TheGreenBow VPN Client Configuration Tools ? THEGREENBOW	tgbtestiPV4: IPsec Pres: Advanced Automation Remote Sharing Addresses	t VPN Client Authentication axxes [Centicate]	vpn Client
Tor VI Parameters     CybestPV4     ConsettPV4     ConsettPV6     ConsettPv	VPN client address       0       0       0       0         Address type       Subnet address       *         Remote LAN address       192       168       175       0         Subnet mask       255       255       255       0         ESP       Encryption       AES128       *         Authentication       SHA-1       *         Mode       Tunnel       *         PP5       Group       DH2 (1024)       *	nterface Any  atemay spherio.d.gradm.org a wed Key Confirm	information sufgeration by Import 6.33 autonom 20 54/0014
N Clent ready			
_	PFS Group DH2 (1024)	Add an and a second sec	

# **TheGreenBow VPN Client**

# Yubikey Neo configuration guide

Website: www.thegreenbow.com Contact: support@thegreenbow.com

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## 1 Introduction

TheGreenBow VPN Client software is designed to work with certificates for establishing a VPN tunnel to a remote IPsec gateway. The certificates can be stored on smartcards with PIN code access protection. This document describes how to use Yubikey Neo with TheGreenBow VPN Client.

This document explains how configure the Yubikey Neo token and TheGreenBow VPN 6.1x version.

## http://www.thegreenbow.com/vpn/vpn\_down.html

Main information about Yubikey Neo tokens can be read from Yubico website :

## https://www.yubico.com/products/yubikey-hardware/yubikey-neo/

OpenSC PKCS#11 middleware can be used. This software can be downloaded from :

## https://github.com/OpenSC/OpenSC/wiki

## 2 Yubikey Neo Manager

CCID mode must be enabled for Yubikey Neo token otherwise TheGreenBow VPN Client would not be able to access to any certificate stored on the token. Yubikey Neo manager can be downloaded from Yubico website :

## https://developers.yubico.com/yubikey-neo-manager/

Yubikey Neo Manager is used for changing connection Mode.

(V) YubiKey NEO Manager (1.0.0)	
Devices Available apps	Welcome (1) No device found. Please insert a YubiKey NEO to continue

After inserting the token the following window is displayed.

<ul> <li>Devices             </li></ul> <li>YubiKey NEO</li>	YubiKey NEO Manager (1.0.0)		
	Devices     YubiKey NEO     Available apps	Settings Name: YubiKey NEO Serial: 3020286 Change connect NOTE: To be able to list/manage apps, yo enabled.	Change name Firmware version: 3.3.0 U2F/FIDO: supported tion mode [OTP] our YubiKey NEO must have CCID

If CCID mode is not enabled, click on "Change connection Mode [OTP]" and select "CCID".

(V) Change conn	ection mode	? ×
Set the connection For this setting to	on mode used by your YubiKey o take effect, you will need to	<sup>,</sup> NEO. unplug, and re-attach your YubiKey.
OTP	CCID	U2F
		OK Cancel

## Yubikey Neo configuration guide

Yubikey token must be removed and replugged again.



New applications are then available.

Devices     YubiKey NEO     Available apps     YubiKey OTP     YubiCATH     Yubico U2F     OpenPGP     Yubico PIV     NOTE: To be able to list/manage apps, your YubiKey NEO must have CCID enabled.     Settings

## 3 OpenSC PKCS#11 middleware

A PKCS#11 middleware is needed for using the Yubikey Neo hardware. OpenSC, an opensource library, can be used. The software can be downloaded from:

## https://github.com/OpenSC/OpenSC/wiki

A 32 bits version must be used even with a 64 bits OS.

A file named vpnconf.ini must be created in the same directory (C:\Program Files (x86)\TheGreenBow\TheGreenBow VPN or C:\Program Files\TheGreenBow\TheGreenBow VPN) than vpnconf.exe and tgbike.exe.

The "vpnconf.ini" file shall have the following content:

Parameter "dllpath" must be changed according with the real path to the OpenSC DLL.

Registry key "Pkcs11Only" must be also added.

A registry file file shall have the following content: Windows Registry Editor Version 5.00

[HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\CurrentVersion\App Paths\TgbIke.exe] "Pkcs110nly"=hex:01

## 4 Adding a certificate to the token

Certificate can be imported to the token with Yubico PIV tool.

#### https://developers.yubico.com/yubico-piv-tool/

Yubico PIV Tool is command line software. For importing a PKCS#12 file, try the following command line with 4101E62211B7B011.p12 the PKCS#12 file and "thegreenbow" password:

yubico-piv-tool.exe -s 9c -a import-cert -a import-key -i 4101E62211B7B011.p12 -K PKCS12 -p thegreenbow

## 5 TheGreenBow VPN client interface

On TheGreenBow VPN client, certificate can be selected in the "certificate" tab. This is displayed only if "certificate" mode is selected in the "Authentication" tab.

Configuration Tools ? THEGREENBOW	
VDN Clic	
	ent
Ikev1Gateway: Authentication	
VPN Configuration Authentication Advanced Certificate	
IKE VI     IKE VI     IKE VI Parameters     IKE VI Parameters     Choose a Certificate in the list below, or select a new Certificate by clicking     on the button 'Import Certificate'.	
tgbtestIPV4 Nom Commun du Certificat Délivré par Expire le	
Image: tgbtestIPV6         Image: TkE V2         Image: TkE V2	
VPN Client ready	

## 6 Support

Information and update are available at: www.thegreenbow.com

Technical support via email at: support@thegreenbow.com

Sales via email at: sales@thegreenbow.com

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