



OpenVPN using macOS: *Tunnelblick*

The Charité VPN service is based on *OpenVPN* which is available for a multitude of operating systems. **Tunnelblick** is used on the macOS.

Downloading the Programme and Installation

After your VPN request has been processed, you will receive a confirmation email with various links to software and documentation as well as a second email with a link to your *personal configuration file*.

Please note the instructions regarding the password from the access notification: **Users without a Charité email account** will first have to set a password in the password front end (<https://zugang.charite.de>). Only then can you use the VPN service.

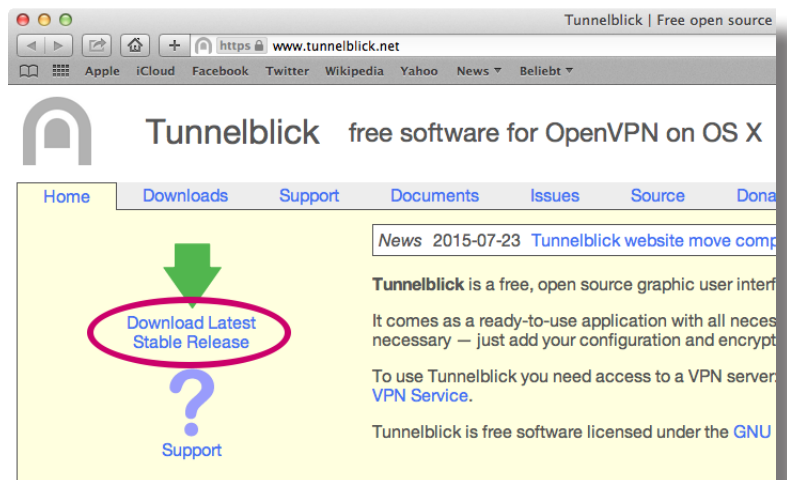


Fig. 1 Tunnelblick site

Using your web browser (*Safari, Firefox or Chrome*) call up the Tunnelblick site <https://www.tunnelblick.net> and click on the green arrow *Download Latest Stable Release*, fig. 1 (current in March 2022: **Tunnelblick 3.8.7a**). The programme is stored in the *dock's download folder* or –depending on the browser used – displayed as an open *disk image* on your desktop, fig.2. Double-click to open the disk image if not yet opened.

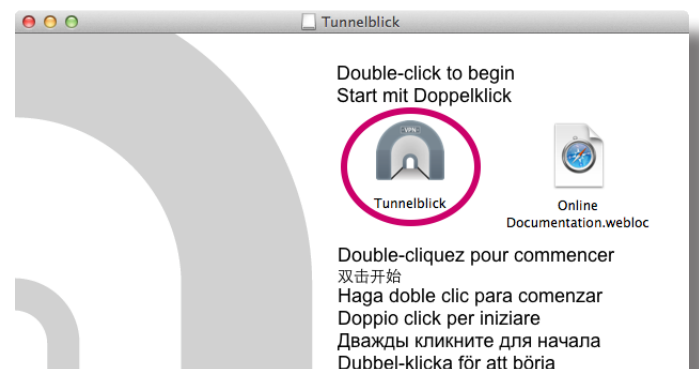


Fig. 2 Tunnelblick package after download

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Setting up the programme and configuration

Tunnelblick carries out the installation when you double-click the icon in disk image as requested, *fig. 2*. Then as is usual for macOS, a warning appears for programmes downloaded from the internet, *fig. 3*. Confirm this with (Öffnen) and the next window appears. You have to enter a **local user name** with administrator privileges, *fig. 4*, not your OpenVPN user name! In a few seconds, the installation is complete and the window as in *fig. 5* appears. Now let Tunnelblick Run (Ausführen), as only then can the installation be completed.

Should you have mistakenly clicked Exit (Beenden), Tunnelblick can also be re-started from the folder *Programme* and continued from the same point. Now the Tunnelblick configuration data is required, *fig. 6*. You have received a link to your personal configuration file by separate e-mail from the VPN staff, *fig 7*. Depending on the e-mail programme you used (*Apple Mail* or *Outlook*), the file will be stored in a specific location, generally in the *Downloads* folder. Now double-click on *charite-xyz.ovpn* (xyz being your standard user name) in the *Downloads* folder to install the configuration within Tunnelblick.



Fig. 3 Warning before first start

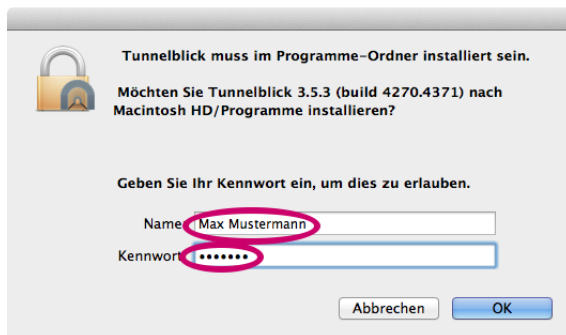


Fig. 4 Installation confirmation



Fig. 5 Start after installation

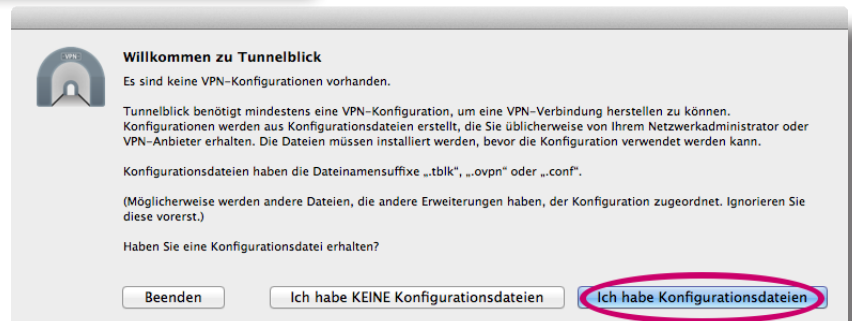


Fig. 6 Install configuration

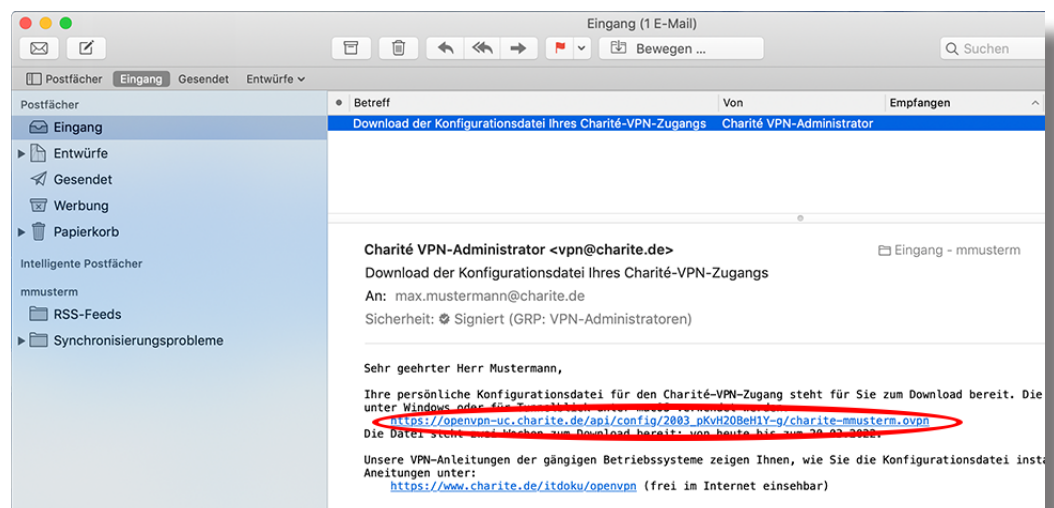


Fig. 7 Email with a link to pers. configuration file

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You will be asked if the configuration should be available to all users (*Alle Benutzer*) or just the current user (*Nur für diesen Benutzer*), *fig. 8*. Select the latter one.

To permit the installation of the configuration you have to enter a **local user name** with administrator privileges, *fig. 9*, not your OpenVPN user name!

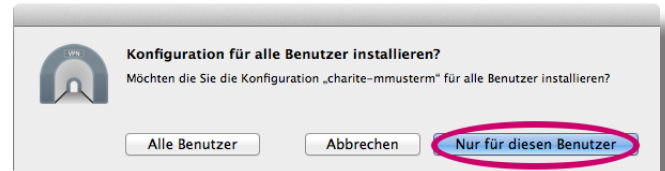
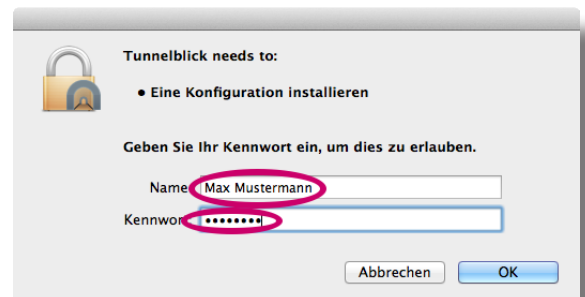


Fig. 8 Configuration for actual user only

Connection to the Charité network

Tunnelblick is running and ready for use and will be started automatically whenever you log in to macOS.

The programme start is relatively unspectacular: the gray tunnel icon appears on the top right of the menu bar, *fig. 10*. Click on the icon and a drop-down menu allows you to make a connection. **Please note:** Should you have problems using Tunnelblick please send us the programme report that appears in the *VPN Details...* window, *fig. 11*. Only then can the VPN administrator understand the problem and help you.



Ab Fig. 9 Installation confirmation

Now select „charite-xyz” (xyz being your standard user name) from the drop-down menu to connect with the Charité network. Tunnelblick then requires authentication by user name and password, *fig. 12*. Use the information provided to you by email: your standard user name in the Charité and the appropriate VPN password.

If the authentication is accepted, the tunnel symbol in the menu bar changes to a black silhouette after a blinking phase, *fig. 13*. You are now connected to the Charité network.

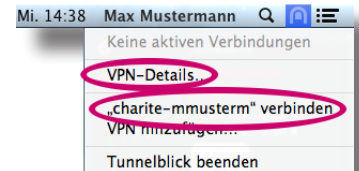


Fig. 10 Drop-down menu



Fig. 11 Details window (short version)

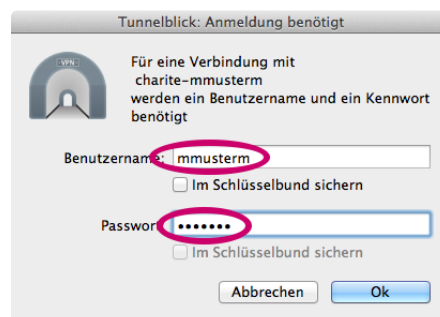


Fig. 12 OpenVPN registration



Fig. 13 Connection OK

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Access to the Internet while the Tunnelblick connection is active

Please note: This section concerns Charité members only (users with a Charité e-mail account). External users are not authorized to use the Charité Internet Proxy.

Your Mac is now virtually connected to the Charité network. Like all computers on the Charité network, it must use the Charité Internet Proxy to access the Internet and thus gives you access to subscribed e-media (books and journals) - as long as the Tunnelblick connection is active. You will find the settings for using an Internet Proxy in *Safari* under *Preferences* → *Advanced* → *Proxies*. It is actually a macOS function as *System Preferences* → *Network* (*Systemeinstellungen* → *Netzwerk*) is opened. Click the option *Auto Proxy Detection* (*Automatische Proxy-Entdeckung*), fig. 14. You can now, without having to change the configuration, surf with or without Tunnelblick. For *Firefox*, the corresponding setting is *Auto Detect Proxy Setting* (*Die Proxy-Einstellungen für dieses Netzwerk automatisch erkennen*) and should be enabled by default. Please refer to the *Firefox* menu under *Settings* → *General*. There, under *Connection Settings*, click on *Settings*.

Please note: The browser retrieves the automatic proxy configuration on startup only. This means that you need to restart the browser after connecting or disconnecting from the VPN! Please note, that some programmes have their own proxy settings (like *Reference Manager* et. al.). Please set these accordingly if the programme have no internet connection.

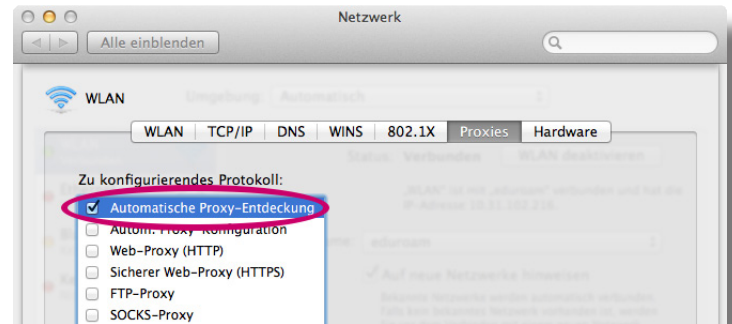


Fig. 14 Auto Proxy Detection

Testing the OpenVPN Connection

<http://vpntest.charite.de> provides a one-stop web service to check if the VPN connection is working properly. Three green dots indicate a fully operational VPN, fig. 15. In case of errors you'll be given hints on what might be wrong and how to fix it. **Users without a Charité email account** will in general get a red dot on test #3 as they lack the authorization for using Charité proxy.

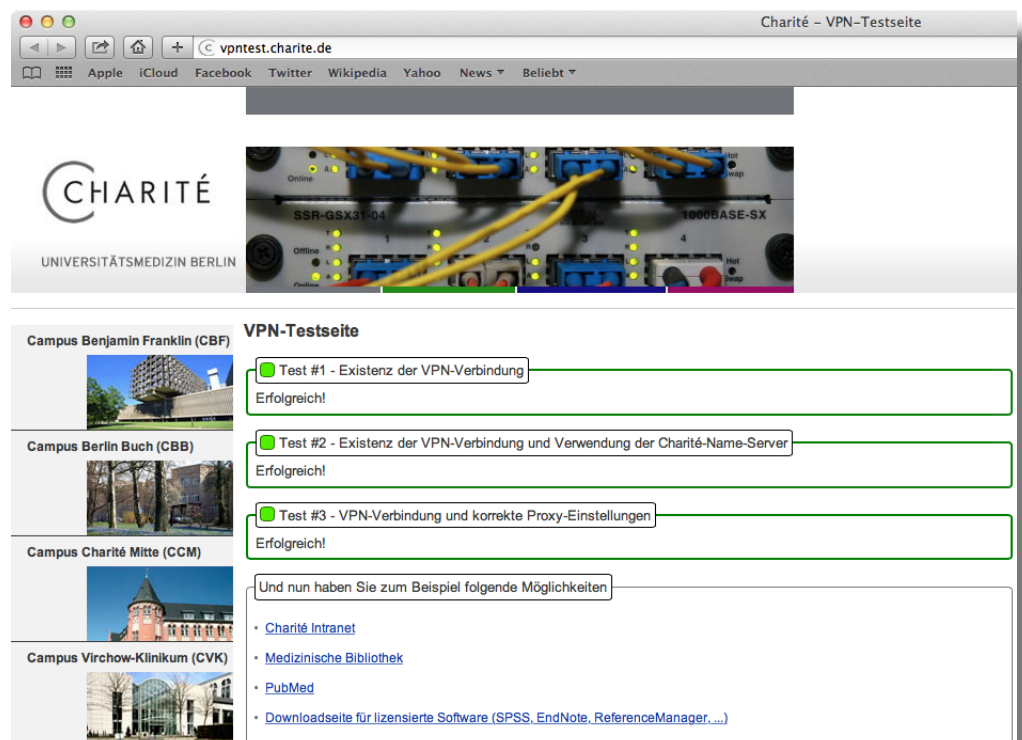


Fig. 15 Website <http://vpntest.charite.de>