

https://hoi-polloi.org

# **VPN** services for journalists

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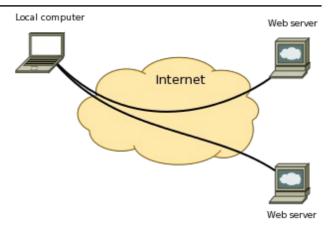
## Introduction

The website hoi-polloi.org is primarily providing services for hacktivists – but is trying to be helpful to all people who are dedicated to freedom of information, freedom of communication and expression, free speech and informational self-determination. This includes VPN services for journalists that work in or travel to countries that do not honor the above values.

## What is a VPN ?

Normally you connect directly from your local computer to servers on the Internet (e.g. web servers); so anyone from your ISP¹ that connects you to the Internet via WiFi or cable connection up to the web server operator can "see" your traffic – and every carrier in between that transports your traffic.

In countries where the access to certain Internet servers is either blocked (or just monitored) this "visibility" is the problem: Anyone along the connection from your local computer to the web server can either block, filter or monitor your activities. So you may want a method to hide your traffic, so that this intervention becomes impossible.

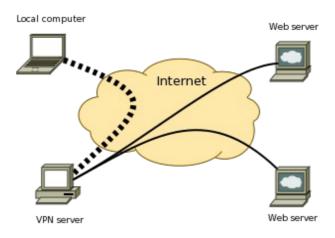


The solution to this problem is to use a VPN (Virtual Private Network). Originally designed to link separate private networks (of a company) over the Internet in a secure way, VPNs can also be used to hide your traffic from anyone along the line to the VPN server.

You connect to a VPN server first, and than all your Internet traffic will be redirected to the VPN server over an encrypted tunnel (so no one can snoop on your Internet traffic).

The VPN server will forward your traffic to the Internet servers on your behalf. If the VPN server is located in a jurisdiction that does not censor Internet traffic, you can easily access web servers even if your local computer is in a jurisdiction that does not allow access to such web servers.

You can use a VPN for any Internet activity you desire: web browsing, email exchange, instant messaging or any custom application that utilizes



the Internet. For you as a user the whole process is completely transparent once the VPN connection is established.

The following sections will help you setup the VPN software on your computer.

## **JoDi VPN Client Installation**

The following steps describe how to install a VPN client software on your computer and to configure the VPN client to work with the JoDi server.

First you have to plug the USB stick into your computer and open the device in a file browser (depending on your operating system this usually happens automatically).

You should see three folders on stick; one for each of the supported operating systems: Linux, MacOS and Windows. Each of these folders contains all files needed to install and configure the client installation.

The root directory of the USB device will contain the PDF version of this document.

<sup>1</sup> Internet Service Provider: the company that owns the network infrastructure you are using on your end

## **Disable IPv6**

The current version of the VPN server can only handle IPv4 traffic; if your network connection is using IPv6 (too), you can run into serious trouble as the IPv6 traffic is routed and therefore not anonymized by the VPN.

Until the VPN server can handle IPv6 traffic we strongly advise you to turn off IPv6 during a VPN session!

#### **Windows 7 and Vista**

- 1. From the *Start* menu, select *Control Panel*. Make sure you are in the *Large or Small icons view* (Windows 7), or *Classic View* (Vista).
- 2. Open Network and Sharing Center.
- 3. On the left, select Change adapter settings (Windows 7) or Manage network connections (Vista).
- 4. Right-click the connection for which you want to disable IPv6, and select *Properties*.
- 5. Uncheck Internet Protocol Version 6 (TCP/IPv6) and click OK.

#### Mac OS X

In Mac OS X, you'll need to disable the IPv6 protocol both for your Ethernet card (wired connections) and for AirPort (wireless connections):

- 1. While logged into an account with administrative privileges, from the Apple menu, select *System Preferences*....
- 2. In System Preferences, select Network.
- 3. Click Ethernet and then click Advanced....
- 4. Click the *TCP/IP* tab, and from the pull-down menu next to "*Configure IPv6:*", choose *Off* or *Link-local only*. Click OK.
- 5. Click Wi-Fi or AirPort and then click Advanced....
- 6. Click the *TCP/IP* tab, and from the pull-down menu next to "*Configure IPv6:*", choose *Off* or *Link-local only*. Click OK.

## Linux (Ubuntu, Debian and many other)

- 1. Right-click on the network status icon in the status bar.
- 2. Click on Edit Connections
- 3. Select the active connection for Internet access and click Edit.
- 4. Go to the IPv6 Settings tab
- 5. In the *Method* dropdown, choose *Ignore*.
- 6. Click on Save.

## **Install Client Software**

First install the VPN client software for your operating system. You have two options:

- Use the installation programs provided on the USB stick (recommended for most users)
- Download and install the client software from the OpenVPN project website:
   https://openvpn.net/index.php?option=com\_content&id=357

### **Mac OS X**

#### **Installation of Client Software**

This section describes how you can install the VPN client software called **Tunnelblick\_3.3.dmg** from the USB stick on your MacOS system. You don't have to be logged in as administrator, but you need the administrator password to successfully install the VPN software. If you do not have such password ask your IT department to install the software for you.

You might also want to check for newer versions of the software or versions suitable for your MacOS release at the VPN project website (https://code.google.com/p/tunnelblick/). It I likely that this installation manual will also work for newer versions of Tunnelblick (Version 3.3 is being deployed on the USB stick you have received).

Insert the USB stick into your computer. A new device should appear and you should see a PDF document (this text) and some folders. Change to the MacOS folder. You will find two entries in the folder: a sub-folder called "JoDi.tblk" and an installation image for Tunnelblick.

Start the installation archive named **Tunnelblick\_3.3.dmg** by double-clicking on the Tunnelblick icon in the folder. An installation start-up screen will appear. Double click the Tunnelblick icon on this screen to start the installation.

(If you want you can read the documentation on the Tunnelblick VPN software before by clicking on the documentation button.)

You have to provide the administrative account credentials (username and password) to install the application on the harddisk. If unsure, ask your IT department or support desk for help during the installation.



After the installation is complete, you can start the Tunnelblick VPN application by clicking on the "Launch" button.

The application will display a little "tunnel" icon in the system tray (upper menu bar on the right side; close to the time display and search icon).

If this is the first time installation of Tunnelblick, the application will ask you for a setup; please select the "Quit" button (most left button), because we have prepared setups for you to use directly.

The installation image is still opened on the desktop. Drag it to the waste bin, to "eject" the image.

Open or activate the window with the "MacOS" folder from the USB stick again. Now double-click on the folder item "JoDi.tblk"; this will install the JoDi VPN settings you need to connect to our service.

You will be asked if the VPN configuration will be installed for all users or just for the account that is currently looged in. Choose whatever you like; if unsure, select "Only me".

You need to provide the credentials (username password) to install the configuration; if you have chosen "All users" you must provide the administrative account credentials; if you install only for yourself, provide your username and password in this dialog.

Whenever you connect to VPN service, your local IP address should change; this indicates a successful VPN connection. Tunnelblick can check for the IP address change automatically after a connection; we recommend to select the "Check for change" option here.



Tunnelblick can check for newer versions of itself automatically and ask you for an update. Since newer versions often fix security problems, it is recommended to chose the "Check automatically" option here.



### **Running the Client Software**

When you login to your account at a later time, you can check if Tunnelblick is running by looking for the "tunnel" icon in the upper menu bar on the right side. If you can't find it, Tunnelblick is probably not running. Press \mathbb{H}-A to list all installed applications on your MacOS and double-click on the "Tunnelblick" application in that list. You should now see the icon in the upper right of your desktop.

Click on the "tunnel" icon an a short menu will pop up. You can now select "Connect JoDi" to connect to the hoi-polloi.org VPN server.

Tunnelblick will start to establish a connection to the hoi-polloi.org VPN server; while the connection is being established, the display will show yellow messages.

Once the connection is established successfully, the current status of the Tunnelblick connection ill be displayed in green.

You will see the amunt of data that has been exchanged over the VPN tunnel since its creation.



You can now use your normal applications like web browser or email to access content on and over the Internet. Every packet is routed over the encrypted VPN tunnel, so anyone snooping on your connection (by monitoring the WiFi access point or the cable router you use) will not be able to see, block or filter your Internet connection.

If you are done using a VPN tunnel, click on the "tunnel" icon in the upper menu bar to the right; in the popup menu select "Disconnet JoDi".

You can later reconnect at any time.

One your are done completely, you can "Quit Tunnelblick" as well – but this step is optional and not necessary. Just log out from your account will terminate any VPN connection still active.



#### **Windows**

#### **Client Software Installation**

To install the OpenVPN GUI application on your Windows computer, you need administrative rights. We recommend to login as Administrator for the installation process.

Insert the USB stick and select the "Windows" folder. You will find some configuration files (to be used later) and two executable installer programs.

Double-click the installer you need for your version of Windows (either 32-bit or 64-bit). If unsure, select the 32-bit version.

The installation starts with an intro dialog; click "Next" to proceed to the license agreement.

Read the agreement carefully and click "I agree" to continue.

A component selection dialog will appear; you don't have to change anything here – just press "Next" to continue the installation.

The next dialog let you choose the install location; confirm the default location proposed by the installer by pressing the "Install" button.

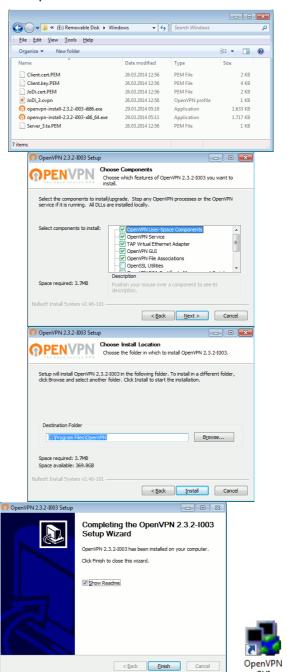
During the installation process you will see a log window, where the current install activity is displayed.

Once the installation is complete, you can show a README file that explains further details about the OpenVPN GUI client software.

Close both windows when done; you have now successfully installed the software.

You should see a "OpenVPN GUI" icon on your desktop.

As administrator, double-click the desktop icon "OpenVPN GUI"; a small icon (with read screens) should appear in the system tray. Right-click the and select "Exit" in the popup menu.





GUI

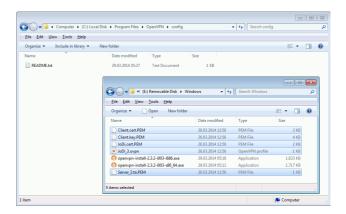
### **Configuring the Client Software**

Open the Windows Explorer and go to the OpenVPN configuration directory at

"C:\Program Files\OpenVPN\config"

Open the Windows folder on the USB stick and select all configuration files in it. Copy the selected files to the OpenVPN config folder by dragging them with the mouse (left-click drag).

You can now logout as administrator.

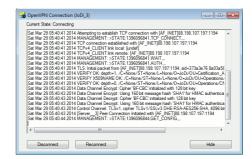


#### **Running the Client Software**

Log into your user account and start the OpenVPN GUI application by double-clicking on its desktop icon. Right-click the icon in the system tray and select "Connect" from the popup menu.



A log window will pop up and show messages for the connection process. Once the connection is established, the window will close automatically and the icon in the system tray will show green screens.

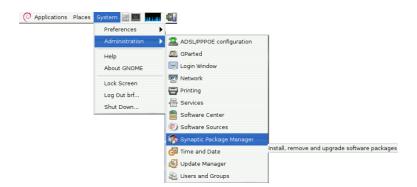


To close a VPN connection, right-click on the icon in the system tray and select "Exit" from the popup menu.

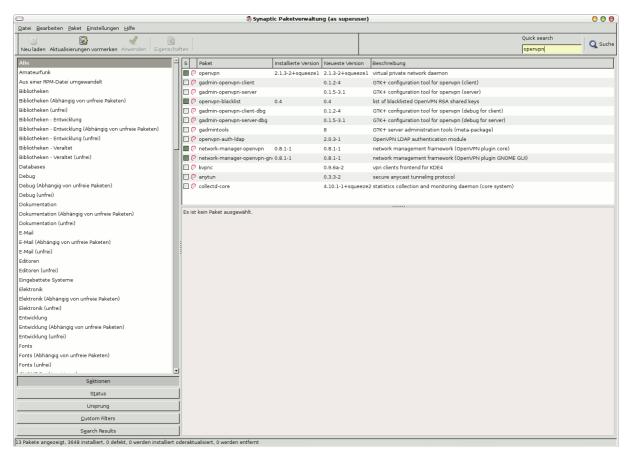
## **Linux (Ubuntu, Debian and many other)**

#### **Installation of the VPN Client Software (openupn)**

The client software is not available on the USB stick but should be installed from the openvpn package bundled with your Linux distribution. Use the package manager of your choice (we use the "Synaptic Package Manager" in this example; this is available under Debian, Ubuntu and many other Linux distributions):



Install the "openvpn" package (and its dependencies like the network manager applet for openvpn):



(If you want to install and compile openvpn yourself, go to the project download website at <a href="http://openvpn.net/index.php/open-source/downloads.html">http://openvpn.net/index.php/open-source/downloads.html</a>)

### **Configuring the Client Software**

Click on Network Manager icon in the system bar and select "Configure VPN" in the "VPN Connections" menu entry.

Click on "Import" to install the JoDi VPN configuration.

Browse to the "Linux" folder on the USB device and select the file "JoDi.ovpn". Click "Open" to start the import of the configuration file.

Once the import has finished, a list of configuration options is displayed. You don't need to change anything here.

Click on "Apply" to store the configuration for later use.

(See Appendix A.1 on how to improve security of the VPN connection by using Tor.)









### **Running the Client Software**

Use the Network Manager (click on icon in system bar) to activate a VPN connection; the connection symbol will show an animation while connecting to the JoDi server and a new connection icon once the VPN connection is established:











No VPN connection

Establishing VPN connection

VPN connection active