Puhh…that is a tricky one! After fiddling a lot it…it seems now so easy…

So I think I have to share that with…everybody who ever is also faced with that strange task 😉

OK…I think you already know that it is not simply possible to make an executable file for a W indows system… with the well know extension: ***.exe**

But we will make that magic happen 😉 … in fact it is not magic its just a combination of the following tools/versions:

- Ubuntu 14.04
- pyinstaller (2.1)
- wine (1.6.2)
- virtual-wine (0.1)
- python-2.7.8.msi
- pywin32-218.win32-py2.7.ex e

Quick overview:

We will make an executable file from our python-project using *pyinstaller*. We do that in a simulated windows-environment using *wine*. This, lets call it, 'simulated windows' gets an installation of *python* and *pywin32*. As it is always a good idea to work clean…we do that in a virtual environment, so our major wine-installation wond' t get touched…isn't that cool 🙂 Let's do it:

Make a test project

Actually, we could make a very simple exam ple like:

```
mkdir ~/pyToExe
cd ~/pyToExe
nano test.py
```

```
# test.py
print "Hello, this is a test!"
```

But I a very good tutorial gave some more complex code that worked directly , so we'll use that:

```
# test.py
import Tkinter
```

```
from Tkinter import *
root = Tk()
root.title('A Tk Application')
Label(text='I am a label').pack(pady=15)
root.mainloop()
print "Successfully, saved processed!'"
```

Install ‘pyinstaller’

As we can read in the same tutorial, but also here, we can simply make a single execeutable file doing that:

```
git clone https://github.com/pyinstaller/pyinstaller
python pyinstaller/pyinstaller.py test.py
```

Check it out…you can already execute it!

```
./dist/test
```

Setup a simple ‘virtual windows’

But try that on windows…you will fail! As this is made with Linux it is not executable on windows! I searched a lot for that ‘cross-compiling’ problem and found finally two very good links:

- http://stackoverflow.com/questions/1770981 3/compiling-py-into-windows-and-mac-executables-on-ubuntu
- https://groups.google.com/forum/#!topic/pyinstaller/veq3BlA_Bns

And found out that the guy, who gave the solutions (BTW: Thank you very much!!!) implemented a solution to start wine in a virtual environment. Let’s initialise it:

```
git clone https://github.com/htgoebel/virtual-wine.git
apt-get install scons
./virtual-wine/vwine-setup venv_wine
```

At the end you can choose the type of Windows…I chose Windows7!

Upgrade to a ‘virtual windows-python’

- we can start the new virtual wine-environment (pretty similar to an normal *virtualenv*), and
- install python and pywin32 (which we have dowloaded from the links above and saved in our folder ‘pyT oExe’, in the the meantime 🙂

(Helpfull, but I do it dif ferently)

```
. venv_wine/bin/activate

wine msiexec -i python-2.7.8.msi

wine pywin32-218.win32-py2.7.exe
```

At this point it is very necessary to use versions that fit exactly to each other!

Make a real .exe*cutable

Now, we have a simple virtual ‘windows-pyt hon’ which we can give *pyinstall* as python-environment:

```
rm -r build
rm -r dist
rm test.spec
wine c:/Python27/python.exe pyinstaller/pyinstaller.py --onefile test.py
ll dist/
```

Yeah…there is the needed extension, but see test if it works in windows using *wine*:

```
wine dist/test.exe
```

What did I say simple isn’ t it?!? Go on and tr y it on a windows…my test where successfull 🙂

All still open tabs of my browser in one list, thank you so much!!!

- http://www.pythoncentral.io/pyinstaller -package-python-applications-windows-mac-linux/
- http://irwinkwan.com/2013/04/29/python-executables-pyinstaller -and-a-48-hour-game-design-compo/
- http://stackoverflow .com/questions/1770981 3/compiling-py-into-windows-and-mac-executables-on-ubuntu
- https://groups.google.com/forum/#!topic/pyinstaller/veq3BlA_Bns
- https://github.com/htgoebel/virtual-wine
- http://undefd.kaihola.fi/2009/04/20/installing-python-and-pywin32-in-wine.html
- https://github.com/pyinstaller/pyinstaller