VPN Clients Quick Guide

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1 Introduction

This document intends to guide you through the whole process of enabling remote access via a VPN-SSL connection. Focusing on the end user (VPN clients).

2 VPN Clients

A VPN¹'s function is to allow remote access from the exterior (Internet for instance) to net resources of a certain LAN.

At the user's workstation it is necessary to install a specific client software that will allow remote access to the network's resources.

2.1 OpenVPN

OpenVPN is one of the most popular VPN client applications.

The installation of this pack should be executed without changing the default definitions. This software will be installed in C:\Program Files\OpenVPN.

The certificate generated by the IPBrick Administrator must be unpacked into directory C:\Program Files\OpenVPN\config.

To start a VPN connection, do a right click over the OpenVPN tray icon and select *Connect*.

Insert the password used to create the certificate in IPBrick and the VPN shall be established.

NOTE: All procedures (Installation and certificate import must be done with Administrator privileges)

2.1.1 OpenVPN Step-by-Step

At http://openvpn.net/index.php/open-source/downloads.html download the latest version of the Windows Installer file;

NOTE: The screenshots on this document refer to the 2.1.4 version, but you can download later versions of OpenVPN.

 $^{^{1}\}mathrm{Virtual}$ Private Networks

Home	Access Server Product	Hosted Service	Community Project	
Community Project	Downloads			
Overview	OpenVPN 2.1.4 relea	ased on 2010.11.09 (Chan	ae Loa)	
Downloads	Changes to 2.1.3:		<u> </u>	
Documentation	 Fixed problem with speci 	al case route targets ('remote_ho	st'), which could cause filling of the routing	g table with random
ношто	garbage. Thanks to Teod	o MICU and Gert Doering for findi	ng and fixing this issue.	
Security Overview	See the man page for more	information on all available feature	\$.	
Examples	Source Tarball	openvpn-2.1.4.tar.qz	GnuPG Signature	
Graphical User Interface	•			
Manuals	Source Zip	openvpn-2.1.4.zip	GnuPG Signature	
Change Log Installation Notes	Windows Installer	openvpn-2.1.4-installexe	GnuPG Signature	
Release Notes		0		
Miscellaneous	This release is also available	as Debian Lenny and Ubuntu 10	.04 packages for i386 and amd64 platform	ns.
Non-English			Trac bug tracker. In uncertain cases plea r IRC channel (#openvpn-devel at irc.freen	
	mist, either using the openvp	n-dever maininglist of the develope	r iko channel (#openvph-devel at irc.ireen	ode.net).

Figure 1: Select the Windows Installer option.

Click Run to run the installer.

					Search		
ess Server Product		Hosted Servic	е	Community Project	_	Ε	
Downloads	ſ	0% of openvpn-2.	1.4-instal	ll.exe from swupdate.openvpn			
OpenVPN 2.1.4 relea	ased	File Download -	Security \	Warning			
Changes to 2.1.3:		Do you want	to run or	r save this file?			
 Fixed problem with speci garbage. Thanks to Teod 				envpn-2.1.4-install.exe	e with random		
See the man page for more i	informa			plication, 1.62MB update.openvpn.net			
Source Tarball	open			Run Save Cancel			
Source Zip	open	(Mbia)	iloo from th	he Internet can be useful, this file type can	-		
Windows Installer	openy	. 🚺 potent	ally harm y	your computer. If you do not trust the source, do not software. <u>What's the risk?</u>			
This release is also available	e as <u>Deb</u>	bian Lenny and U	buntu 10	0.04 packages for i386 and amd64 platforms	-		
				r <u>Trac bug tracker</u> . In uncertain cases please er IRC channel (#openvpn-devel at irc.freenoo		rs	

Figure 2:

You may encounter a Security Warning screen: "Do you want to run this software?". If you see the Security Warning screen, click Run to run the software.

			Search
ess Server Product	Hosted Service	Community Project	E
	Internet Explorer - Security Warning		3
Downloads	Do you want to run this softwar	e?	
OpenVPN 2.1.4 rele	Name: openvpn-2.1.4	Hinstall.exe	
Changes to 2.1.3:	Publisher: OpenVPN Tec	chnologies, Inc.	
 Fixed problem with spec garbage. Thanks to Teo 		Run Don't Run	e with random
See the <u>man page</u> for more		t can be useful, this file type can potentially harm oftware from publishers you trust. <u>What's the risk?</u>	
Source Tarball	oper		
Source Zip	oper	Open Open Folder Cancel	
Windows Installer	openvpn-2.1.4-install.exe	GnuPG Signature	
If you find a bug in this rele	ase, please file a bug report to our	.04 packages for i386 and amd64 platforms. <u>Trac bug tracker</u> . In uncertain cases please r IRC channel (#openyon-devel at irc freenoc	contact our developers

Figure 3: Security Warning

You may also encounter a User Account Control prompt: "A program needs your permission to continue." Click Continue.

User Account Control
🕡 A program needs your permission to continue
If you started this program, continue. opeE751.tmp OpenVPN Technologies, Inc.
Details Continue Cancel
User Account Control helps stop unauthorized changes to your computer.

Figure 4:

The Setup Wizard prompt will appear. Click Next to continue.



Figure 5: Setup Wizard

The OpenVPN license agreement and terms appear. Click I Agree to continue.

OpenVPN 2.1.4 Setup Image: Comparison of the set of t
Press Page Down to see the rest of the agreement.
DpenVPN (TM) An Open Source VPN daemon Copyright (C) 2002-2010 OpenVPN Technologies, Inc. <sales@openvpn.net></sales@openvpn.net>
This distribution contains multiple components, some of which fail under different licenses. By using OpenVPN or any of the bundled components enumerated below, you agree to be bound by the conditions of the license for each respective component.
OpenVPN trademark
If you accept the terms of the agreement, dick I Agree to continue. You must accept the agreement to install OpenVPN 2.1.4 .
Nullsoft Install System v2.44
< Back I Agree Cancel

Figure 6: Click Run to run the installer.

The component selection dialog is visualized. Leave all components checked with their default settings and click Next.

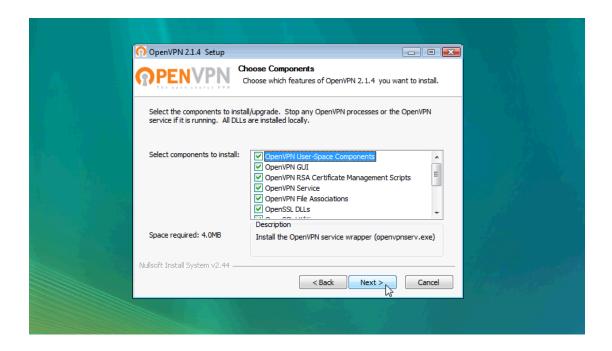


Figure 7: Component Selection

Select your destination folder and click Install. Note that the Destination Folder location during install (usually C:\Program Files\OpenVPN)

OpenVPN 2.1.4 Setup
🐨 Windows Security
Would you like to install this device software? Name: TAP-Win32 Provider V9 Network adapters Publisher: OpenVPN Technologies, Inc.
Always trust software from "OpenVPN Technologies, Inc.". Install
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?
TAP INSTALL (tap0901)
Nullsoft Install System v2.44
< Back Next > Cancel

Figure 8: Destination Selection

When the installation is complete, click Next.

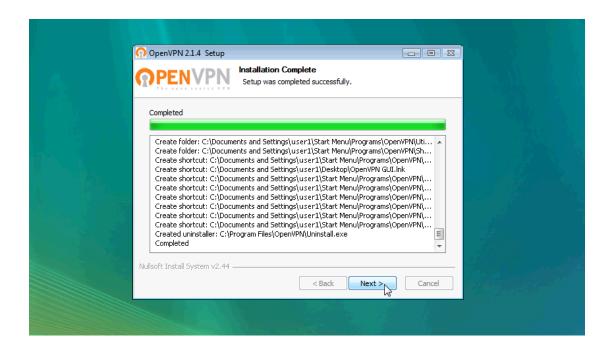


Figure 9: Installation

The wizard will notify you of the completion of the installation and prompt you to click Finish.



Figure 10: Wizard Final Notification

Extract the Certificate zip file to the config folder of OpenVPN

 $\mathbf{7}$

Usually C:\Program Files\OpenVPN\config;

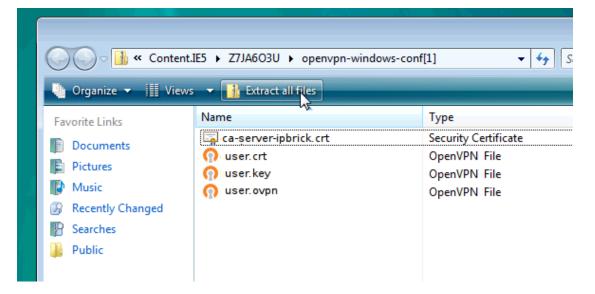


Figure 11: Extract Files

"Select a Destination" prompt will appear. Click Browse.

00	Content.IE5 > Z7JA603U > openvpn-windows-conf[1]		٩	
No 🌓	anize 🔻 🏢 Views 👻 🚹 Extract all files		0	
Favorit	🕞 🎍 Extract Compressed (Zipped) Folders			
Pic	Select a Destination and Extract Files			
Rec B Sea Put Put	Files will be extracted to this folder: C:\Users\user Browse		8 No	
Ja Pu	♥ Show extracted files when complete			
				A.
Folder	Extract Cance	el	•	
annu a				

Figure 12: "Select a Destination" prompt

Locate the Destination Folder (usually C:\Program Files\OpenVPN\config and find the config folder within it. Click OK.

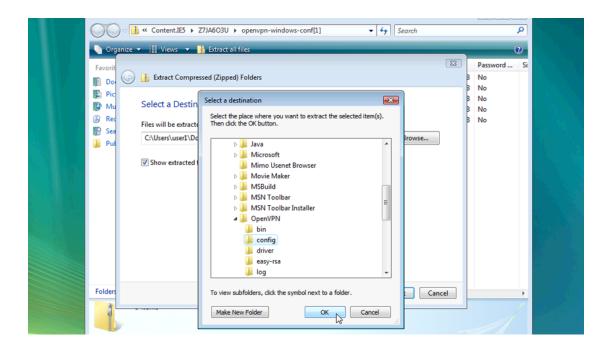


Figure 13: config Folder

Click Extract to begin extraction.

	« Content.IE5 > Z7JA6O3U > openvpn-windows-conf[1] • 47 Search		٩	
In Organize	✓ Ⅲ Views ▼ 11 Extract all files		0	
Favorit	Extract Compressed (Zipped) Folders	EX		
Pic Mu	Select a Destination and Extract Files	8	No No No	
🚱 Rec 🕎 Sea	Files will be extracted to this folder: C:\Program Files\OpenVPN\config Browse	3	No	
🗼 Pul	Show extracted files when complete			
Folders	Extract	el .		

Figure 14: Extraction

You may need to provide administrator privileges to save the files. Click Continue.

Content.IES > Z7JA6O3U > openvpn-windows-conf[1] • 4) Search		٩
🐚 Organize 👻 🌐 Views 👻 🊹 Extract all files		0
Favorit Do Pric Rec Sec Put Put Extract Compressed (Zipped) Folders Set Destination Folder Access Denied File Vou'll need to provide administrator permission to copy to this folder Config Date created: 3/7/2011 2:36 PM Cancel Vou bis for all current items (4 found)	223 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	No
Folders Next Can	icel	,

Figure 15: Administrator Privileges

Find the OpenVPN GUI icon on your desktop.

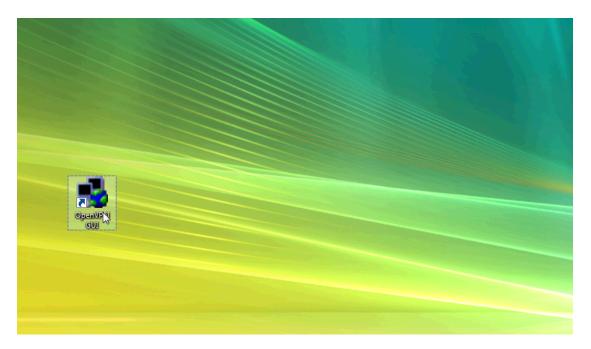


Figure 16: OpenVPN Shortcut

Right-click it to bring up a context menu. Select Properties

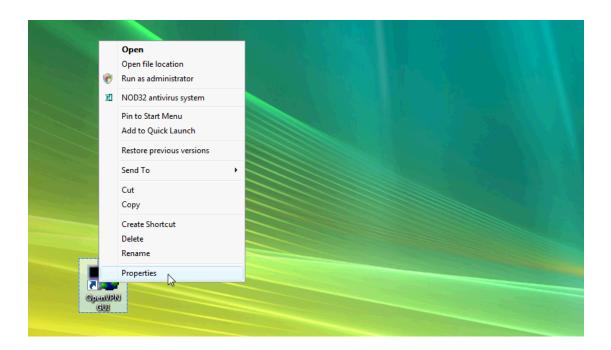


Figure 17: Context Menu

Click Advanced, then Select Run as Administrator.

	DenVPN GUI Properties
	Choose the advanced properties you want for this shortcut. Run as administrator This option allows you to run this shortcut as an administrator, while protecting your computer from unauthorized activity. Run in separate memory space
OpenVPN GUI	OK Cancel Open File Location Change Icon Advanced



Click OK.

	DpenVPN GUI Properties
	Advanced Properties
	Choose the advanced properties you want for this shortcut.
	✓ Run as administrator
	This option allows you to run this shortcut as an administrator, while protecting your computer from unauthorized activity.
	☑ Run in separate memory space
	OK Cancel
OpenVPN	Open File Location Change Icon Advanced
GUI	

Figure 19:

Click OK to close the OpenVPN GUI properties.

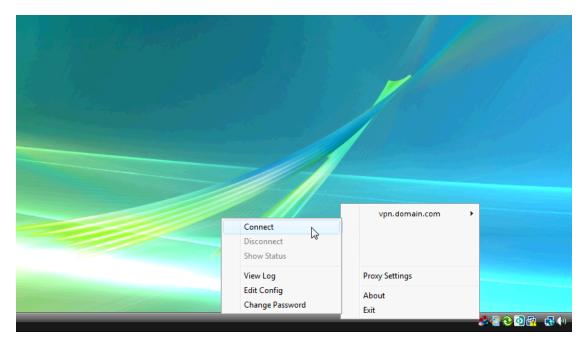
	nter Stern State S	Properties		X
	Security	Details	Previous Versions	
	General	Shortcut	Compatibility	
	Dpe Ope	enVPN GUI		
	Target type:	Application bin		
	Target:			
	Start in:	"C:\Program Files\Ope	enVPN"	
	Shortcut key:	None		
	Run:	Normal window		-
	Comment:			- I I
OpenVPN	Open File Loo	cation Change lo	Advanced	5
GUI				
Sector States				
		ок 💦	Cancel Apply	

Figure 20:

In the Windows taskbar tray, right click on the OpenVPN GUI icon.



Figure 21:



Find the site to connect to from the menu, and choose Connect from the site's submenu.

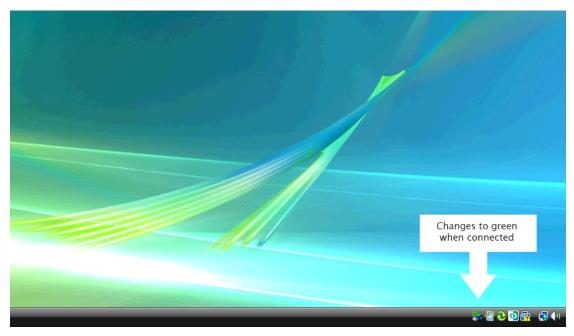
Figure 22:

Enter your Login and Password when prompted and click OK.

OpenVPN Connection (hk1.vpn.giganews.com) Current State: Connecting Mon Mar 07 15:19:32 2011 OpenVPN 2.1.4 i686-pc-mingw32 [SSL] [LZ02] [PKCS11] built on Nov 8 2010 OpenVPN - User Authentication Username: user Password:	
Disconnect Reconnect Hide	

Figure 23:

The OpenVPN GUI icon in the tray will turn green once the secure connection is established.





NOTE: If it's not working properly, you'll need to edit the ***.ovpn** file at:

C:\Program Files\OpenVPN\config

and add the following lines at the end:

route-method exe route-delay 2

2.2 Securepoint SSL VPN

OpenVPN needs to run in an administrator mode, which is something that, as an end user, you may not be able to do.

If you are experiencing problems you may want to try another client app.

With the obvious exception of its installation procedure, Secure point is a VPN client application that doesn't require administrator's privileges

2.2.1 Securepoint SSL VPN step-by-step

Download the Securepoint executable at:

```
http://sourceforge.net/projects/securepoint/files/SecurepointSSLVPN_
RC4.exe/download
```

The installation procedure of Securepoint is very similar to OpenVPN.

After download, double click on the SecurepointSSLVPN_RC4.exe

You will be prompted to choose the installation language. Select the desired one and click on OK.



Figure 25: Installation Language Prompt

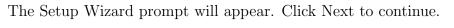
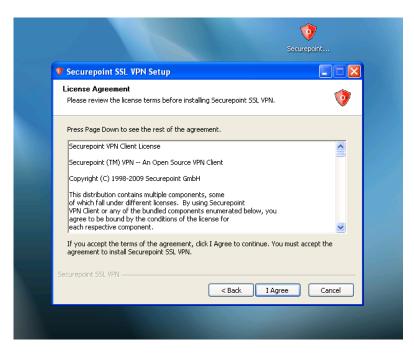




Figure 26: Setup Wizard Prompt



The Secure point license agreement and terms appear. Click I Agree to continue.

Figure 27: Securepoint license agreement

The Installation Context is visualized.

Securepoint SSL VPN Setup	
Installations context Please select the context of the installation	(
This setting set the installation mode for the SS	5L VPN client.
All users: The Securepoint SSL VPN Client is avail Current user: The Securepoint SSL VPN Client is only No other user have access to the clien In which context you want to install the Secu	available for the current user. It.
O Current user	
 All users 	
Securepoint SSL VPN	
	< Back Next > Cancel

Figure 28: Installation Context

Leave the setting at Management and click Next.

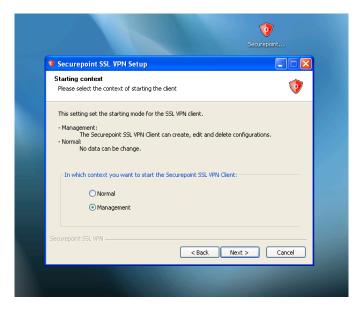


Figure 29: Starting Context

Select your destination folder and click Next.

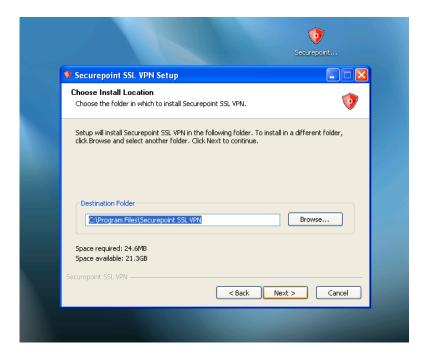


Figure 30: Install Location

Leave all components checked with their default settings and click Next.



Figure 31: Choose Components

The installation begins.

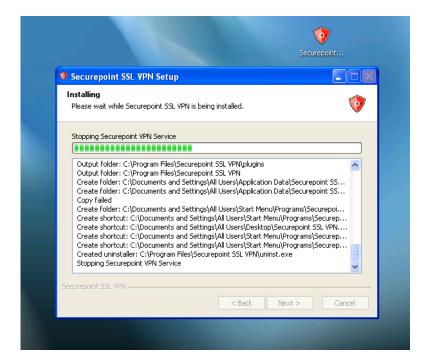


Figure 32: Installation

When you visualize the windows logo verification window click on Continue Anyway.



Figure 33: Windows Logo Verification

The wizard will notify you of the completion of the installation and prompt

you to click Finish.



Figure 34: Wizard Final Notification

Securepoint SSL VPN Setup	Securepoint
Securepoint SSL VPN Secup Installation Complete Setup was completed successfully.	••••
Securepoint SSL VPN Setup Do you want to start the Securepoint SSL VPN clie Yes No	nt now?
Securepoint SSL VPN	nish Cancel

If you wish you may start the app straight away, just click YES.

Figure 35: Start Prompt

The Secure point VPN SSL Client application will start.



Figure 36: Securepoint VPN SSL Client application start

The procedures of extracting the certificate and running the application are similar to the ones described for the OpenVPN client. The only difference is that you don't need to be a System administrator. Extract the files to a easily accessable location (e.g. Desktop).

At the Securepoint interface click on Import.

🤨 Securepoint SSL VPN RC4 - manage
••••SECUREPOINTOpenVPN
Vew Tmport 🛃 🛃 Close

Figure 37: Securepoint VPN SSL Client application interface

Click on the browse button (.) of Imp	port existing	configuration
------------------------------	-----------	---------------	---------------

🤨 Import config file 🛛 🗙
File path:
Path to the import file [*.crypt]:
Save as:
 as filename
🔿 as:
Password:
Password:
Import existing configuration:
Path to the *.ovpn file:
🔷 Import 🧕 🌭 Close

Figure 38: Import Configuration File

Browse to the location where you extracted the files.

Find ovpn file					? 🛛
Look in:	🔁 Desktop		•	+ 🗈 💣 🎟 -	
My Recent Documents Desktop	🛅 user				
My Documents					
My Computer					
My Network Places	File name:			•	Open
Fiaces	Files of type:	OpenVPN configs	([×] .ovpn)	•	Cancel

Figure 39: Import Configuration File

Choose the .ovpn file and click on Import.

🤨 Securepoint SSL VPN RC4 - manage	×
• C Import config file File path:	N
Path to the import file [*.crypt]:	
Save as: as filenar as: Import successfully ended!	
Password: OK Password: Minimum OK Import existing configuration:	
Path to the *.ovpn file: user/Desktop/user/user.ovpn	
Import 🤄 Close	

Figure 40: Import Successfully Ended

You will now visualize your connection. Click on Connect.

😻 Securer	point SSL VPN RC4 - manage 🛛 🛛 🗙
••• §	SECUREPOINTOpenVPN
- user	Ready to connect.
V N	lew 💽 Import 🔂 🛃 🌾 Close

Figure 41: Available Connection

Insert your password.

🛛 Secu	repoint SSL VPN RC4 - manage 🛛 🔀
•0•	SECUREPOINTOpenVPN
- user	Connecting Cancel
	🔮 User data requested 🛛 🔀
	Please insert:
	PKC512: •••••
	Save data
	OK Cancel
V	New 💽 Import 🔯 🛃 🌭 Close

Figure 42: Available Connection

Your connection will start.

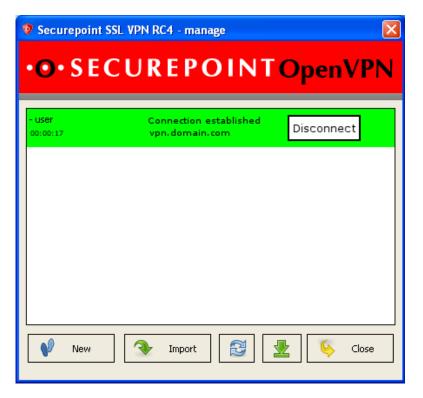


Figure 43: Connection Established