General comparative advantage of Surfshark VPN

I am demonstrating this on **Surfshark** because – other than
-**price**,
-**good security record**,
-**excellent speed** and
-**many servers around the world** –
-**it is by far the easiest VPN service to set up in Enigma2** (by comparison to other VPN providers), given they have
-**elegantly placed both encryption keys in .ovpn files** AND(!!!)
-one can have **unlimited number of devices** protected with their service (other VPN providers have a usual limit of only 5-6 devices, so for me it was a no-brainer, given the number of Enigma2, Android and Windows devices my family has)!!!

An overview of what we are about to do

1) One just **transfers Surfhsark .ovpn files over to an STB**.
2) One **installs VPN Manager** by Murxer and quickly sets it up! Easy-peasy!

Which HW and what type of encryption to use?

Surfshark have Android and Windows easy-to-use-apps for VPN, even with IKEv2 encryption, which only reduces your full internet connection speed by about 10%!

Enigma2 uses OpenVPN - for now. We do have a rather good plugin for it, though, which will allow you to change a VPN server/country in a matter of seconds and it will work stably!

Older E2 based machines **might not have the firepower necessary**, so if you experience difficulties with it – this is probably the reason…. You might need a more **capable E2 machine i.e. newer HW which can support this**. We are talking about a powerful Broadcom dual core processor (1.5GHz or higher) and sufficient RAM (say, Zgemma H7 or Edision OS MIO 4K Plus) or HiSilicone quad core processor (also 1.5 GHz or higher - Zgemma H9 series, like Combo and Twin) etc.

I am using **PurE2** version of **Enigma2 in those STBs**. Btw, **STB = Set Top Box**. Nowadays they are not just Satellite but also Cable and Terrestrial, as well as IPTV boxes, we also use them for playback on local network, from USB sticks, external or internal (SATA) HDDs/SSDs etc. They are mightily capable AIO multi-media centres!

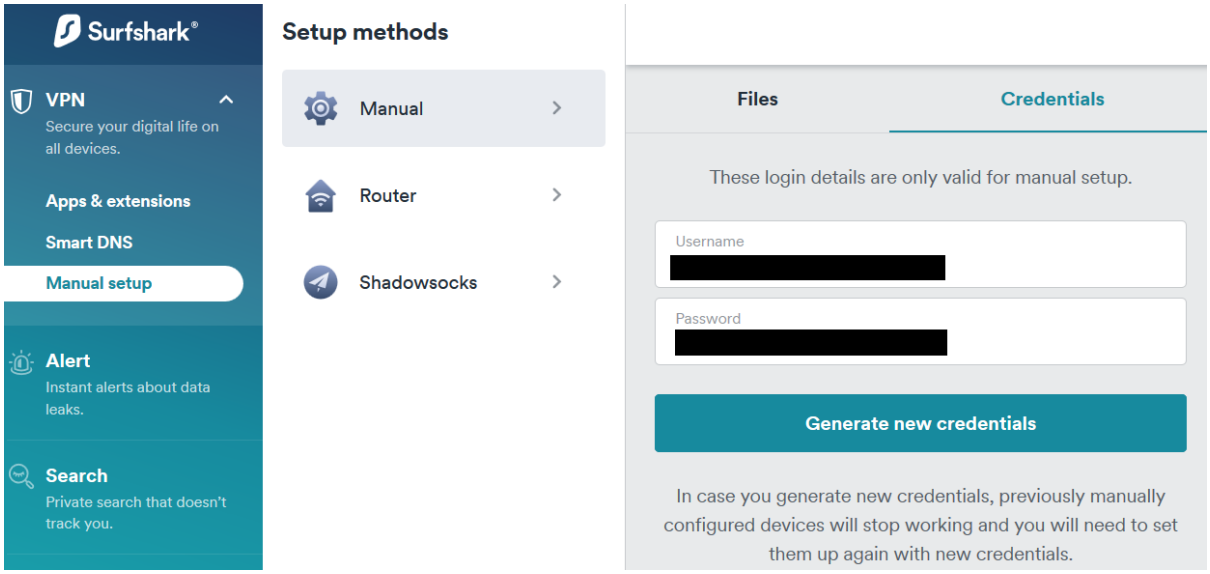
Preparation

Pay attention **when you sign up** with **Surfshark** and **note the following**: "Surfshark provides you with separate login and password for OpenVPN (manual) connection."

You can find them here: https://my.surfshark.com/vpn/manual-setup/main

"Those are the credentials, different from the ones that you use to log in to our website or the app."

To find them, login and then choose VPN (the top left corner) > click on Manual setup > click on “Credentials” (look in the in the middle of the page, at the top, I covered mine, of course, with black squares…)…



So, one does not use one’s usual, normal credentials, which one normally uses with Windows or Android Surfshark apps (one’s email and password of one’s choice).

With other VPN providers they are the same but not so with Surfshark!

With Surfshark, for OpenVPN encryption, which is used in Enigma2, one uses the credentials (i.e. username and password) one is given by Surfshark (see above!)!

It is worth noticing that one can change those regularly (“Generate new credentials”).

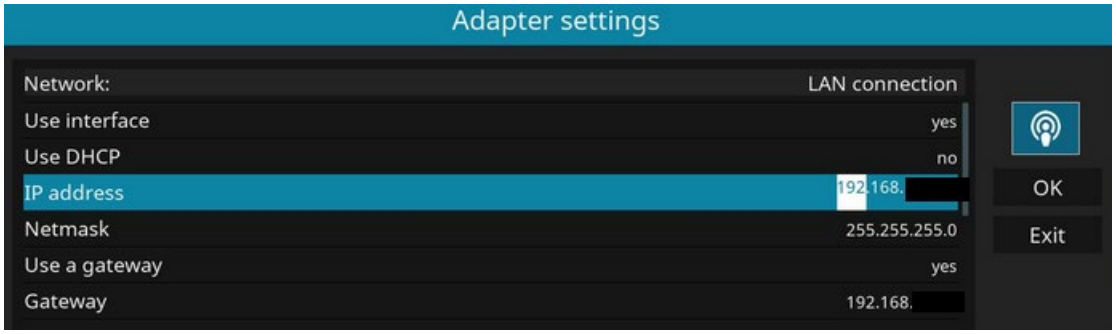
Network settings in an STB with Enigma2

On your STB’s RCU (= Remote Control Unit) press MENU > Setup > System > Network > Device setup > WLAN = wlan0 or LAN = eth0, depending on your physical setup > Adapter settings > now, pay attention:

Do **not** use automatic DHCP but manually set

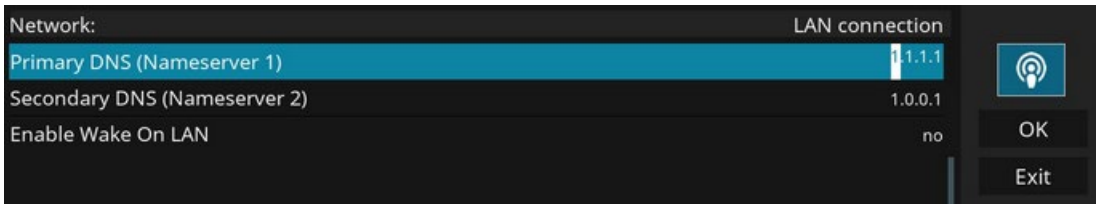
-local network IP address (static, as you see fit)

-Netmask as seen below, plus your router’s/modem’s address (Gateway):



A little lower, usually on the next page, as you scroll down, one find these settings:

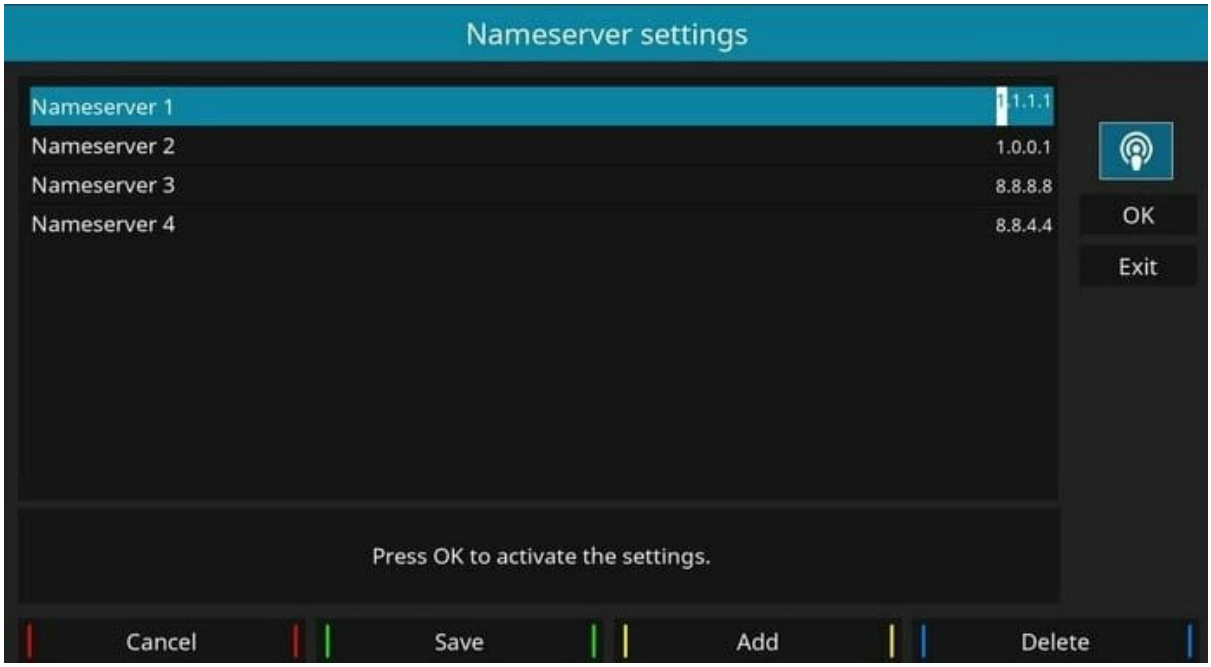
-Primary and Secondary DNS (Nameserver 1 & 2), which one sets up like so:



Press OK to SAVE!

Then, additionally, in the previous menu (Network > Device Setup > choose your interface [LAN= eth0 or WLAN = wlan0]) > Nameserver settings > add these:

1.1.1.1
1.0.0.1 > Save and go back to it, then press yellow button to add another
8.8.8.8 > Save and as above...
8.8.4.4 > Save



Now, press OK to SAVE! Done, now restart PurE2.

And now, IN MEDIAS (ST)RES(S)!!!

Surfshark is the easiest VPN service to set up in Enigma2!

Setting up VPN Manager plugin written by Murxer

1) Install the VPN Mananger E2 plugin, using your RCU, by pressing:

MENU > Plugins > green button > Extensions > find the plugin (currently v. 1.1.4) > press OK > go back to main Menu to restart E2.

2) When PurE2 restarts one must use **FileZilla Client app** (freeware) on one's computer in order to connect with one's STB ("to FTP into the STB").

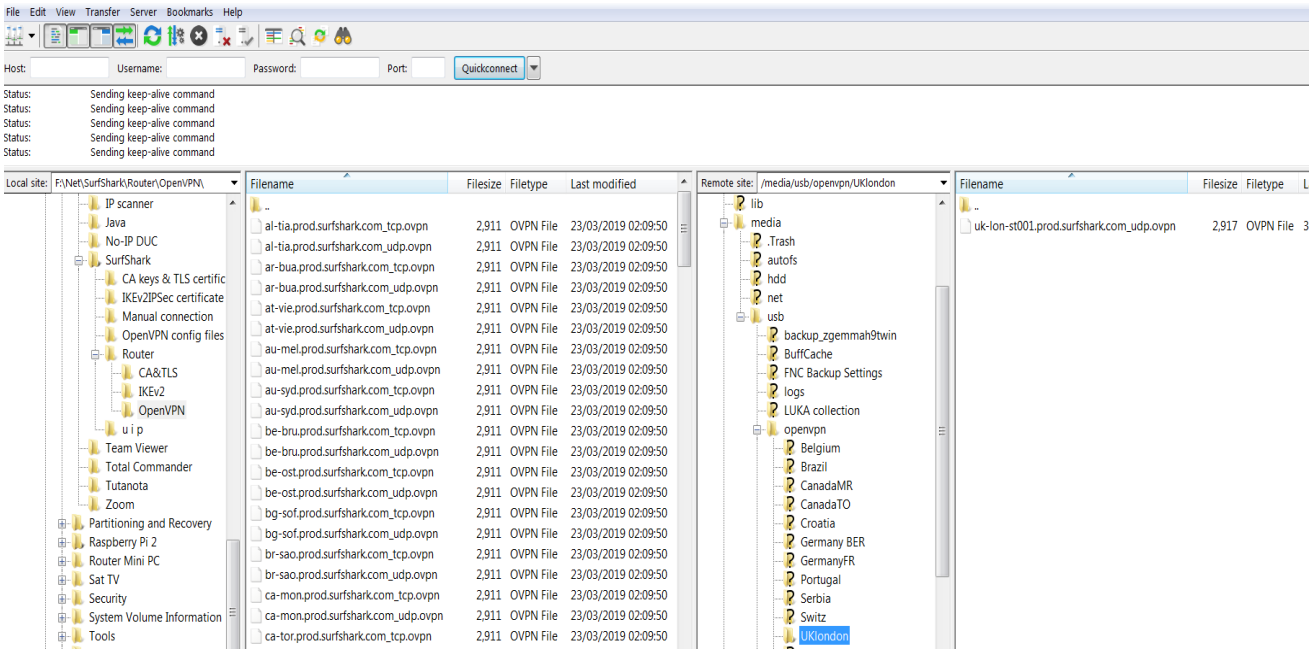
One must start FZC and enter one's STB, in order to **create a folder on a USB stick/SSD/mSD card which is connected to your STB (or one can even make it in one's "flash" but only if you have to) and name it** whatever you want, say **openvpn**, so it would be here, for instance: **media/usb/openvpn**

FileZilla Client is recommended as it has no problems connecting with Enigma2! (It works under Linux [say, Ubuntu, Mint, Debian etc.]), Windows, Mac, Android).

This is what FileZilla Client operation looks like while using PurE2:

How to connect your PC with your STB using FZC

Host = your STB's Home Network IP address (like: 192.168.xxx.xxx or 192.168.1.x)
User = root
Password = pure2
Port = 21
Press "Quick Connect" button.



On the left side is my PC folder tree and on the right is Enigma2 STB folder tree.

On the right side one navigates to where one wants to create a folder for one's Surfshark files, then right click on the folder > Make a new folder > give it a name > Enter button on your keyboard. Then, drag & drop the Surfshark's .ovpn files from your PC to your STB into that folder.

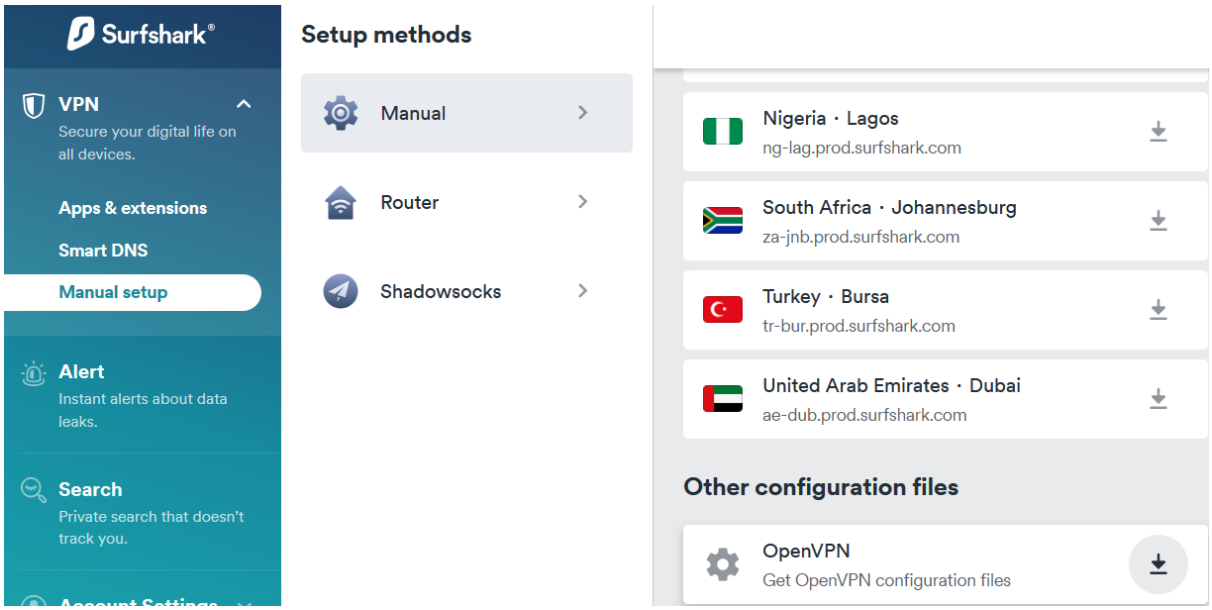
But first…

3) **Create subfolders** in that "**openvpn**" folder and name them accordingly, say: London, Berlin, Manchester, Sao, Frankfurt, NYC etc.: /media/usb/openvpn/London (or whatever you want to have as an option, create as many as you need).

4) **Choose .udp.ovpn files** given to you by your Surfshark VPN provider and move them to your newly created folders, one for each server/city into its specific folder.

Alternatively, one can simply make the **openvpn** folder on one's PC, prepare it fully, with all the sub-folders, each containing an .ovpn file > and then transfer ("FTP") the whole lot to the STB by "drag & drop" to your /media/usb folder (see my screenshot above, as to what it should look like).

One can get them/download the .ovpn files here > look at the bottom right corner:



5) Now, having successfully done all that, go to:

MENU > Plugins > VPN Manager > MENU > change the following settings:

-Save directory config > find/navigate to the main openvpn folder (where your folders with .ovpn files are) by pressing OK and going up and down and pressing the OK button - until you find where you put it, then press the SAVE button (it should be something like this: **/media/usb/openvpn/** - see the screenshot I put below)

-OpenVPN autostart > yes

-**VPN username** > (as explained, Surfshark is specific here, you need to put in the ones they gave you for manual settings, not your email and password you chose!)

-**VPN password** > (as above)

Have a look what I did below:

If Surfshark username and password for manual setup are too difficult to do via RCU, then use FZC to FTP to your box and go to:

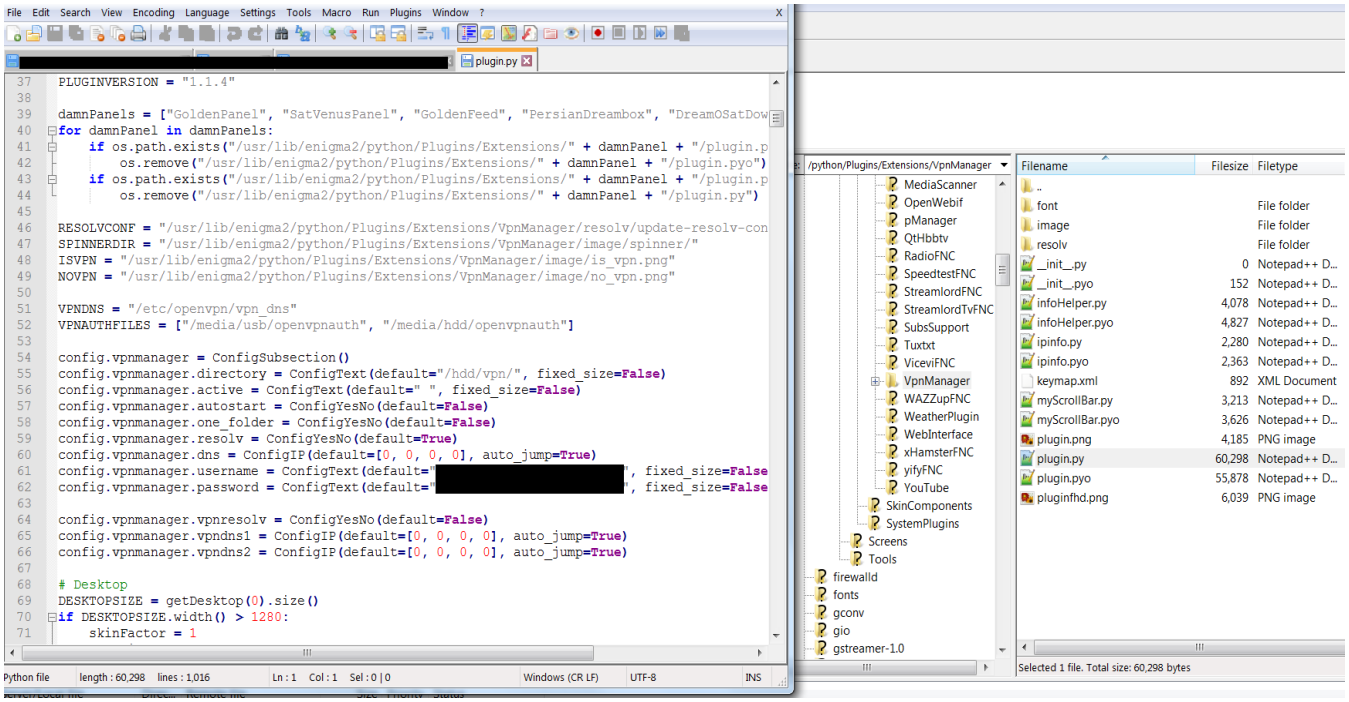
/usr/lib/enigma2/python/Plugins/Extensions/VpnManager > right click on **plugin.py** and choose **View/Edit** (use **Notepad++ for editing**).

In lines 61 and 62 **copy and paste your username and password** where you see XXXXXXXXXXXXXXXXXXX below:

config.vpnmanager.username = ConfigText(default="XXXXXXXXXXXXXXXXXXX", fixed_size=False)

config.vpnmanager.password = ConfigText(default="XXXXXXXXXXXXXXXXXXX", fixed_size=False)

It looks like this, editing the .py file, using FZC (on the right) and Notepad++ (left):



File > Save and exit. Confirm the change, if asked. Close FZC. **Restart E2.**

6) Open VPN Manager by pressing MENU on your RCU > Plugins > VPN Manager and note your normal IP address, internet provider, speed etc.

Now, choose which server you want to be on and press OK button on your RCU.

If you wait a bit, after connecting to a VPN server, you will be able to see your new and OpenVPN encrypted IP address, speed etc.

Alternatively, in PurE2 go to MENU > pManager > Network > General network info > see if you are on a VPN... (in Surfshark you have to have 10.x.x.x address, amongst others...)

Also, check your speed using MENU > FNC PurE2 plugins > Speedtest-FNC > OK, then OK again...

gorski

PurE2 home, primarily German and English languages:

http://www.hd-digital-satcrew.com/forum/index.php?page=Index

Balkanic forum (Serbo-Croat): http://www.dream-sat.info/smf/index.php

Scandinavan forum (Viking and English lingos, mainly): http://dream-zone.dk/forum

An international forum: https://www.linuxsat-support.com/ with a whole PurE2 dedicated section: https://www.linuxsat-support.com/board/1549-pure2-image-team/