

MSUM Remote Access to Bridges 165 Lab Network

This presentation installs OpenVPN and required files to access the MSUM Bridges 165 network. Then, the presentation shows how to start the connection.

Hardware/Software Used in Presentation

Windows 10 Anniversary Update
Reasonably fast internet connection
OpenVPN and configuration files

Preuss
12/21/2016



Recycle Bin

The presentation starts Windows 10.



Downloads

openvpn.net/index.php/open-source/downloads.html

Downloads

OpenVPN 2.3.14-- released on 2016.12.07 ([Change Log](#))

This release includes many small improvements and fixes. A full list of changes is available [here](#).

If you find a bug in this release, please file a bug report to our [Trac bug tracker](#). In uncertain cases please contact our developers first, either using the [openvpn-devel mailinglist](#) or the developer IRC channel (#openvpn-devel at irc.freenode.net). For generic help take a look at our official [documentation](#), [wiki](#), [forums](#), [openvpn-users mailing list](#) and user IRC channel (#openvpn at irc.freenode.net).

[Link]	[Link]	GnuPG Signature
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[Link]	[Link]	GnuPG Signature
[Link]	[Link]	GnuPG Signature
Installer (64-bit), Windows Vista and later	openvpn-install-2.3.14-l601-x86_64.exe	GnuPG Signature

Instructions for verifying the signatures are available [here](#).

We also provide static URLs pointing to latest releases to ease automation. For a list of files look [here](#).

This release is also available in our own software repositories for Debian and Ubuntu, Supported architectures are i386 and amd64. For details. look [here](#).

Note that *easy-rsa* is no longer bundled with OpenVPN source code archives. To get it, visit the [easy-rsa](#) page on GitHub, or download it from our Linux software repositories. The Windows installers are bundled with OpenVPN-GUI - its source code is available on [its project page](#) and as tarballs on our [alternative download server](#).

The presentation selects "openvpn-install-2.3.14-l601-x86.exe" as shown. This file is downloaded to the local machine.

It is possible newer versions of this program will work with the distributed configuration file.



Application Tools Downloads

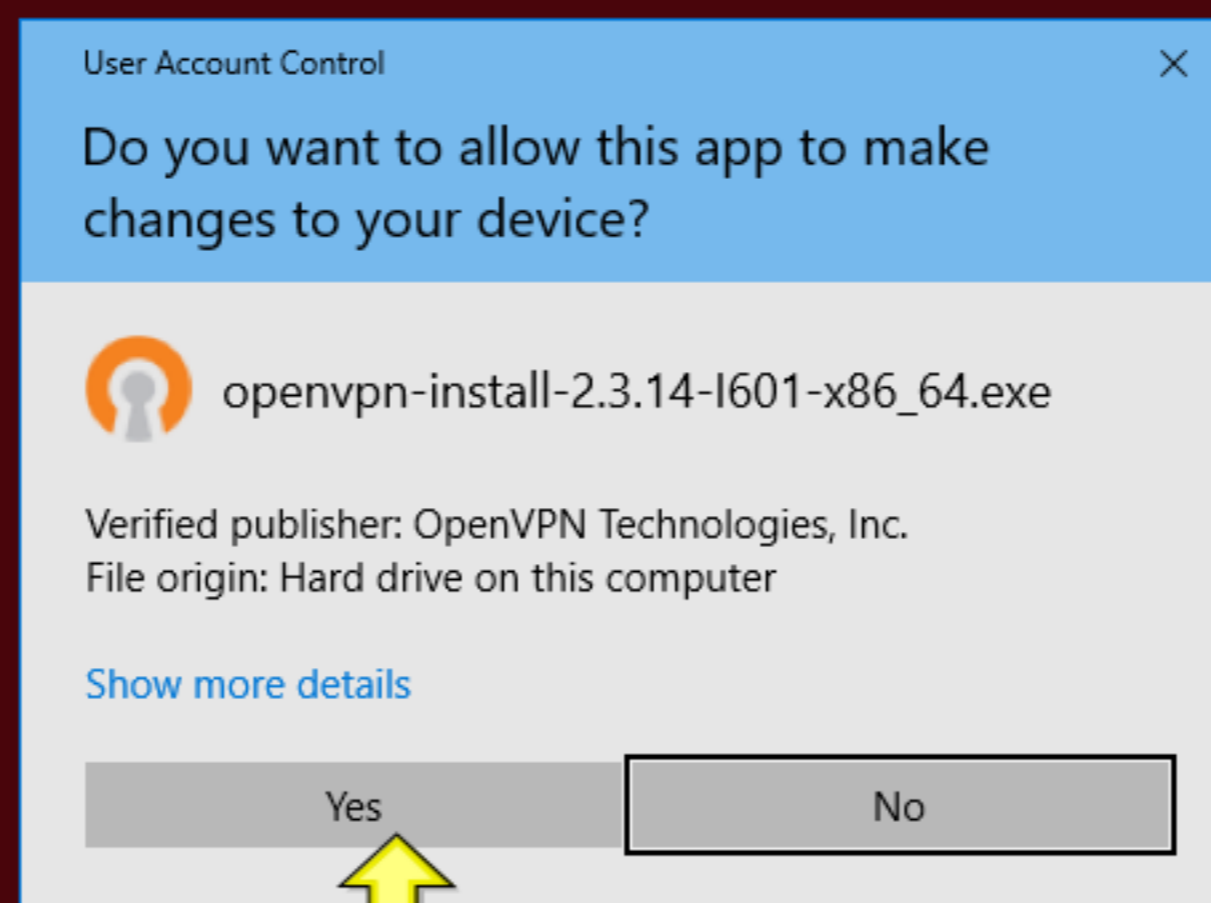
File Home Share View Manage

← → ▾ ↑ ▾ > This PC > Downloads ▾ ↻ Search Downloads 🔍

Name	Date modified	Type	Size
OOSU10	9/2/2016 12:53 PM	Application	619 KB
openvpn-install-2.3.14-l601-x86_64	12/20/2016 2:26 PM	Application	2,171 KB
Windows1...grade28084	8/11/2016 4:58 PM	Application	5,655 KB

3 items | 1 item selected 2.11 MB


The presentation selects "openvpn-install-2.3.14*" for installation.



The presentation selects "Yes" to give the program permission to install.



OpenVPN 2.3.14-I601 Setup



Welcome to the OpenVPN 2.3.14-I601 Setup Wizard

This wizard will guide you through the installation of OpenVPN , an Open Source VPN package by James Yonan.

Note that the Windows version of OpenVPN will only run on Windows XP, or higher.

Next > Cancel

The presentation selects "Next" to continue.



OpenVPN 2.3.14-I601 Setup

License Agreement
Please review the license terms before installing OpenVPN 2.3.14-I601.

Press Page Down to see the rest of the agreement.

OpenVPN (TM) -- An Open Source VPN daemon
Copyright (C) 2002-2010 OpenVPN Technologies, Inc. <sales@openvpn.net>

This distribution contains multiple components, some of which fall 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, click I Agree to continue. You must accept the agreement to install OpenVPN 2.3.14-I601.

Nullsoft Install System v2.46-101

< Back **I Agree** Cancel

The presentation reviews the license agreement. Then selects "I Agree" to continue the installation.



OpenVPN 2.3.14-I601 Setup

Choose Components
Choose which features of OpenVPN 2.3.14-I601 you want to install.

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 install:

- OpenVPN User-Space Components
- OpenVPN Service
- TAP Virtual Ethernet Adapter
- OpenVPN GUI
- OpenVPN File Associations
- OpenSSL Utilities

Space required: 5.3MB

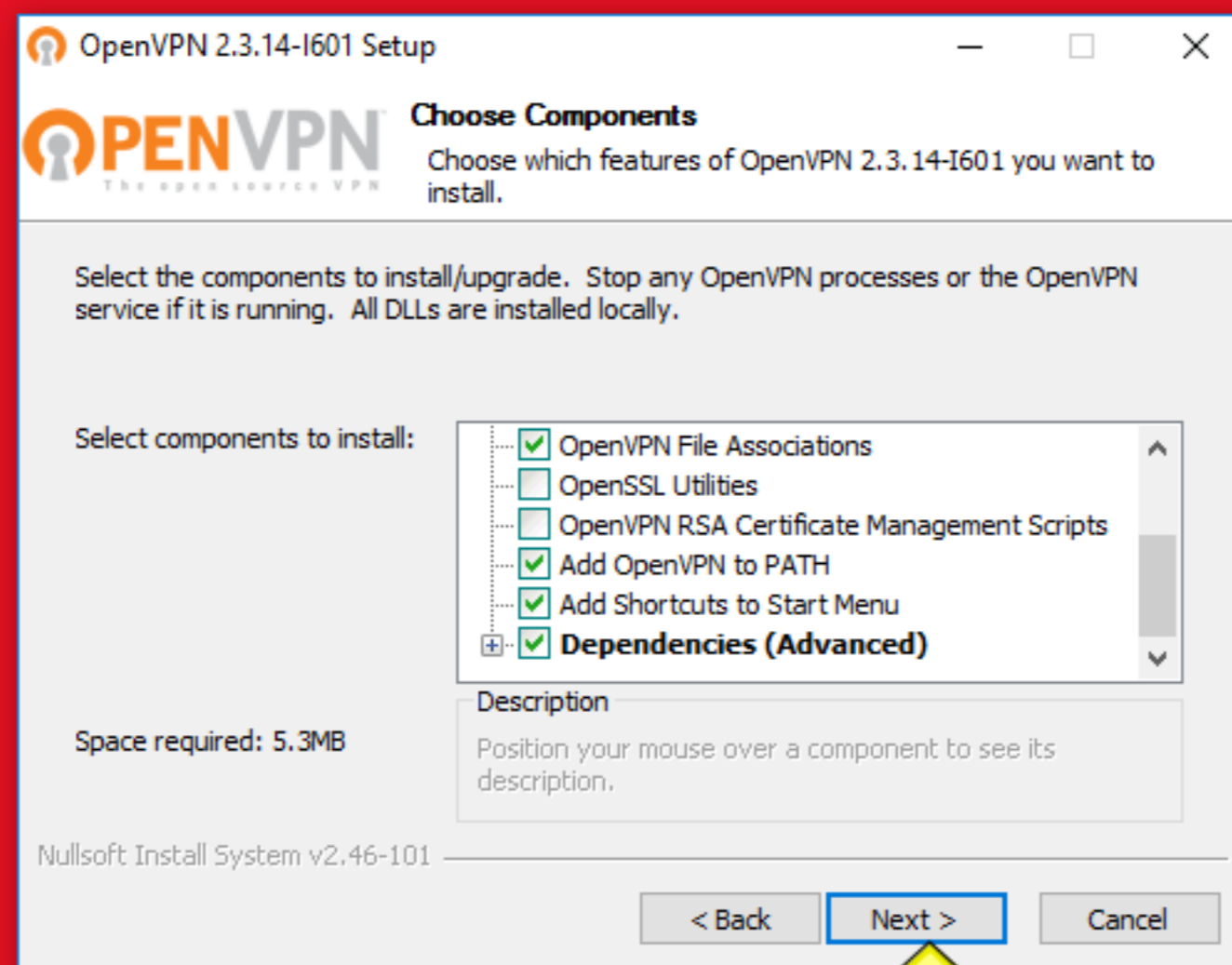
Description
Put your mouse over a component to see its description.

< Back Next > Cancel

This is the first screen showing the components to install. Essentially, the presentation is using the defaults. Refer to the next screen for the remainder of the list.



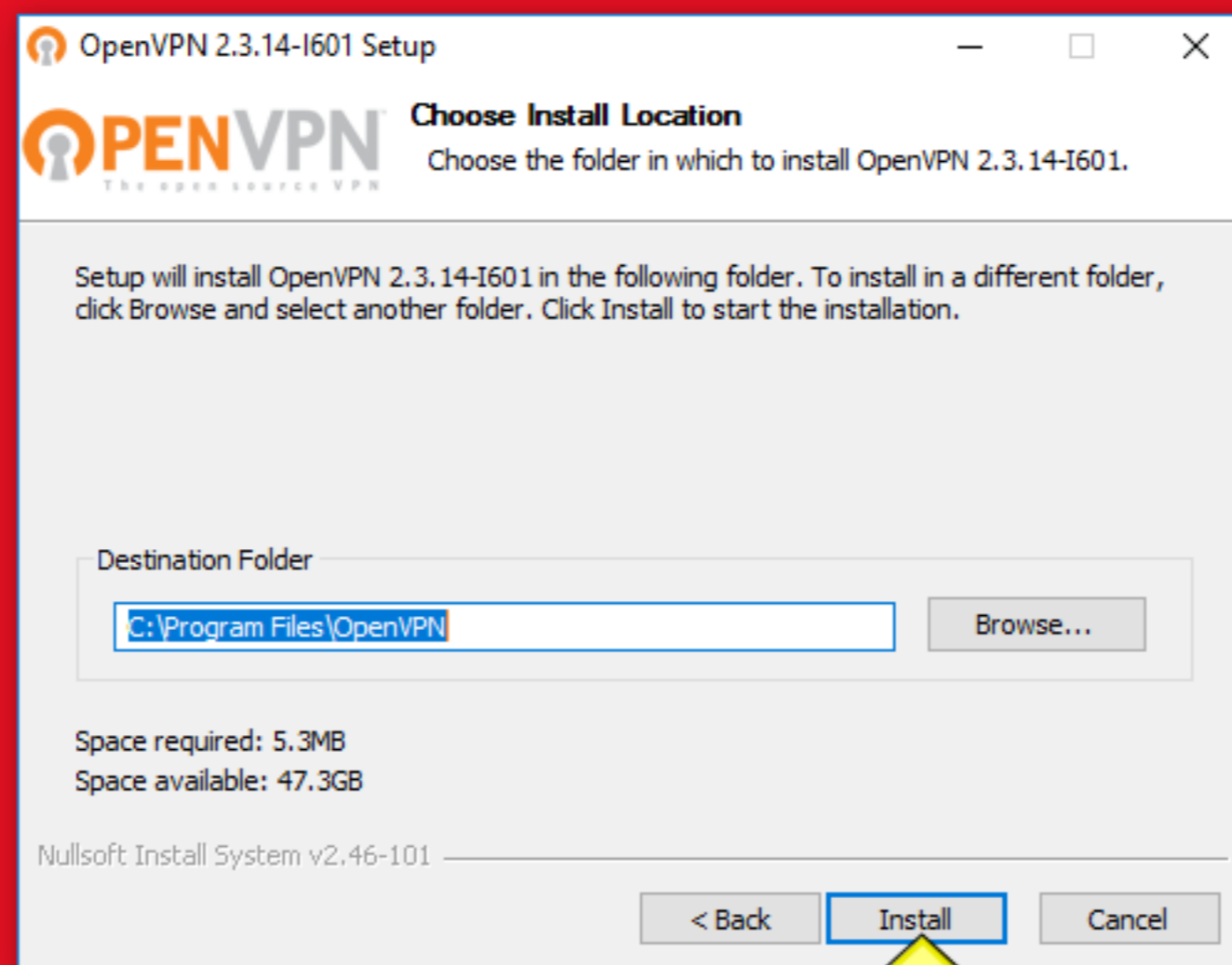
Recycle Bin



Once the correct components are selected, the presentation selects "Next" to continue the installation.



Recycle Bin



The presentation does not change the default destination folder. The presentation selects "Install" to continue.

Changing the default destination folder requires the human to make the appropriate changes later in these directions.



OpenVPN 2.3.14-I601 Setup

Windows Security

Would you like to install this device software?

Name: TAP-Windows Provider V9 Network adapters
Publisher: OpenVPN Technologies, Inc.

Always trust software from "OpenVPN Technologies, Inc."

The presentation selects "Install" to continue the installation. This is a necessary component.



OpenVPN 2.3.14-I601 Setup

Installation Complete
Setup was completed successfully.

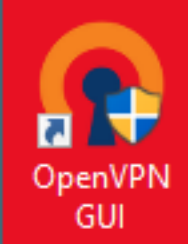
Completed

Output folder: C:\Program Files\OpenVPN\bin
Extract: liblzo2-2.dll... 100%
Output folder: C:\Program Files\OpenVPN\bin
Extract: libpkcs11-helper-1.dll... 100%
Output folder: C:\Program Files\OpenVPN
Extract: icon.ico... 100%
Output folder: C:\Program Files\OpenVPN\doc
Extract: license.txt... 100%
Created uninstaller: C:\Program Files\OpenVPN\Uninstall.exe
Completed

Nullsoft Install System v2.46-101

< Back **Next >** Cancel

Once the installation is complete, the presentation selects "Next" to continue.



OpenVPN 2.3.14-I601 Setup

Completing the OpenVPN 2.3.14-I601 Setup Wizard

OpenVPN 2.3.14-I601 has been installed on your computer.
Click Finish to close this wizard.

Start OpenVPN GUI

Show Readme

< Back **Finish** Cancel

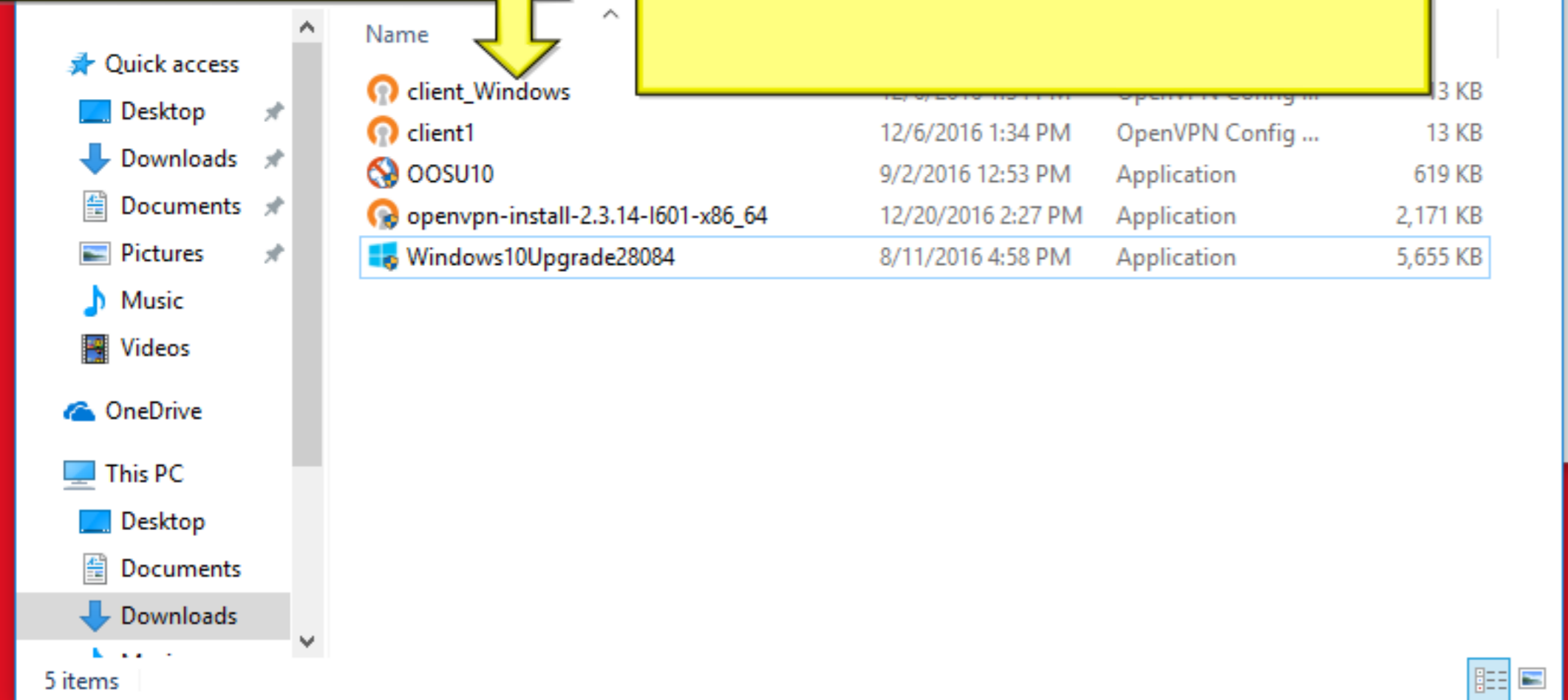
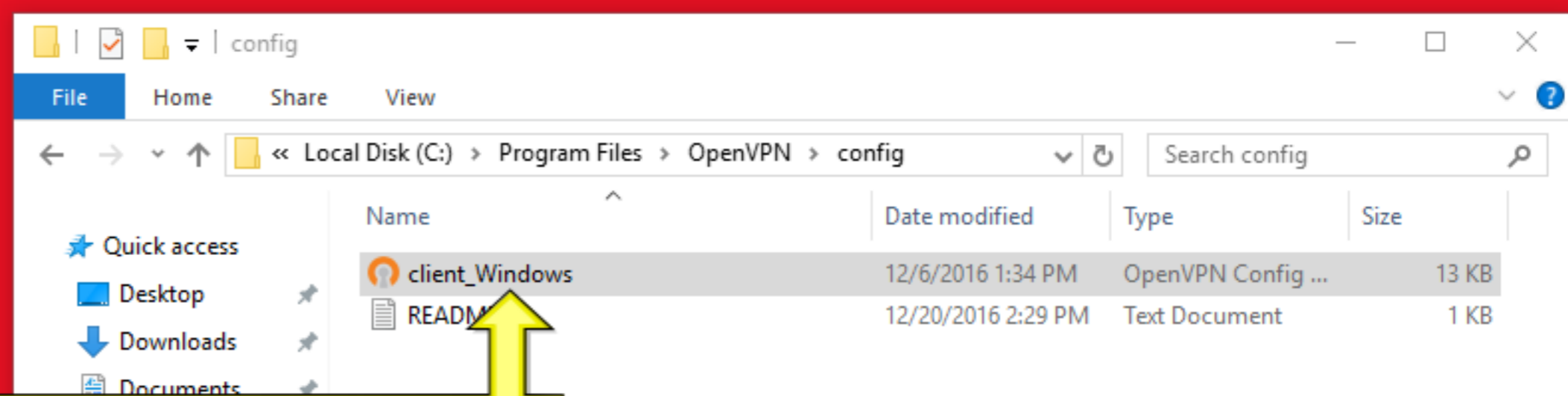
The presentation selects "Finish" to complete this part of the installation.



The file "client_Windows" must be copied to "c:\Program Files\OpenVPN\config"

The file "client1" is for Linux systems, not Windows.

The presentation successfully copied/moved the file "client_Windows" to "c:\Program Files\OpenVPN\config" as shown.





File Explorer window showing the path: Local Disk (C:) > Program Files > OpenVPN > config

Name	Date modified	Type	Size
client_Windows.ovpn	12/6/2016 1:34 PM	OpenVPN Config ...	13 KB
README.txt	12/20/2016 2:29 PM	Text Document	1 KB

Command Prompt window showing system information and a copy command:

```

PROCESSOR_ARCHITECTURE=AMD64
PROCESSOR_IDENTIFIER=Intel64 Family 6 Model 60 Stepping 3, GenuineIntel
PROCESSOR_LEVEL=6
PROCESSOR_REVISION=3c03
ProgramData=C:\ProgramData
ProgramFiles=C:\Program Files
Shell=cmd.exe
SystemRoot=C:\Windows
windir=C:\WINDOWS

C:\Users\preuss>copy %HOMEPATH%\Downloads\client_Windows.ovpn "\Program Files\openvpn\config"
Overwrite \Program Files\openvpn\config\client_Windows.ovpn? (Yes/No/All): y
1 file(s) copied.

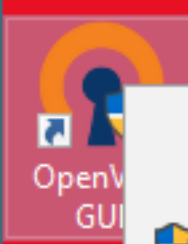
C:\Users\preuss>
  
```

The presentation used the command line copy to copy "client_Windows.ovpn" to the correct folder.



File Explorer window showing the path: This PC > Downloads

- client_Windows.ovpn
- client_Windows.ovpn
- OOSU
- open
- Wind



- Open
- Open file location
- Run as administrator
- Troubleshoot compatibility
- Pin to Start
- Scan with Windows Defender...
- Pin to taskbar

- Restore previous versions

- Send to >

- Cut
- Copy
- Paste

- Create shortcut
- Delete
- Rename

- Properties

The presentation right clicks on the OpenVPN GUI shortcut to get the menu shown.

The presentation selects "Properties" option from the menu.



OpenVPN GUI Properties

Security | Details | Previous Versions
General | Shortcut | Compatibility

OpenVPN GUI

Target type: Application

Target location: bin

Target: `..\Program Files\OpenVPN\bin\openvpn-gui.exe"`

Start in: `"C:\Program Files\OpenVPN\bin"`

Shortcut key: None

Run: Normal window ▾

Comment:

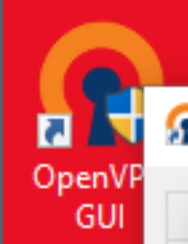
Open File Location | Change Icon... | **Advanced...**

OK | Cancel | Apply

Under the Shortcut tab, the presentation selects "Advanced button".



Recycle Bin



OpenVPN GUI

OpenVPN 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

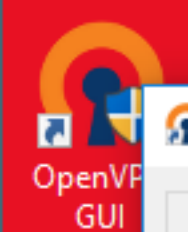
Open File Location Change Icon... Advanced...

OK Cancel Apply



The presentation checks the box to "Run as administrator". This is necessary because parts of the VPN setup require administration level access.

Once the box is checked, the presentation selects "OK".



OpenVPN GUI Properties

Security | Details | Previous Versions
General | Shortcut | Compatibility

OpenVPN GUI

Target type: Application

Target location: bin

Target:

Start in:

Shortcut key:

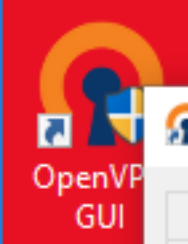
Run:

Comment:

← The presentation selects "OK" to save and close the menu.



Recycle Bin



OpenVPN GUI

OpenVPN GUI Properties

Security | Details | Previous Versions
General | Shortcut | Compatibility

OpenVPN GUI

Target type: Application

Access Denied

You will need to provide administrator permission to change these settings.

Click Continue to complete this operation.

Continue

Comment:

Open File Location | Change Icon... | Advan...

OK | Cancel

The presentation grants permission to make the changes by selecting "Continue".



Recycle Bin



OpenVPN
GUI

The installation is complete.