

1.

# **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.

Install	Ope	nVPN
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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

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 no need to install the EasyRSA script package.

🕜 OpenVPN 2.4.8-1602-Win10 Setup				$\times$
<b>ΩPENVPN</b>	Choose Components Choose which features of OpenVPN 2.4 to install.	.8-I602-Wi	in 10 you v	vant
Select the components to install/upgrade. Stop any OpenVPN processes or the OpenVPN service if it is running. All DLLs are installed locally.				
Select components to instal	Select components to install: OpenVPN User-Space Components OpenVPN Service TAP Virtual Ethernet Adapter OpenVPN GUI EasyRSA 2 Certificate Management Scripts O Advanced			
Space required: 12.7MB	Description Position your mouse over a compon description,	ent to see	its	
Nullsoft Install System v2,50-1	< Back Ne	ext >	Cano	el

# Add your Config Files

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

📙   🛃 📑 🗧   C:\Program Files\	\Open\	/PN\config			_	×
File Home Share Vie	ew					~ 🕐
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\square$ $\Rightarrow$ This PC $\Rightarrow$	Loca	I Disk (C:) → Program Files → OpenVPN →	config	v Ö	O Search config	
> Notepad++	^	Name	Date modified	Туре	Size	
V OpenVPN		README.txt	3/31/2020 9:27 AM	Text Document	1 KB	
bin						
📙 config						
doc						
log						
sample-config	~					
1 item						

- 7. You should be provided with these files:
  - A. ca.crt  $\leftarrow$  This is the VPN server certificate
  - B. your-laptop.key ← This is your private key
  - C. your-laptop.crt ← This is your certificate
  - D. candelatech-udp.conf ← The config file for establishing a UDP connection. This is the faster type of connection.
  - E. candelatech-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*.

← → • ↑ 🖡 • ĭ	his PC > OS (C) > Program Files > OpenVPN > config			v 8 )
1 O ith umu	Name	Date modified	Туре	Size
	🖙 ca.ot	29-03-2020 07:06	Security Certificate	2 KB
Dropbox	andela-tcp.conf	29-03-2020 09:56	CONF File	1 KB
OneDrive	andela-udp.conf	29-03-2020 09:56	CONF File	1 KB
	🖙 laptop-2020-02-06.rpadala.candelatech.com.crt	29-03-2020 07:03	Security Certificate	6 KB
🍤 This PC	Iaptop-2020-02-06.rpadala.candelatech.com.key	29-03-2020 07:03	KEY File	2 KB
3D Objects	README.txt	18-03-2020 14:58	Text Document	1 KB

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.

<sup>i</sup> Click on Taskbar *up arrow*  $\Lambda$  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* $\rightarrow$ *General* tab. Here you can set OpenVPN to start automatically if you desire.

OpenVPN - Settings	×				
General Proxy Advanced About					
User Interface Language: English ~					
Startup					
Preferences					
Show script window					
Show Balloon <ul> <li>On connect</li> <li>On connect/reconnect</li> <li>Never</li> </ul>					
ОК Са	ncel				

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

n OpenVPN - Settings	$\times$
General Proxy Advanced About	
Configuration Files         Folder:       C:\Program Files\OpenVPN\config         Extension:       conf	
Log Files	
Folder: C:\Users\Dell\Documents _	
Script Timeout       10         Preconnect script timeout:       30         Connect script timeout:       10         Disconnect script timeout:       10	
OK Cance	1

- A. Change the Configuration Files  $\rightarrow$  Folder value to where you saved your config files.
- B. Change the Configuration Files  $\rightarrow$  Extension value to conf.
- C. Change the Log Files  $\rightarrow$  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.



C:\Program Files\OpenVPN\config\candela-udp.conf - Notepad++ [Administrator]

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

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I	📙 cand	ia-tcp.conf 🗵 🔚 candela-udp.conf 🗵				
	1					
	2	Candela openvpn				
	3					
	4	client				
	5	lev 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	:omp-lzo				
	14	lobind				
	15	erb 3				
	16	uite 5				
	17	a "C:\\Program Files\\OpenVPN\\config\\ca.crt"				
	18	"C:\\Program Files\\OpenVPN\\config\\laptop-2020-02-06.rpadala.candelatech.com.crt"				
	19	ey "C:\\Program Files\\OpenVPN\\config\\laptop-2020-02-06.rpadala.candelatech.com.key"				
	20	her AES-256-CBC				
	21					
1	66					

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
4	

17.

# Starting and Stoping the VPN Connection

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

Connect	candela-tcp	>			
Disconnect	candela-udp	>			
Reconnect	Import file				
Show Status	Settings				
View Log	Exit				
Edit Config		·			
Clear Saved Passwords		^ 또	] ())	11:09 AM	$\Box$

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