



# TheGreenBow VPN Android

## User Guide

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## 1 Introduction

TheGreenBow VPN Client for Android is a VPN Client IPsec / IKE V1.

It allows opening and configuring VPN tunnels from an Android smartphone, with most VPN gateways in the market.

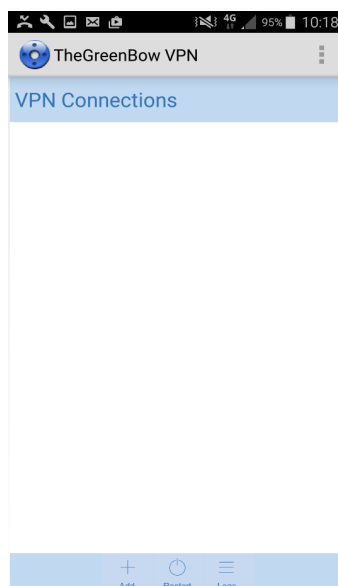
TheGreenBow VPN Client Android allows you configuring a tunnel with a pre shared key, X-Auth or a certificate. It supports the Mode Config.

Note: Many VPN gateways configuration guides are available on the TheGreenBow website: [List of VPN gateway configurations guides](#).

## 2 Installation

Download TheGreenBow\_VPN\_Android\_x.xx.xxx.apk file on the target device.

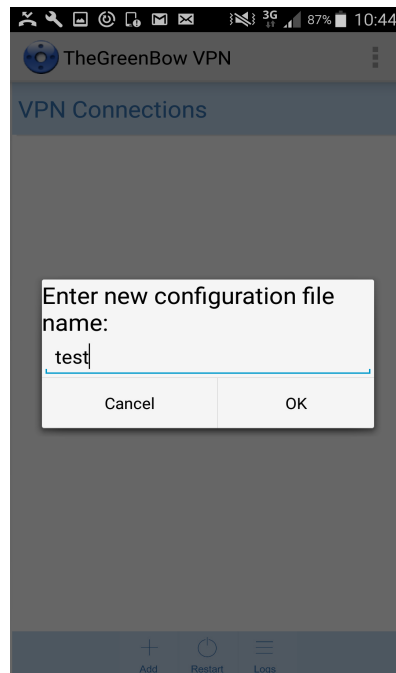
Via the smartphone file explorer, launch the file TheGreenBow\_VPN\_Android\_x.xx.xxx.apk





### 3 Create a new VPN tunnel

To create a new VPN configuration, press the "+" button in the footer of the screen, then enter the name of the tunnel.

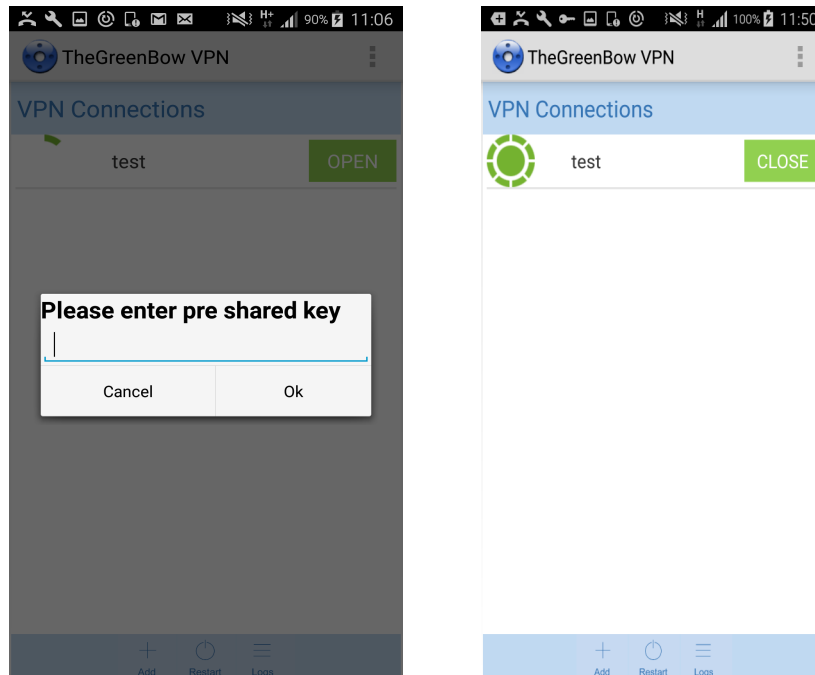


The new tunnel is added to the list of tunnels.

The new tunnel is created with a set of default parameters that are used to open a VPN tunnel with a TheGreenBow VPN gateway available for testing if everything works fine.

#### 3.1 Open the 'test' VPN Tunnel

Press the "Open" button to open the VPN tunnel.  
The password to open the tunnel is "123456789".



To quit the application without closing the VPN tunnel click on the 'Home' button. The 'Back' button will close the tunnel and the app.



Once opened, TheGreenBow test VPN tunnel opens TheGreenBow test page: <http://192.168.175.50>



If you can see the web page, it means the VPN tunnel opened successfully.



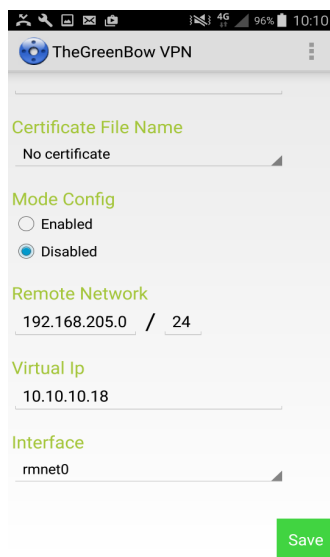
## 4 Configure a VPN tunnel

The configuration parameters of the tunnel are divided between:

- Parameters accessible via the application user interface
- Parameters available in the configuration file

### 4.1 Configure via the user interface

Press the "<" button for the VPN tunnel you like to configure.



Parameters	Description
Gateway	DNS or IP address of the remote VPN Gateway
Mode Config	Enabled / Disabled. (This allows the VPN tunnel to automatically receive from the VPN gateway a set of parameters used to open the tunnel)
Virtual IP	Virtual IP address in the smartphone remote network.
Remote Network Prefix length	Remote network address
Certificate File Name	Name of the file containing the certificate (P12 or PFX) used by the VPN tunnel. See section "Selecting the certificate".
Authentication Mode	Authentication mode: Certificate, Pre Shared Key or X-Auth
Login (XAuth)	X-Auth login

To save the configuration, press on the "Save" button at the bottom of the screen.



## 4.2 Import a "tgb" VPN Configuration file

The Android VPN Client enables to import a VPN Configuration file created with TheGreenBow VPN Client for Windows.

This function enables to create, test and validate a VPN Configuration with TheGreenBow VPN Client for Windows, then to import it into the VPN Client for Android.

### **Procedure :**

- Download and install TheGreenBow VPN Client for Windows
- Create the VPN Configuration. Validate this VPN Configuration (check the tunnel is correctly opening)
- Right-click on the relevant tunnel (click on the Phase2 name of the tunnel)
- Select "Export"
- In the export dialog, choose "Don't protect the exported VPN Configuration"
- Save the VPN Configuration: The name you choose for the VPN Configuration will be the name of the tunnel in the Android VPN Client interface.
  
- Connect the SmartPhone to the Computer via the USB port.
- Copy the exported VPN Configuration in the SmartPhone directory " TheGreenBow \ tgbImport "
- Run the Android VPN Client: The VPN Configuration is automatically added to the list of available tunnels.
- If the VPN Configuration file contains a certificate, the user is automatically asked to create a password, in order to protect the certificate. This password will be asked to the user each time a tunnel opens.

### **Note :**

The import operation described above can be done with several VPN Configurations simultaneously. It enables to import several tunnels together. All "tgb" files can be copied in the directory " TheGreenBow \ tgbImport ". They will be all imported as the application starts.

## 4.3 Edit the VPN Configuration

1. Open the configuration via the user interface ( Press the ">" button for the VPN tunnel you like to configure)
2. Press the "EXP" button (Export): The configuration is exported in the following file:

TheGreenBow / tgbExport / [tunnel\_name] .tgbm

3. Edit the file with a text editor:

```
{
Gateway = tgbtest.dyndns.org
PlauthenticationType = pre_shared_key
Psk =
Xauth_login =
Xauth_pwd =
P12certificateFileName = myP12.p12
Plenc = aes
PlauthAlgo = sha1
PldhGroup = 5
Mode_cfg = On
Sa_dest = 192.168.175.0
Sa_dest_masq = 24
VirtualIp = 10.10.1.76
Sa_s = 10.10.1.76
Sa_s_masq = 32
P2enc = aes
P2auth = hmac_sha1
P2pfsGroup = modp2048
P2lifeTime = 3600
Dns = 192.168.175.3
}
```



Label	Description	Value
Gateway	Adresse de la passerelle VPN cible	DNS or IP address of the remote VPN Gateway
Plauthentication Type	Phase 1 authentication mode	"pre_shared_key", "xauth_psk_client", "rsasig"
Psk	Pre Shared Key	Fill in only if X-Auth mode is selected.
Xauth_login	Login X-Auth	Fill in only if X-Auth mode is selected.
Xauth_pwd	Reserved	Empty
P12certificate FileName	File name containing the P12 certificate	
Plenc	Phase1 encryption	"des", "3des", "aes"
PlauthAlgo	Phase1 Authentication algorithm	"md5", "sha1", "sha256", "sha384", "sha512"
PldhGroup	Phase1 DH group	"1", "2", "5", "14", "15", "16", "17", ou "18"
Mode_cfg	Mode config	"On" or empty.
Sa_dest	Remote network IP address	
Sa_dest_masq	Remote network prefix length	16, 24 ou 32.
VirtualIp	Virtual IP address in the smartphone remote network.	
Sa_s	Virtual IP address in the smartphone remote network.	In most cases, identical to the virtualIP address
Sa_s_masq	Reserved	"32"
P2enc	Phase2 encryption	"des", "3des", "aes"
P2auth	Phase2 Authentication algorithm	"hmac_md5", "hmac_sha1", "hmac_sha256"
P2pfsGroup	Phase2 PFS Group	"modp768", "modp1024", "modp1536", "modp2048", "modp3072", "modp4096", "modp6144", "modp8192"
P2lifeTime	Phase2 lifetime	Greater than 300, in seconds.
Dns	Remote DNS IP address (optionnal)	

Once edited, copy the file into the following directory:

```
TheGreenBow / tgbImport / [tunnel_name].tgbm
```

Quit the application. The VPN tunnel you just modified is automatically imported.

## 4.4 Password

The password used to open the tunnel is not saved in the configuration file; it is dynamically retrieved when opening of the VPN tunnel.

The password is different depending on the type of authentication:

- In PSK mode, the password is the Pre Shared Key
- In X-Auth mode, the password is the X-Auth password (the Pre Shared Key must be entered in the configuration)
- In Certificate mode, the password is the password for the P12 file.





The last entered password is stored in memory by the application, allowing the user to re-open the tunnel without having to re-enter it.

## 4.5 Select a certificate

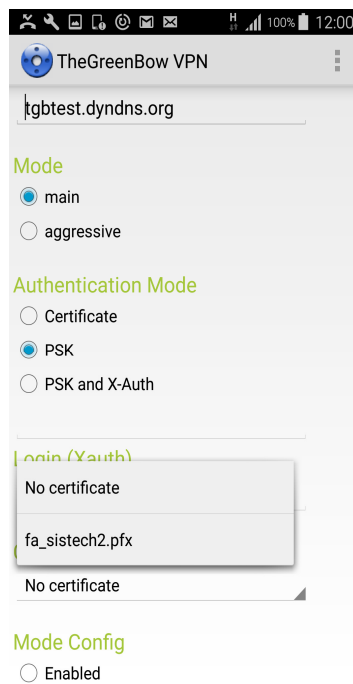
TheGreenBow VPN Client Android can be configured to use certificates. The required certificates must be in P12 format (i.e. P12 or PFX file)

To add a certificate to the VPN tunnel configuration, here are the steps:

1. Copy the Certificate "P12" file into the following directory:

TheGreenBow / TGBImport

2. Quit and restart the application.
3. The certificate is automatically imported into the application (and it is removed from the import directory). A certificate appears in the list of certificates that can be chosen for the selected VPN tunnel.
4. Open the configuration via the user interface (Press the "<" button for the VPN tunnel you like to configure).
5. Select the certificate in the dropdown for the "Certificate File Name" item.
6. Save using the "U" button in the header of the app.



## 5 Logs

TheGreenBow VPN Client Android offers two logs:

1. Logs displayed in the user interface
2. Logs available in two files in the directory: TheGreenBow / tgbExport

Log files are generated automatically as soon as the log window of the application is displayed. The first log file contains the logs displayed in the user interface of the application,



The second log file contains more detailed information (IKE logs).

The file names are in the following format:

- tgblogYYYY-MM-DD.txt
- ikelogYYYY-MM-DD.txt

where YYYY is the year, MM is the month, DD is the day.

```
test >> test is opened
[TGBLOG][2014-09-09-10-19-20]INFO Tun:
test >> reset sent.
[TGBLOG][2014-09-09-10-19-20]INFO Tun:
test >> onStartCommand Starting
[TGBLOG][2014-09-09-10-19-20]INFO Tun:
test >> Got in VPNService daemon :
java.io.IOException: read failed: EBADF (Bad
file number)
[TGBLOG][2014-09-09-10-19-20]INFO Tun:
test >> Closing..
[TGBLOG][2014-09-09-10-19-20]INFO Tun:
test >> phase 1 is down
[TGBLOG][2014-09-09-10-19-21]INFO Tun:
test >> tunnel is closed
[TGBLOG][2014-09-09-10-19-24]INFO Tun:
test >> VPN service is closing
[TGBLOG][2014-09-09-10-19-24]INFO Tun:
test >> Interface is closed
[TGBLOG][2014-09-09-10-19-25]INFO Tun:
test >> onStartCommand Starting
```



## 6 Specifications

### TheGreenBow VPN Client for Android

Release 4.40.003  
Size 5,4 Mo  
Date Dec 2016

Language English

### Android release

Android 4.0 and further.

### Protocols et algorithms

Phase1 Encryption	DES, 3DES, AES
Phase1 Authentication	md5, sha1, sha256, sha384, sha512
Phase1 DH groups	Group 1, 2, 5, 14, 15, 16, 17, or 18
Phase2 Encryption	DES, 3DES, AES
Phase2 Authentication	hmac_md5, hmac_sha1, hmac_sha256
Phase2 PFS	modp768, modp1024, modp1536, modp2048, modp3072, modp4096, modp6144, modp8192
Mode Config	yes
X-Auth	yes
Certificate	yes
Certificate Format	P12 / PFX

## 7 Contacts

TheGreenBow website: <http://www.thegreenbow.com/mobile>

Technical Support: [support@thegreenbow.com](mailto:support@thegreenbow.com)  
or via our website: <http://www.thegreenbow.com/support.html>

Sales: [sales@thegreenbow.com](mailto:sales@thegreenbow.com)