Firebird VPN Docwriter's Guide

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Obtaining And Installing VPN

Introduction

In order that doc writers can upload finished documents, a VPN system is now required where previously, secure FTP was all that was needed. This document gives details on obtaining the software, installing it and testing that it works.

Instructions on how to upload actual documents are given elsewhere in the Docwriters' manuals.

Windows users can download a preconfigured installation package which will install and configure the openVPN software ready for use.

Linux users need to have installed openVPN and then use a simple configuration file to allow connections to the Firebird network. This configuration file is all that Linux users need to download.

The details of the server's IP address, logon and password will be given in an email when you apply for upload privileges. Please note that the details given are specific to you and you alone - no-one else can use your credentials.

Initial Download

Regardless of whether you use Windows or Linux, you first need to connect to the server using the credentials supplied in the email that you received when you applied for upload privileges.

Once you have logged in with the given user name and password, you will see two files:

- `XXXX_Firebird_VPN_config.zip`
- `XXXX_Firebird_VPN_setup.exe`

The zip file is for Linux users only, the exe is for Windows users. The 'XXXX' part of the filename varies and is customised specifically for your use only. The filename will normally start with your name - which may be incorrectly spelt, as mine was - don't worry if this is the case. The filename makes no difference to the contents.

> **Note**
>
> Windows users must be running Windows XP, Windows 2000 - or a higher version of Windows.

The Windows file is about 2MB in size as it contains an installer as well as the various configuration files. The Linux file contains your own personal certificates but not an installer. It is correspondingly small!

Installation

The installation process is different for Linux users and Windows users. Please use the appropriate section below according to your own requirements.

Once complete, the system will be configured to allow you to connect to the Firebird server which has a network address of 192.168.2.2. This does mean that if you are running on a network with the same address range, then you may not be able to connect if a device on your network has obtained or been configured with the 192.168.2.2 IP address.

The quick solution is to configure your router to issue IP addresses that start above 192.168.2.2 - that way, you will not clash with any other equipment on your own network when you try to connect to Firebird's server.

On my own network, for example, I have the router configured to issue addresses from 192.168.2.10 onwards and I reserve the addresses below that for anything I wish to give a permanent IP address - my printer, for example, is hard coded to 192.168.2.4. Luckily nothing is yet using 192.168.2.2.

Windows Installation

Once you have obtained the setup file, as described above, you simply double-click it to start the installation process.

You will, however, need to be using Windows XP, Windows 2000 or a higher version - Vista, Windows 7 Windows 2003 etc. OpenVPN cannot be used on any release of windows previous to XP or Windows 2000.

> **Note**
>
> You will also require local administrator privileges to be able to set up some parts of the installation.
>
> Right-click on the setup file and select **Run as ...** then select administrator. You will be prompted for the administrator password.

Once the installer is running, you will progress through a number of different installer pages by clicking the **next** button. The following is the process you should follow:

1. On the *Welcome* page - click **next**.

2. On the *License* page - click **accept**. If you don't agree, exit from the installer.

3. On the *Choose Components* page - all options are selected by default and you should simply click **next**.

4. On the *Install Location* page - choose a location that you are happy with. The default will be `c:\program files\openVPN` (or `c:\program files (x86)\openVPN` on Windows 7). Click **install**.

    During the installation, your firewall may prompt you about the installer, if so, allow the installer internet access each time. You may also be prompted by some of the components that the installer is attempting to install. You should allow internet access to those prompts as well.

    Windows will also prompt you that the program running is not a Windows Logo certified application. Click the **install anyway** button to continue.

    Under Windows 7, the prompt will be that Windows *cannot verify the publisher of this driver software...*, click **install driver software anyway**.

5. On the *Install Complete* page - click **Next**.

6. Finally, click **finish**.

The openVPN application is not running - if all went well with the installation - however, in future, to start it you should click **Start -> All Programs -> openVPN -> openVPNGUI**.

Once openVPN is running you will see a new icon in your system tray. When the icon is coloured red, you are disconnected, when green you are connected. Double clicking this icon will open the connection dialogue as will right-clicking on the icon, and choosing **`Connect`** from the menu.

When you attempt to connect it is possible that your firewall will prompt for permission to allow `openvpn.exe` to access the internet. You should allow this to connect and if possible, tell the firewall to always allow `openvpn.exe` permission to connect to the internet.

To disconnect openVPN from the internet, double-click on the green openVPN icon, or, right-click it and select **`disconnect`**.

You are now ready to test the installation. Make sure that openVPN is currently running.

Linux Installation

Open a terminal session and, as your own user, type in the command **whereis openvpn**. The response will look similar to the following if the openVPN software is already installed:

```
$ whereis openvpn
openvpn: /usr/sbin/openvpn /etc/openvpn.conf <other stuff>
```

And, if not, the result will be as follows:

```
$ whereis openvpn
openvpn:
```

If you see that the software is installed already, you can skip over the following sections and go directly to the section on

Ubuntu, Linux Mint etc

For Ubuntu and derivatives, the process to install openVPN is as follows:

1. Click **System -> Administration -> Synaptic Package Manager** if you are on Ubuntu, or, **Menu ->Package Manager** if running Linux Mint. This will start the software package manager.

2. Enter your own password when (or if) prompted to do so.

3. In the Quick Search edit box, type in **`openvpn`** then click **`search`**.

4. In the list of packages that subsequently appears, scroll down to the *openvpn* entry and click on the check box at the start of the line.

5. You are prompted to **`Mark for installation`**. Do so.

6. Click **`Mark`** for the list of packages that are also required when you see the dialogue appear.

7. Click the **`Apply`** button.

8. Click **`Apply`** in the confirmation dialogue.

9. Wait ...

10. When all is done, click **`close`**.

11. The list of packages will now show that openVPN version *2.1~rc19-lubuntu2* has been installed. (In my case.) Obviously, this will differ as later versions of openVPN are produced for Ubuntu etc.

12. Close the package manager.

OpenSuse

For OpenSuse the process to install openVPN is as follows:

1. Press the ALT and F2 keys together to obtain a prompt.

2. Type in **yast** and press Enter.

3. Enter the root password when prompted.

4. Click *Software* on the right.

5. Click *Software Management* on the left.

6. In the search box, type **openvpn** and click the **search** button.

7. When the list of related packages is displayed, scroll down until you find the one named *openvpn*.

8. Right click that entry, and select **install** from the menu.

9. Click the **accept** button.

10. Follow the prompts to install the correct CD or DVD etc, if necessary.

11. Close the software manager.

Linux Configuration

Once you have installed the software, you are ready to configure it. This is a simple process and involves nothing more difficult that creating a directory and unzipping the zip file that you downloaded earlier.

The process is as follows:

1. Change directory to a suitable location where you will create the openVPN configuration files.

```
$ cd ~
```

2. Create a directory.

```
$ mkdir -p Firebird/VPN
```

3. Copy the downloaded zip file into the new directory.

```
$ cd Firebird/VPN
$ cp <dowload location>/*_Firebird_VPN_config.zip ./
```

4. Extract the required files.

```
$ unzip *.zip
```

```
...
```

You now have all the files you need to run a VPN session connecting to the Firebird network.

Starting OpenVPN

OpenVPN doesn't run on startup on Linux installations. You are required to start it yourself as and when you need it. You need to start it as root as it dynamically creates a file in the /dev directory. The following command should be run from a bash session while logged in as your own user. It will work perfectly well on Ubuntu or Linux Mint, or other Linux installations, where a dedicated root session is not available.

```
$ cd ~Firebird/VPN
$ su -c "/usr/sbin/openvpn --config `pwd`/firebirdsql-project.ovpn"
```

Alternatively, you can start openVPN from wherever you happen to be, as follows:

```
$ su -c "/usr/sbin/openvpn --config \
~/Firebird/VPN/untangle-vpn/firebirdsql-project.ovpn"
```

Regardless of which command you use, you will be prompted for a password. On Ubuntu type systems, the password is your own. If you are running OpenSuse, it will require the root password.

At this point, the bash session will hang after displaying a lot of text, finishing with the line:

```
...
Initialisation Sequence Completed
```

You are now running openVPN and have created a tunnel to the Firebird network. You are ready to test the system.

Testing

To test your installation, use a command line version of FTP. This is quick and common to both Linux and Windows. The process is as follows:

1. FTP to the Firebird server:

    ```
    $ ftp 192.168.2.2
    Username: <as supplied>
    Password: <as supplied>
    230 logon successful
    Remote system type is UNIX
    Using binary mode to transfer files
    ```

    The connection process seems to take quite a while it is certainly a low slower then the old server was. This may just be a glitch in the system at present and will probably speed up in the near future.

2. Change to the pdf directory:

    ```
    ftp> cd htdocs/devel/doc/manual/pdf
    ```

3. List the contents of the directory:

```
ftp> ls
...
```

You now have a working VPN system and can use it to upload completed documents to the Firebird network.

```
ftp> ls
...
```

Appendix A:
Document history

The exact file history is recorded in the `manual` module in our CVS tree; see http://sourceforge.net/cvs/?group_id=9028. The full URL of the CVS log for this file can be found at http://firebird.cvs.sourceforge.net/viewvc/firebird/manual/src/docs/firebirddocs/fbdoc_vpn.xml?view=log

Revision History

1.0   30 March 2010 ND   Created new manual.

Appendix B:
License notice

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The Original Documentation is titled *Firebird Backup File Splitting Filter*.

The Initial Writer of the Original Documentation is: Norman Dunbar.

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