

e·quinux



# VPN Configuration Guide

AVM FRITZ!Box

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# Welcome!

This configuration guide and the VPN Wizard are the easy way to set up a VPN connection to your IPsec VPN capable FRITZ!Box device with VPN Tracker.

## About this Guide

This configuration guide is intended as a supplement to the documentation included with your FRITZ!Box device and to the VPN Tracker manual, it cannot replace them. If you have no experience with VPN yet, please also read the introductory chapters on VPN and on using VPN Tracker in the VPN Tracker manual.

You'll find the VPN Tracker manual directly in VPN Tracker (Help menu) or on the [VPN Tracker support website](#).

## FRITZ!Box Configuration

There are two different ways of configuring your FRITZ!Box and VPN Tracker:

1. **Using the VPN Wizard supplied by equinux:** The VPN Wizard is an OS X application that creates a configuration file for your FRITZ!Box and a matching VPN Tracker configuration. Optionally, it can also create a configuration for accessing your FRITZ!Box through iPhone or iPad.
2. **Using the configuration software supplied by AVM:** A Windows-based VPN configuration tool is available from AVM. Use this tool for more complex setups. You can then create a matching setup in VPN Tracker using the AVM FRITZ!Box device profile.

**This configuration guide covers only the VPN Wizard.**

## Technical Support

If you have any questions our technical support team is available to help. Contacts and further information is available on the technical support website:

<http://www.vpntracker.com/support>

# Prerequisites

A few prerequisites must be met in order to establish a VPN connection to your FRITZ!Box.

## Your Mac

- ▶ The configuration described in this guide requires VPN Tracker 7. Make sure you have all available updates installed. The latest VPN Tracker updates can be obtained from <http://www.vpntracker.com>
- ▶ You also need the VPN Wizard for configuring your AVM FRITZ!Box. The VPN Wizard download can be found at <http://www.vpntracker.com/interop>.

## Your FRITZ!Box

- ▶ A FRITZ!Box with a modern IPsec VPN-capable firmware is required. This guide is based on FRITZ!OS 05.51. You can find information about the VPN capabilities of various FRITZ!Box models on the AVM VPN Portal website.
- ▶ Your FRITZ!Box needs to be connected to the Internet.
- ▶ Your FRITZ!Box needs to have a fixed public IP address or have its dynamic IP address registered with a dynamic DNS provider. Suitable providers are AVM's [MyFRITZ!](#) service or [DynDNS](#).

## Setting up Dynamic DNS with MyFRITZ!

To get started, register your FRITZ!Box for the MyFRITZ! service. To register, access your [FRITZ!Box's configuration web interface](#) and go to Internet > MyFRITZ!.

Once you've completed the registration, retrieve the – slightly cryptic – host name that MyFRITZ! has assigned to your FRITZ!Box:

- ▶ Access your FRITZ!Box's configuration web interface.
- ▶ Go to **Internet > Permit Access > FRITZ!Box Services**.
- ▶ Check the box **Internet access to the FRITZ!Box via HTTPS enabled**.
- ▶ Locate the address line ending in .myfritz.net and write it down the hostname (without the leading https://) as ❶ on the configuration checklist on the next page.

The screenshot shows the 'Permit Access' configuration page for a FRITZ!Box. On the left is a navigation menu with options like Overview, Internet, Online Monitor, Account Information, Filters, Permit Access (selected), MyFRITZ!, Telephony, Home Network, WLAN, DECT, System, Wizards, FRITZINAS, and MyFRITZ!. The main content area is titled 'Permit Access' and has two tabs: 'Port Forwarding' and 'FRITZ!Box Services'. The 'FRITZ!Box Services' tab is active. It contains a note about secure access via HTTPS, another note about IPv4 address accessibility, and a checked checkbox for 'Internet access to the FRITZ!Box via HTTPS enabled'. Below this, there is a text input field for the 'Address of your FRITZ!Box' containing 'https://xaobefqt3xqff81vw.myfritz.net' and a radio button for 'or' followed by 'https://203.0.113.83'. A red circle highlights the hostname 'xaobefqt3xqff81vw.myfritz.net'. At the bottom right are 'Apply' and 'Cancel' buttons.

- ▶ Uncheck **Internet access to the FRITZ!Box via HTTPS enabled** again.



Do **not** apply the changes. We've only enabled the box to reveal the MyFRITZ! hostname.

# My FRITZ!Box Configuration

To use the VPN Wizard, you'll need a few settings from your FRITZ!Box. You'll find all the necessary information in your FRITZ!Box's configuration web interface.

## Public IP Address or Hostname of your FRITZ!Box

- ❶ Hostname (MyFRITZ!, DynDNS etc.) \_\_\_\_\_ or  
Static IP Address: \_\_\_\_\_.

## Home Network (LAN) of your FRITZ!Box

- ❷ LAN: \_\_\_\_\_ / \_\_\_\_\_.

A FRITZ!Box's default home network is 192.168.178.0/255.255.255.0. You'll only need to retrieve this setting if your FRITZ!Box is configured to use a different network. In that case you'll find the necessary information under Home Network > Network > Network Settings > IPv4 Addresses (with the "View" option set to "Advanced").

## Unused IP Address(es) on the FRITZ!Box's Home Network

- ❸ IP Address for VPN Tracker: \_\_\_\_\_  
❹ IP Address for iPhone/iPad VPN: \_\_\_\_\_ (optional)

VPN Tracker requires one (two if you're also connecting with iPhone/iPad) unused IP addresses from the home network. You can use any free IP address, or use the IP addresses suggested by the VPN Wizard if they're not in use on your network. You can review the IP addresses that are used on your FRITZ!Box under Home Network > Network > Devices and Users.

# Create Configuration Files

Once you've met all prerequisites and obtained the necessary configuration information from your FRITZ!Box, you're ready to run the VPN Wizard.

## Step 1: Start VPN Wizard



If you haven't done so already, please download the VPN Wizard for AVM FRITZ!Box, and open it by double-clicking its icon. You'll find the download at

<http://www.vpntracker.com/interop>

## Step 2: Connection Name

**Welcome!**

Welcome to the VPN Tracker Setup Assistant for AVM FRITZ!Box devices.

You'll be guided through the necessary steps to set up a secure connection to your home or small business network.

The assistant can create a connection for VPN Tracker, or for VPN Tracker and also for your iPhone/iPad.

Connection Name:

Also create a connection for my iPhone or iPad

- ▶ Enter an arbitrary name for the connection.
- ▶ If you'd like, check the box to have the Wizard create a connection for your iPhone/iPad as well.

## Step 3: Passwords

**Passwords**

The VPN Wizard has automatically generated the following passwords for you. If you wish, you can customize them now.

**VPN Tracker Connection**

Pre-Shared Key:

**iPhone / iPad Connection**

Pre-Shared Key:

Username:

Password:

Password Complexity:

Show passwords

- ▶ The wizard auto-generated passwords for you. You can change them in this step if you like.
- ▶ You can also modify the suggested username for iPhone/iPad VPN connections.

## Step 4: Network Settings

**Network Settings**

The following settings need to match your FRITZ!Box's actual configuration. Please obtain your FRITZ!Box's public IP Address or host name, and check that the LAN network settings are correct.

[Open FRITZ!Box](#)

Public IP Address or Host Name:  ①

LAN Network / Mask:  /  ②

Virtual IP for VPN Tracker:  ③

Virtual IP for iPhone/iPad:  ④

Host to Everywhere ?

Go Back Continue

- ▶ Enter the public IP address or hostname of your FRITZ!Box ① (see also → *Prerequisites*)
- ▶ If your FRITZ!Box does not use the default home network 192.168.178.0 / 255.255.255.0, change the home network and mask accordingly ②.
- ▶ VPN Tracker requires an unused IP address from your FRITZ!Box's home network. Please check if the suggested IP address is unused and change it if necessary ③.
- ▶ A second IP address is required for an iPhone/iPad VPN. Please also check if that IP address is unused, and change it as necessary ④.
- ▶ To send your Mac's Internet traffic through the VPN (and not just traffic to the FRITZ!Box's home network), check the box "Host to Everywhere".

## Step 5: Check Configuration

The configuration is now complete. In the last step, you can double-check your settings, and print them if desired.

**Your Configuration**

This is your new configuration. If you want, you can print it for later reference before saving.

Connection Name: My VPN

Public IP Address / Host Name: xaobfe5qt3xqff81vw.myfritz.net

FRITZ!Box LAN: 192.168.178.0

Virtual IP for VPN Tracker: 192.168.178.201

Pre-Shared Key for VPN Tracker: \*\*\*\*\*

Virtual IP for iPhone/iPad: 192.168.178.202

Pre-Shared Key for iPhone/iPad: \*\*\*\*\*

Username for iPhone/iPad: charlie

Password for iPhone/iPad: \*\*\*\*\*

Show passwords

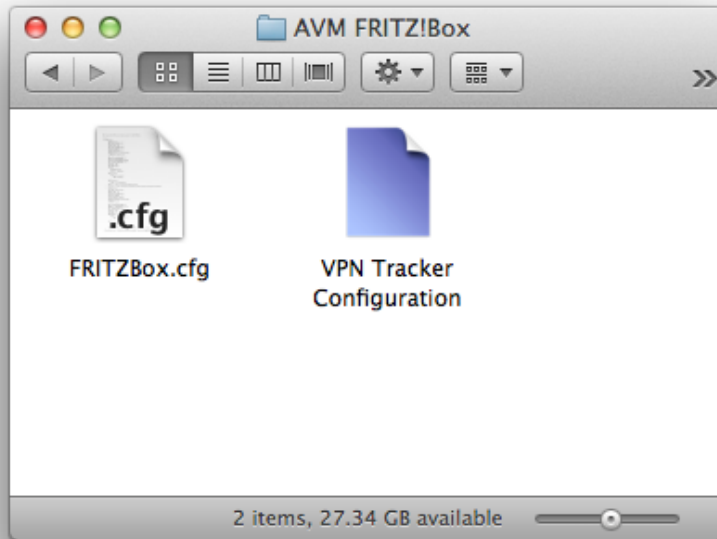
Print... Go Back Save...

When you're happy with the settings, click **Save** to create the configuration files for your FRITZ!Box and for VPN Tracker. The Wizard will save the files and open Finder to show them.



# Use the Configuration Files

Once the Wizard has created the configuration files, you'll need to upload the configuration to your FRITZ!Box and import it into VPN Tracker.

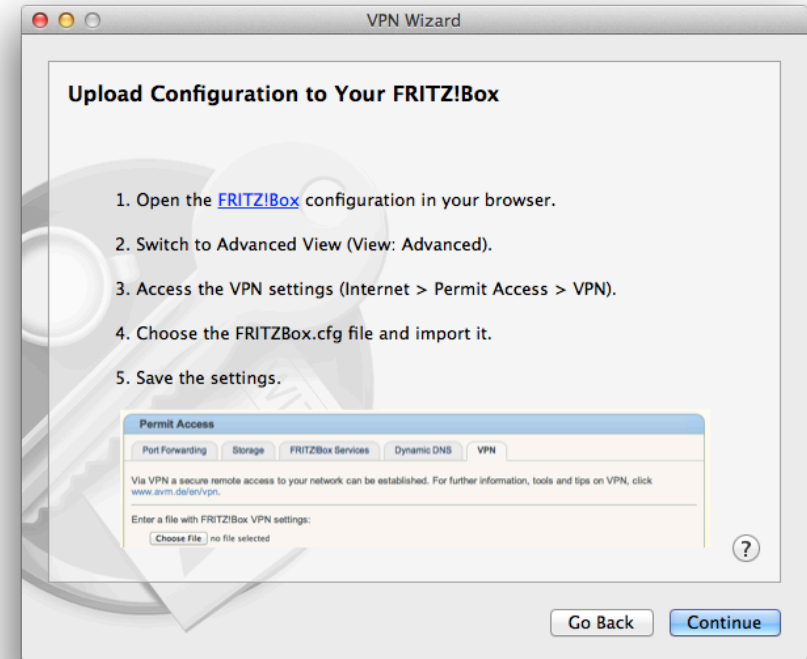


Switch back to the Wizard. You'll be guided through the steps of uploading the configuration and setting up VPN Tracker and your iPhone/iPad.



If you run into any difficulties during the following steps, don't worry. Your settings are saved, so you can resume uploading/importing them at any time.

# Upload Configuration to your FRITZ!Box

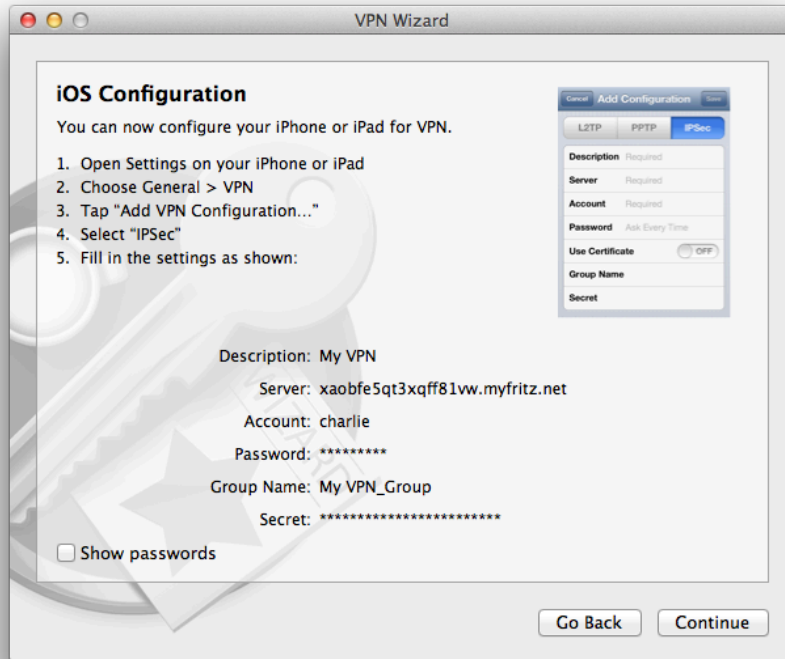


The first step is to upload the configuration to your FRITZ!Box.



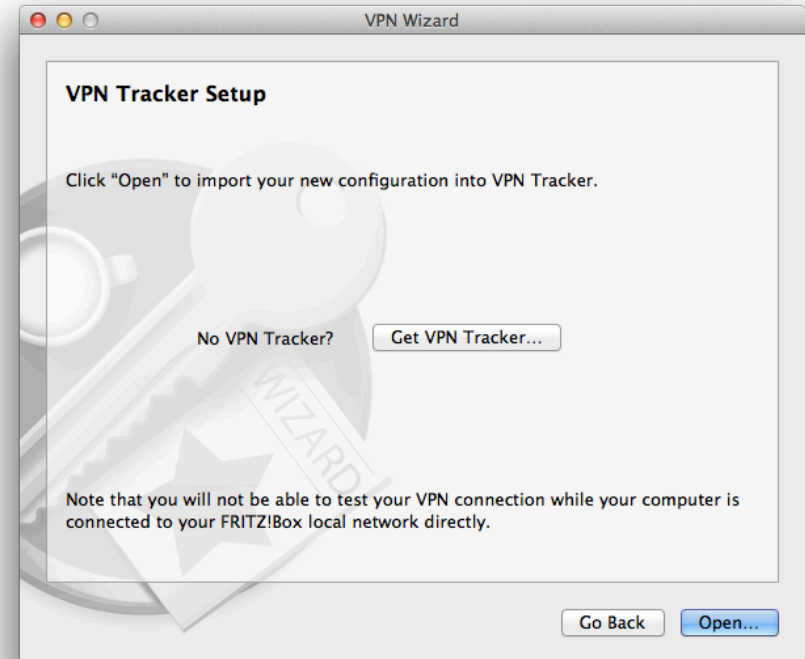
Make sure that your FRITZ!Box is running a current VPN-capable firmware. Set the FRITZ!Box **View** option at the bottom of the screen to **Advanced** instead of **Standard**.

## iOS Configuration



If you told the Wizard to create settings for your iPhone or iPad, it'll now show you how to set up your iPhone/iPad to your newly created VPN.

## VPN Tracker Configuration



The last step is to import the configuration into VPN Tracker. If you haven't downloaded VPN Tracker yet, you can do so at this time.

# Connect to your VPN

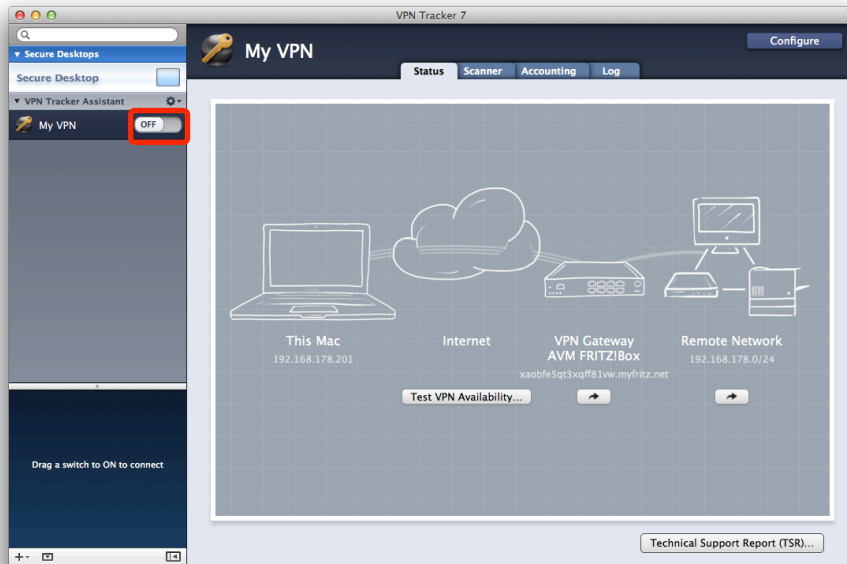
You're now ready to connect to your VPN. Simply click the On/Off slider in VPN Tracker.

## Further Information

The [VPN Tracker Manual](#) has additional details on using and configuring VPN Tracker. You'll also find troubleshooting tips, just in case.

Our technical support team is here to help. Visit the technical support website for contacts and additional information:

<http://www.vpntracker.com/support>



You'll need to be outside of your FRITZ!Box's home network to connect to your FRITZ!Box's VPN.