solution – a device that allows you to block those annoying ads for every computer device on your local network.

The Pi-hole acts as a Domain Name System (DNS) server, something that sits in-between you and the internet. This allows the Pi-hole to intercept any outgoing or incoming DNS requests and can block or pass certain domains from accessing your device, keeping your computer and other devices safe from ads.

What you need

- Pi-Hole Starter Kit

- Mouse & Keyboard (Initial setup)
- Ethernet cable (recommended)
- Pi-Hole 16GB SD card (Included in starter kit)
- Raspberry Pi 2.5A Power Supply (Included in starter kit)

Connecting your hardware

1. Connect an Ethernet cable from your Pi-hole Box to your router
2. Connect your Keyboard & Mouse to the USB ports on the Pi-hole Box
3. Connect a HDMI cable to your TV/Monitor
4. Connect a micro USB DC power supply to the Pi-hole Box

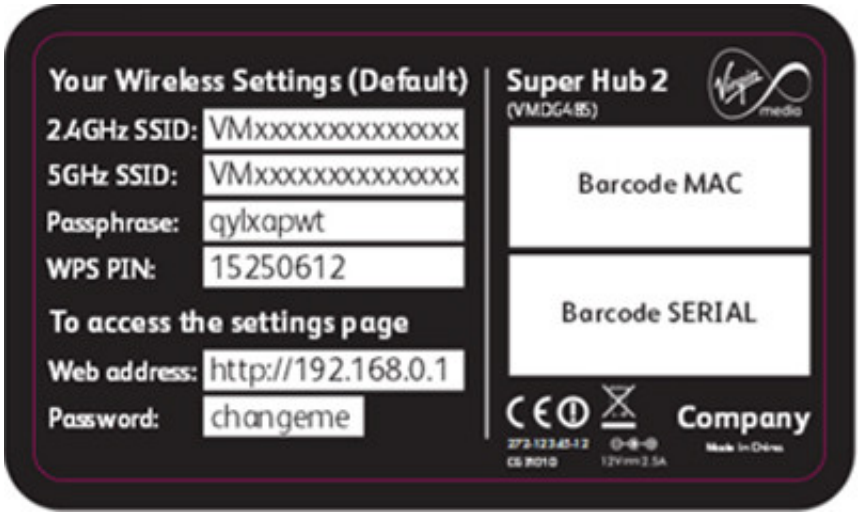
Gather your network requirements

Pi-hole needs a static IP address in order to function properly. By default your router will most likely give your device a different IP address every time it connects to the network or after a period of 30 days. What we need is for the IP address to never change when the Pi-hole is connected to your router, otherwise you would have to re-configure the Pi-hole settings every so often, and this is not practical.

There are two ways in which you can set a static IP address on your router; you can either set it as a static address or you can use Dynamic Host Control Protocol (DHCP) reservation. The easiest and most convenient way to set a static IP is using DHCP reservation.

If you are using DHCP, this information can be found in your router's web interface:

Step 1 - Logon to your router's web interface. This is usually a static IP address in which you put into the web browser and can be found in either your routers manual or on a sticker on the reverse side of the router hardware. You will also be required to enter a password.



Step 2 - In the web interface navigate and locate a section called DHCP settings or something similar.

Step 3 - Look for a *reservations* setting

Step 4 - You should see a full list of connected devices from a list

Step 5 - Click on the small tick box next to the Pi-hole (raspberry) and add the reservation

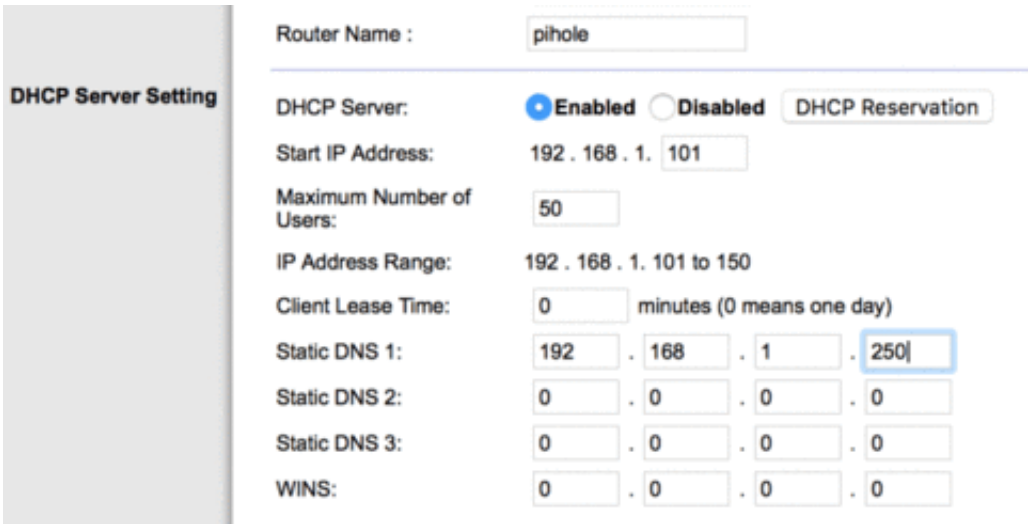
Step 6 - The Pi-hole IP address should now be added to the reserved list, where the IP address will always be assigned to the Pi-hole. Make sure you take note of the IP address as we will need it later on in this guide.

Use Pi-hole as your DNS server

Now that we have set the Pi-hole to use a static IP address on the local network we need to make sure that every device on the network will now use the Pi-hole as its DNS server:

Step 1 - Enter your router's configuration page and depending on on your router's interface you should see a setting or menu that says **static DNS** or **DNS server**.

Step 2 - Here you need to enter the IP address of your Pi-hole, which we set earlier in the DHCP section.



Note: If you router does not let you change the DNS or if the setting is not there, then please refer

to the FAQ section.

Configure your Pi-hole

The Pi-hole software is already pre-installed; you just need to configure it for your network. In just a few simple steps you will be up and running in no time, blocking those annoying ads:

Step 1 - Login to your Raspberry Pi with the username and password, which is ***adblock*** and ***blackhole***.

Step 2 - Open up the Terminal window by clicking the icon in the toolbar or by navigating to **Home** > **Accessories** > **Terminal**

Step 3 - Type in the command **pihole -r** and hit enter

Step 4 - When prompted choose **Reconfigure** in the menu

Step 5 - Follow the on-screen instructions to configure the Pi-hole

Step 6 - Select a DNS server to use

Step 7 - Make sure you also select install for the web interface

Step 8 - Once complete you will be presented with a screen with your interface address which is:

- http://pi.hole/admin
- http://IPADDRESS/admin i.e. http://192.168.0.1/admin

Step 9 - Run **pihole -up** to check for and install any updates to the software

Step 10 - In order to access the settings in the web interface you will need to set a password with **sudo pihole -a -p**

FAQ

My router does not allow me to change my DNS settings

Some internet providers provide a router that does not allow you to change the DNS, this is so that you are forced to use their default DNS server. Follow this guide here to be able to redirect the DNS server to the Pi-hole -

https://discourse.pi-hole.net/t/what-can-i-do-if-i-cant-change-manually-set-the-dns-server-on-my-router/8928

The site cannot be reached

Make sure that your IP address has not changed in your router settings and also that the DNS redirect is active

Why is my Pi-hole is not blocking ads?

Make sure that you have only 1 active DNS in your router otherwise any internet traffic may not be redirecting to the Pi-hole but rather to the default DNS