

## Configuring OpenVPN on Windows

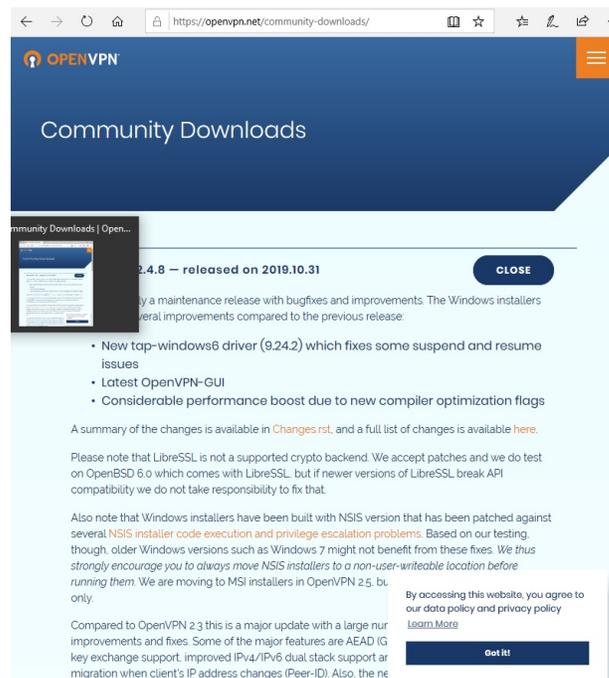
**Goal:** Connect your laptop to a VPN with the provided keys and configuration file.

Connecting to the office network remotely requires you to install the openvpn package and place the config files in the correct places. You can start and stop the VPN using simple commands at a terminal.

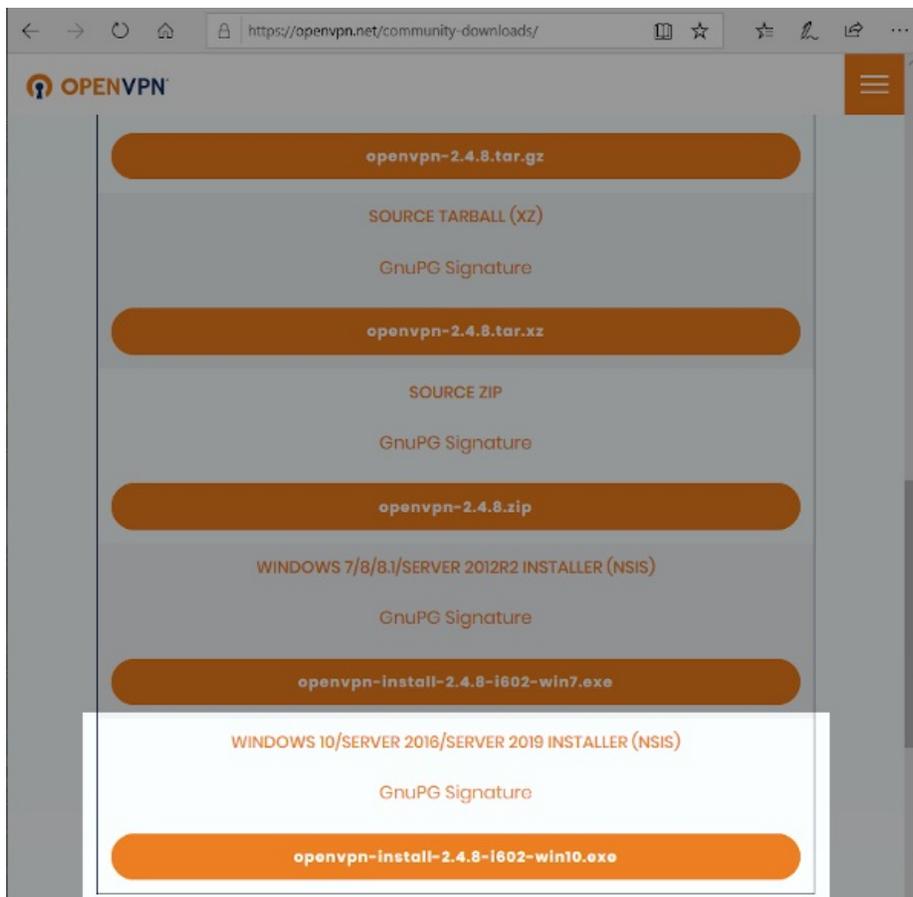
1.

### Install OpenVPN

2. Download and install the latest version of OpenVPN GUI on windows.

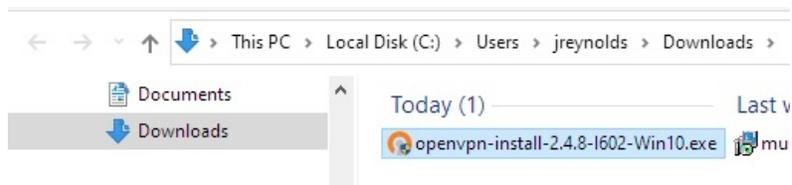


The list of packages to download is at the bottom of the page:

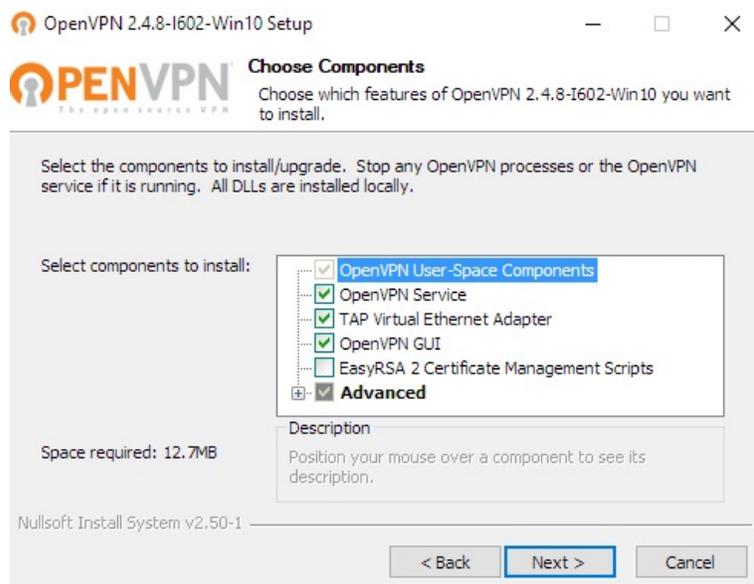


For more information see [Openvpn Community Downloads](https://openvpn.net/community-downloads/)

3. In your Downloads folder, double click to start the installer.

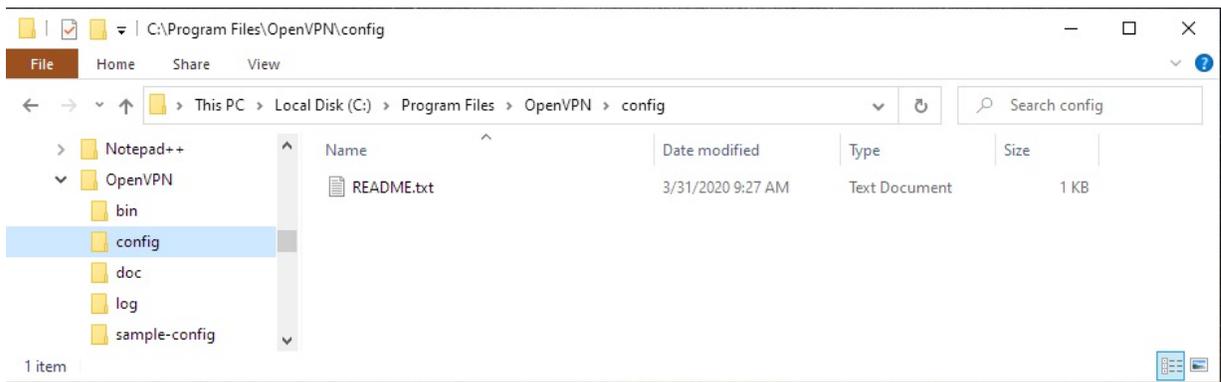


4. When the installer asks you what components to choose, you just need those necessary for being a client. You do not need to install the EasyRSA script package.



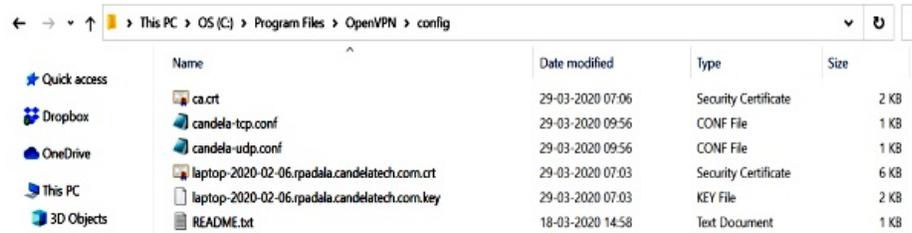
5. **Add your Config Files**

6. OpenVPN keeps configuration files in `C:\Program Files\OpenVPN\config`. Open this folder with Windows

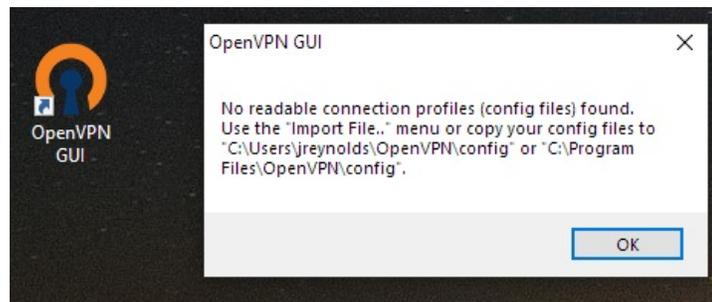


7. You should be provided with these files:
  - A. `ca.crt` ← This is the VPN server certificate
  - B. `your-laptop.key` ← This is your private key
  - C. `your-laptop.crt` ← This is your certificate
  - D. `candela-tech-udp.conf` ← The config file for establishing a UDP connection. This is the faster type of connection.
  - E. `candela-tech-tcp.conf` ← The config file for establishing a TCP connection. TCP OpenVPN connections do not perform as well, and are useful if you are in an environment that only allows outbound TCP port 443.

You will place these files in `C:\Program Files\OpenVPN\config`. you will probably be asked to give your password because the folder is owned by Administrator.



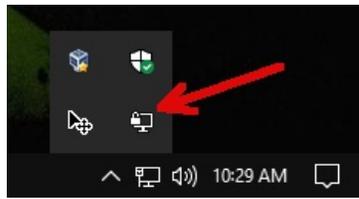
8. Double click the **OpenVPN GUI** icon. If you see a warning message about no configuration files found, we're about to fix that in the next step. Click **OK**.



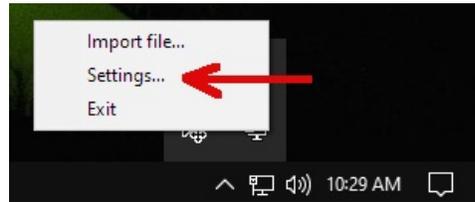
## 9. **Configuring OpenVPN**

10. When the OpenVPN software starts, it places an icon in the system tray.

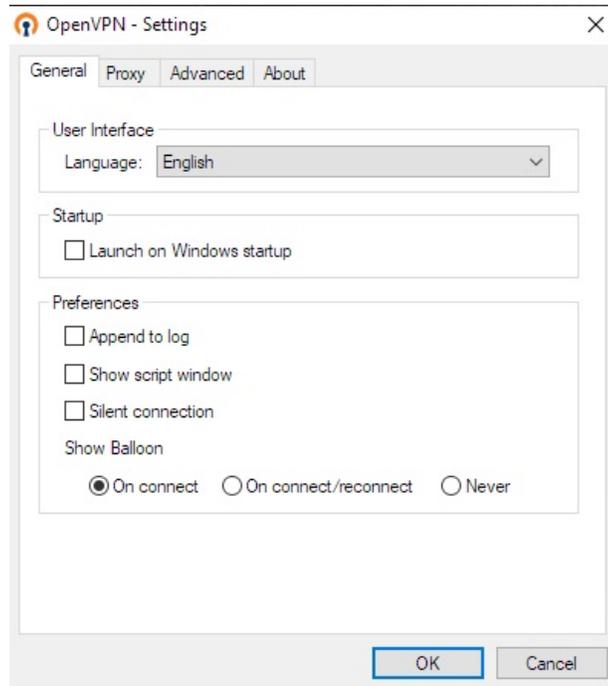
 Click on Taskbar up arrow  to see hidden taskbar items



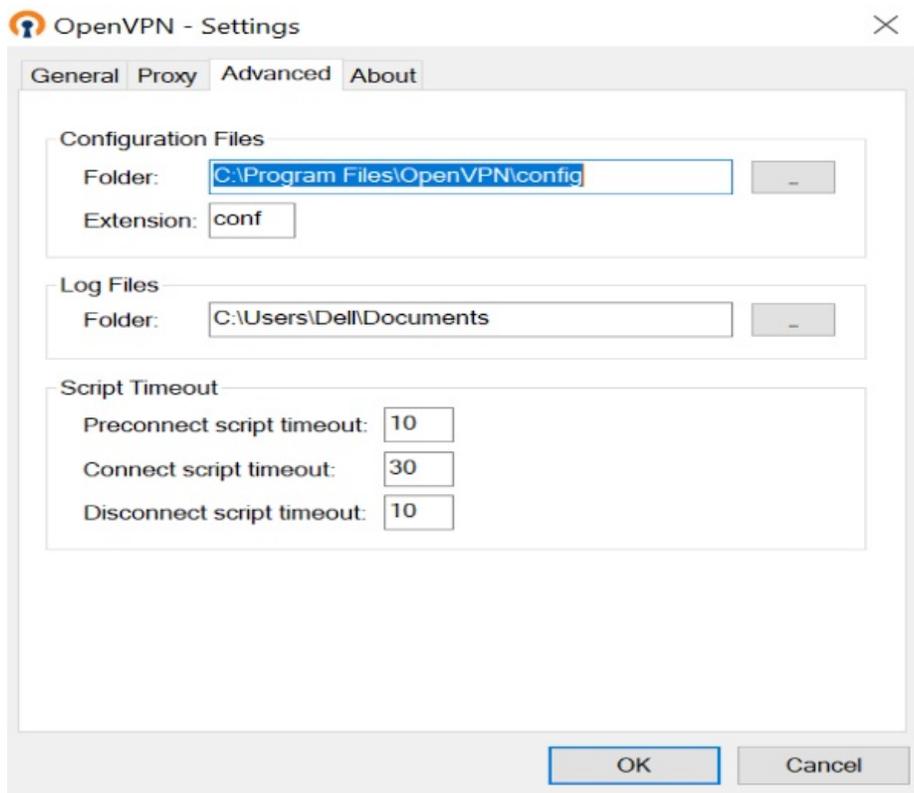
11. Right click the Screen with Padlock icon to see the menu. Select **Settings**.



12. You will see the Settings→General tab. Here you can set OpenVPN to start automatically if you desire.



13. Click on the Advanced tab. You will alter these settings:



- A. Change the Configuration Files→Folder value to where you saved your config files.
- B. Change the Configuration Files→Extension value to `conf`.
- C. Change the Log Files→Folder value to where you want to find your connection logs.
- D. Click **OK**

14.

## Editing your Config File

15. The `candela-udp.conf` configuration file is going to be formatted for a Linux machine. You will need to change the location of the certificates to absolute Windows paths.

**i** Backslashes `\` need to be escaped: `\\`

**i** Any paths with spaces need to be `"` double-quoted `"` ;.

```

C:\Program Files\OpenVPN\config\candela-udp.conf - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
candela-tcp.conf candela-udp.conf
1 #
2 # Candela openvpn
3 #
4 client
5 dev tun
6 proto udp
7 remote firewall.candelatech.com 1194
8 keepalive 5 120
9 resolv-retry infinite
10 persist-key
11 persist-tun
12 mute-replay-warnings
13 comp-lzo
14 nobind
15 verb 3
16 mute 5
17 ca "C:\\Program Files\\OpenVPN\\config\\ca.crt"
18 cert "C:\\Program Files\\OpenVPN\\config\\laptop-2020-02-06.rpadala.candelatech.com.crt"
19 key "C:\\Program Files\\OpenVPN\\config\\laptop-2020-02-06.rpadala.candelatech.com.key"
20 cipher AES-256-CBC
21
22 #
  
```

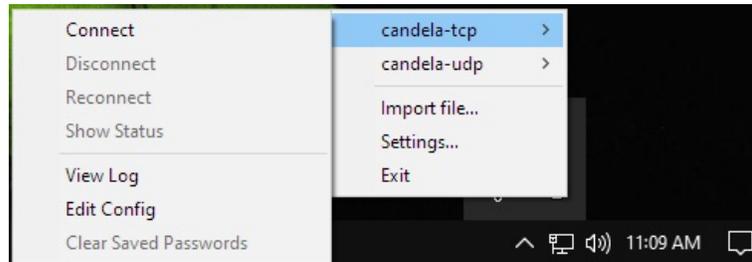
16. Here is an example file you can highlight and copy:

```
client
dev tun1
proto udp
remote firewall.candelatech.com 1194
#remote firewall.candelatech.com 443
script-security 2
resolv-retry infinite
nobind
persist-key
persist-tun
verb 3
ca ca.crt
cert "C:\\Program Files\\OpenVPN\\config\\laptop-dell.2019-08-13.jreynolds.candel
key "C:\\Program Files\\OpenVPN\\config\\laptop-dell.2019-08-13.jreynolds.candel
comp-lzo
cipher AES-256-CBC
```

17.

## Starting and Stopping the VPN Connection

18. After saving your config files, return to the taskbar to start an openvpn connection:



- A. Click on Taskbar up arrow 
- B. Right click on the Computer with Padlock
- C. Select your connection name
- D. Select Connect