

Setting up your own private VPN using a cheap VPS server

In this example I will show you how easy it is to setup your very own private VPN. This is the best possible solution for everyone. Yes, you may find VPN services cheaper online but

1. They are usually oversold and frequently slow down.
2. They say no logging, can you really be sure of that? I mean, your requesting a plain text URL for your IPTV Channel List, which contains your username & password. Its not hard for them to log things like this for other purposes..... Blocking IPTV servers maybe???

So with your own £3 a month VPS, you can install your own OpenVPN server, then you have.

1. Your own secure VPN, with nobody logging it 100%.
2. Plenty of bandwidth to watch a 1080p stream, hell enough to watch 4 or 5 1080p streams with ease.
3. Nothing stopping you creating 3 or 4 users on it and sharing the cost with others. (£3 a month \ 4 = <£1 each....., now its cheaper and more reliable than a VPN service.....)

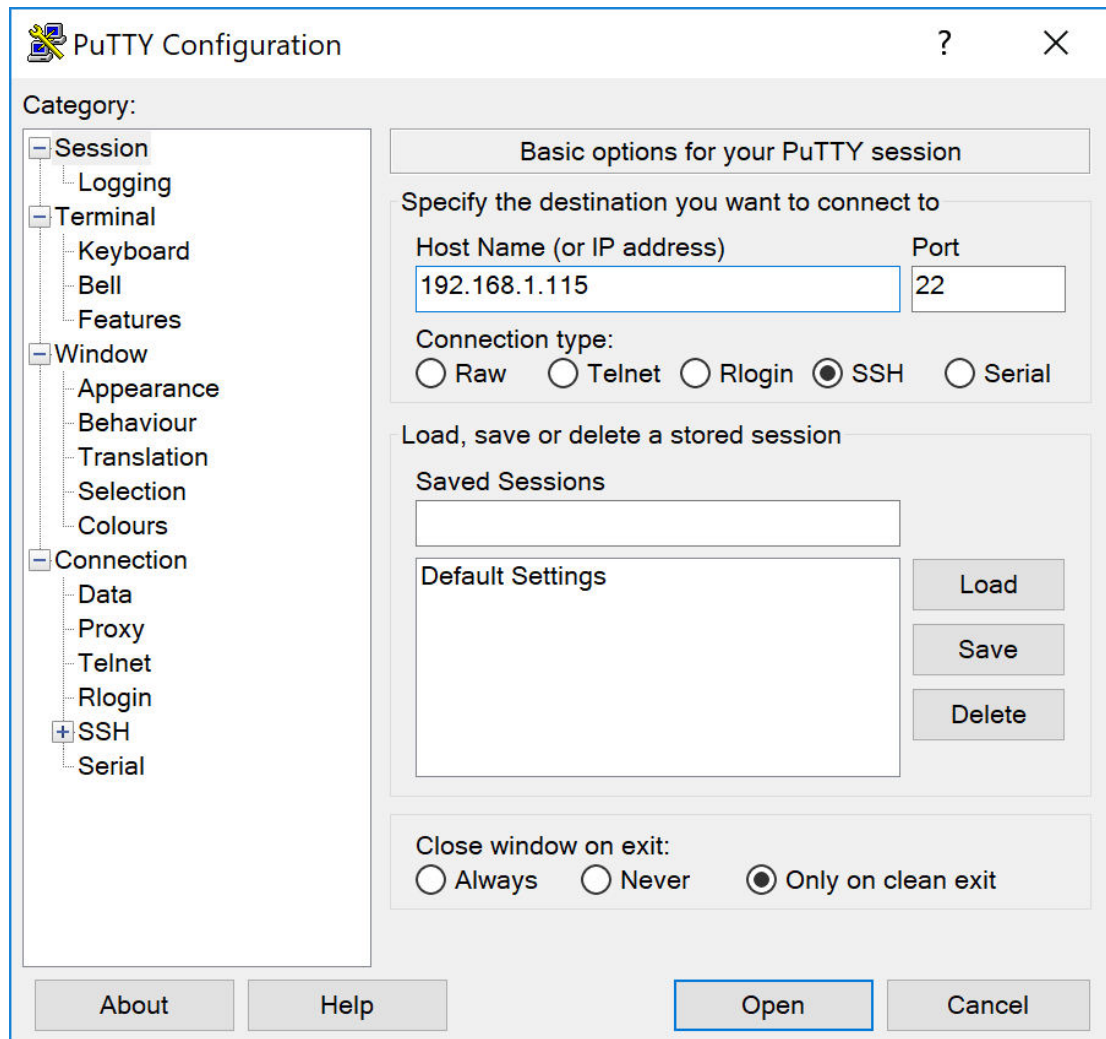
Anyway, on to the guide.

I will use a virtual machine for the screenshots but a vps at any provider will work the same.

OVH provide cheap reliable and fast VPS servers, starting at £2.49+vat(20%) per month. This is what I use for mine, its plenty fast enough for the 1080 streams. VPS SSD 1, single core, 2gb ram, 10gb disk space, 100mbps shared internet. Never yet had a problem.

Once you have your VPS, if using OVH, select to install Debian Jessie x64. Once its setup and ready you will receive an email with the login details. This will be an SSH login, you will need putty (<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>) if you don't already have it. While your grabbing apps if you don't already have WinSCP (<https://winscp.net/eng/download.php>) get that too, makes it easier to transfer files to your server.

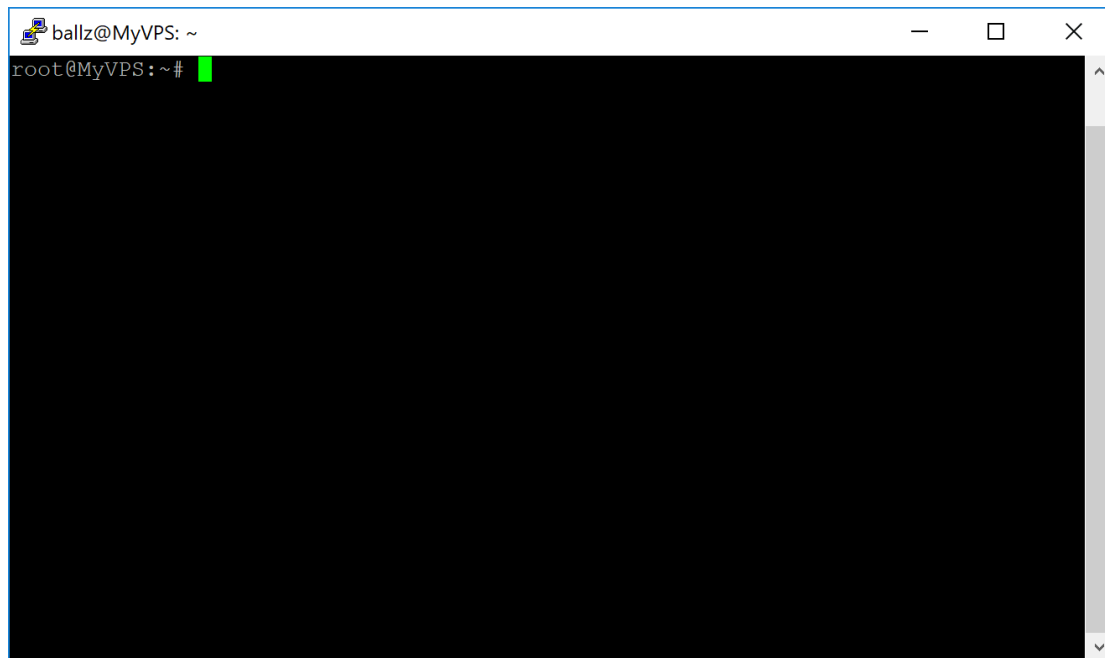
Open Putty, input your VPS ip in the host box, leave it on SSH and click open. Like this



You will get a popup regarding a key, accept it.

Login with the username (root) and password from your VPS setup email.

Now it should be similar to this..... (Ignore my titlebar, I switched user for the guide)

A terminal window titled 'ballz@MyVPS: ~' with standard window controls. The prompt is 'root@MyVPS: ~#' followed by a green cursor bar. The rest of the terminal is black and empty.

First check for updates.....

apt-get update && apt-get -y upgrade

Let it run, there shouldn't be much, usually.

Now for the easy part thanks to Nyr on github and his roadwarrior installer.

This installs the basic openvpn package through the package manager, configures it and saves you an ovpn file afterwards. You can re-run the script to add a 2nd user, again for a 3rd and so on.... It's a very basic setup, but its all we need and its secure.

Here we go. As per instructions at <https://github.com/Nyr/openvpn-install>

wget -no-check-certificate https://git.io/vpn -O openvpn-install.sh && bash openvpn-install.sh

This is a single line command which will download the script and run it. The output should look like this.....

```
ballz@MyVPS: ~  
Welcome to this quick OpenVPN "road warrior" installer  
  
I need to ask you a few questions before starting the setup  
You can leave the default options and just press enter if you are ok with the  
  
First I need to know the IPv4 address of the network interface you want OpenVPN  
listening to.  
IP address: 192.168.1.115
```

**Make sure your VPS IP is there and hit return.
Keep it default on the next question, (1 Recommended UDP), hit return**

```
ballz@MyVPS: ~  
Welcome to this quick OpenVPN "road warrior" installer  
  
I need to ask you a few questions before starting the setup  
You can leave the default options and just press enter if you are ok with the  
  
First I need to know the IPv4 address of the network interface you want OpenVPN  
listening to.  
IP address: 192.168.1.115  
  
Which protocol do you want for OpenVPN connections?  
  1) UDP (recommended)  
  2) TCP  
Protocol [1-2]: 1
```

Keep selecting the defaults, you can change port if you want to.

```
ballz@MyVPS: ~  
First I need to know the IPv4 address of the network interface you want OpenVPN  
listening to.  
IP address: 192.168.1.115  
  
Which protocol do you want for OpenVPN connections?  
  1) UDP (recommended)  
  2) TCP  
Protocol [1-2]: 1  
  
What port do you want OpenVPN listening to?  
Port: 1194  
  
Which DNS do you want to use with the VPN?  
  1) Current system resolvers  
  2) Google  
  3) OpenDNS  
  4) NTT  
  5) Hurricane Electric  
  6) Verisign  
DNS [1-6]: 2  
  
Finally, tell me your name for the client certificate  
Please, use one word only, no special characters  
Client name: myusername
```

Now when it asks for the name of the client certificate give it a username or similar. This is for your OpenVPN ovpn config file.

The whole thing is automated, it will download what it requires and setup everything needed. Just wait, first run generates the SSL keys.

Once its done it will tell you that your client file is located at /root/myusername.ovpn

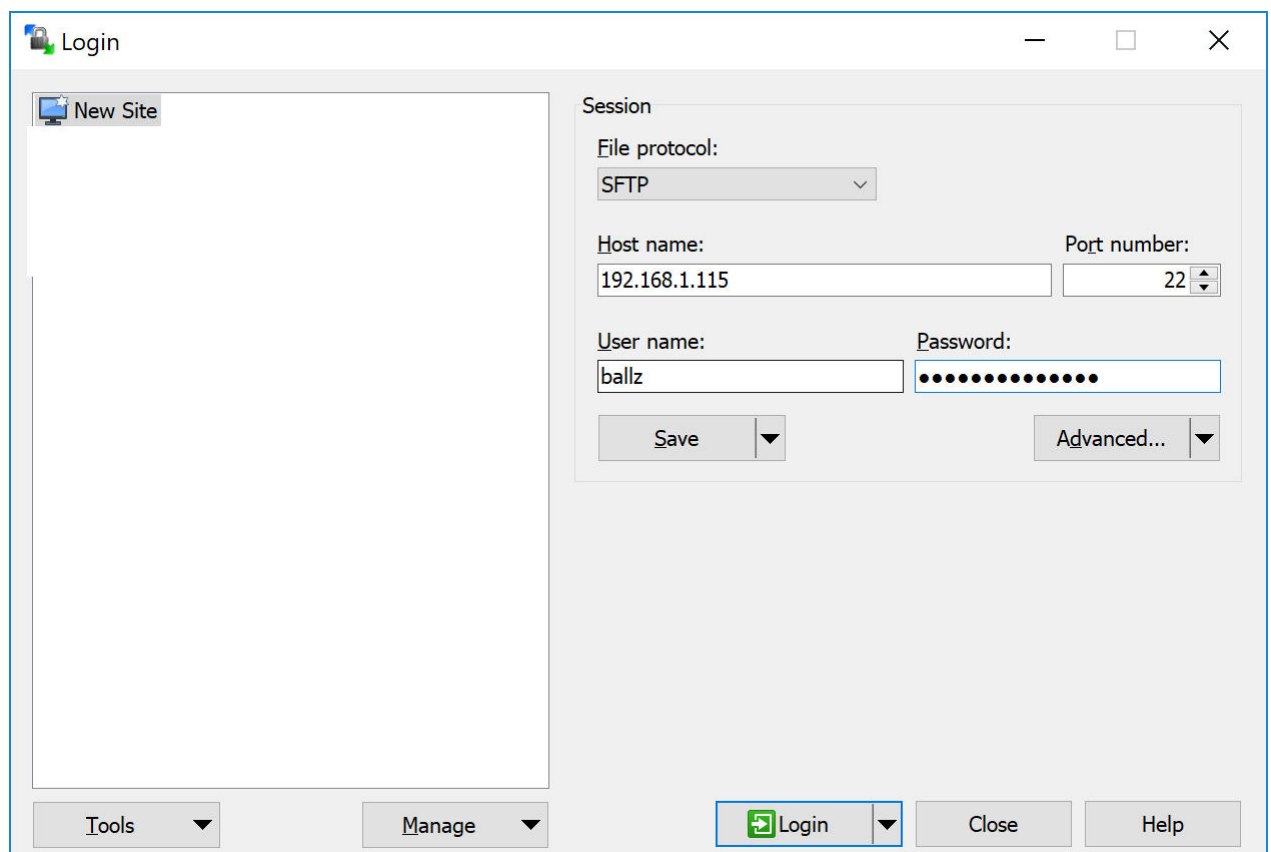
Before we close putty, for security set a good password on your root user. Type the following

passwd

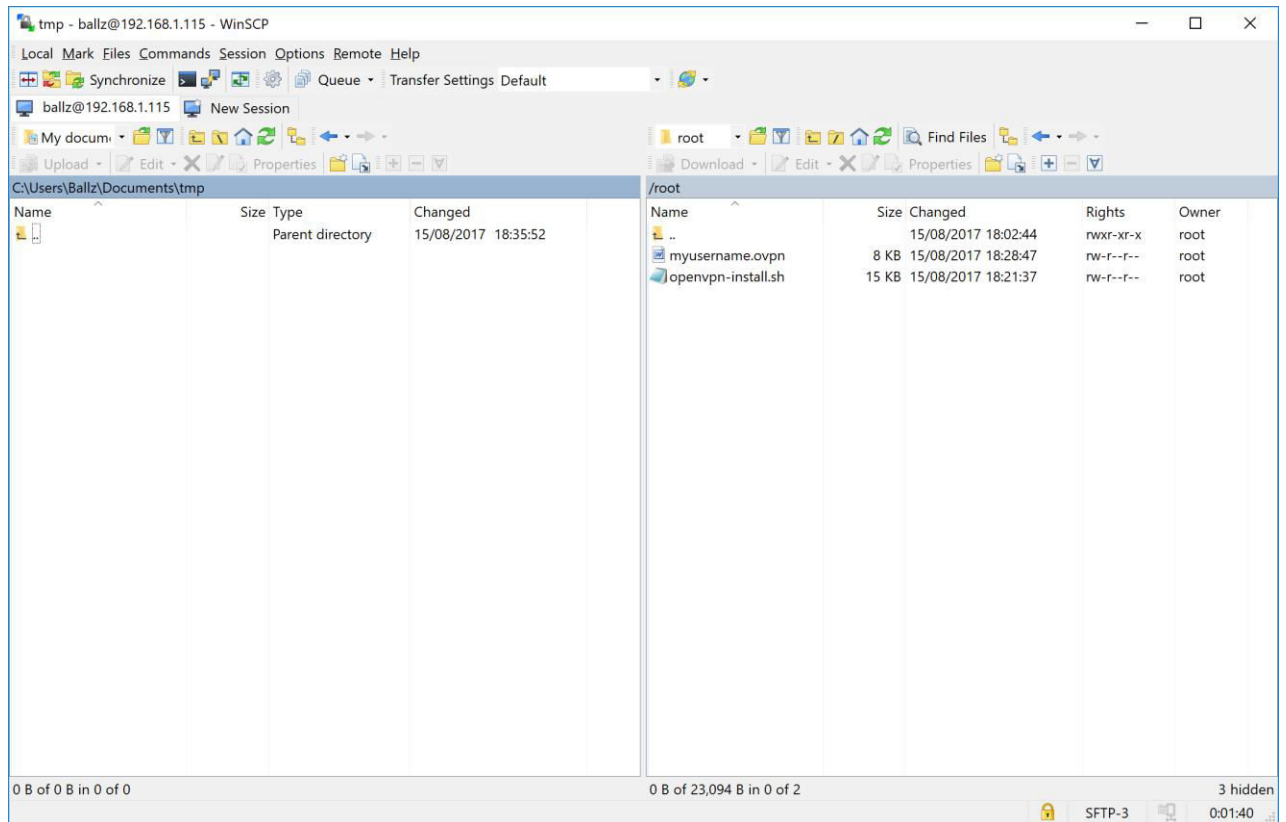
It will ask for your current password, nothing will be shown on screen as you type, this is normal.

Set a new password and REMEMBER it. Were done with putty.

Start up WINSCP, input the server ip, leave SFTP in the drop down box Input your user (root) and your NEW PASSWORD, (ignore that im using the ballz username, you need to use root)



Click Login.... Accept the key request that will pop up.....



Now navigate on the left side to where you want the ovpn file saving, then drag and drop it from right to left.

This file can now be used with the Pi guide I did to setup your VPN router.

If your using an iDevice (ipad etc), windows pc, android device etc you can install the OpenVPN connect app and use the ovpn file to connect to your private VPN.