



<http://raspberrypiwebserver.com/serveradmin/get-your-raspberry-pi-web-site-on-line.html>

When a user visits a web site, they use the site's domain name to address the site. Their browser then sends a request to a DNS server to translate the domain name into an IP address. Once the browser has the site's IP address, it sends a request to the server.

There are two problems with this:

- 1. the external IP address of your home network can change at any time, and
- 2. your Pi is behind a firewall and can't be accessed directly from the internet.

## Dynamic DNS

The first problem can be solved by using a [dynamic DNS](#) service. These services act as DNS servers that update automatically if your IP address changes. There are numerous dynamic DNS services available. Most of them provide a free service where you can choose a subdomain name.

You need to install a small piece of software on your Pi. This software is supplied by your dynamic DNS provider, and it monitors the external address of your router. If that address changes, the software sends a message to the dynamic DNS server to update its records.

A dynamic DNS system specifically for Raspberry Pi servers is due to be launched in October/November 2013. You can read more about this at [rpidns.co.uk](http://rpidns.co.uk).

## Port forwarding

When a user on the internet wants to see your web site, their browser can get the IP address of your home network from your dynamic DNS service. But requests still need to find a way through your router's firewall.

By default web servers listen for connections on port 80. When a user's request to see a page on your site reaches your router, the router must forward that request to your Pi's IP address. You don't want to forward all incoming traffic to your Pi, just the traffic for the web server which is on port 80. Most routers allow you to set up port forwarding so that any traffic on port 80 will be sent to your Pi. Instructions on how to do this vary from one router to the next, but you can find some [pointers at wikiHow.com](#).

In most routers there are options to use an existing forwarding rule for HTTP traffic on port 80. If the rule doesn't already exist, you'll need to create one. If you are

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prompted to choose between TCP and UDP, pick TCP. You'll need to specify your Pi's IP address, so you need to [give your Pi a static IP address](#).

Note that some ISPs block port 80 to prevent their customers from running web servers (to reduce bandwidth usage). In this case, you need to configure your server to listen on a different port, say port 87. You would need to set up your router to forward traffic on port 87, and you would need to configure your dynamic DNS service to forward requests on port 80 to port 87.

You may need to restart your router for changes to take effect.

You can test your set-up by opening a web browser and going to your domain name. If all is well, you should see your site appear in your browser.

Once everything's working, you might want to make it easier for people to find it. You can start by setting up an account in [Google Webmaster tools](#) and submitting a sitemap. You could also register your site on [pirepository.com](#), a site that lists web sites that run on Raspberry Pi servers.