



ruados

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A sysadmin with no good selfies

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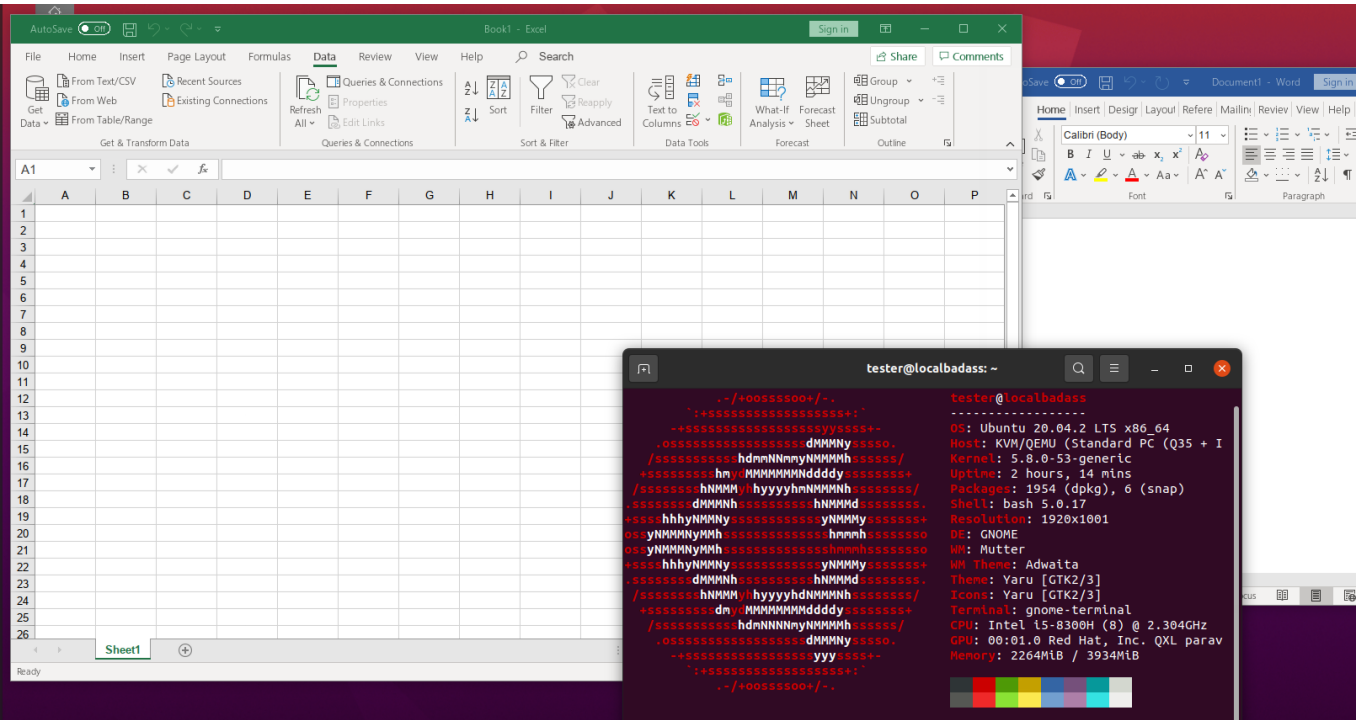


Photo Credit: Yours truly

Office 365 on Ubuntu 20.04 LTS with Wine

30 MAY 2021 • 6 mins read

Two years ago, on a bright Summer day, I was sitting on my desk, fiddling with a Cisco Access Point that refused to work, when my boss burst into the door. We had a client with Office 2007 installed on Ubuntu, and it was refusing to do a certain task that she wanted, can't really remember what. So we decided to simulate the error on our end, and then work on it.

While my team was doing that, I thought, "she does have Office 365, why not give it a try?", after all there were 3 of us trying to simulate the error, one more guy looking at the same wouldn't be necessary. So I decided to work on an alternative solution: Get her to use the most recent Office.

And what a pain that turned out to be. I saw screenshots online, but not a single tutorial, just glimpses and forum discussions going back and forth trying to find the same I was looking. But I eventually I got it to work, and now the client could finally use the most recent MS Office, if she wanted. She didn't want to use it.

But why would you consider to run Office with Wine? Some Pros and cons. Pro:

- Native run on Linux. Wine is not an emulator, so, for all purposes, it's running as if it was native. Somewhat.
- Well, it's Microsoft Office, on Linux. That alone is cool, nice to show off.
- Running .xslm on Libreoffice isn't the most fun of experiences, and in many businesses, that's a necessity.
- Have I mentioned how cool that is?

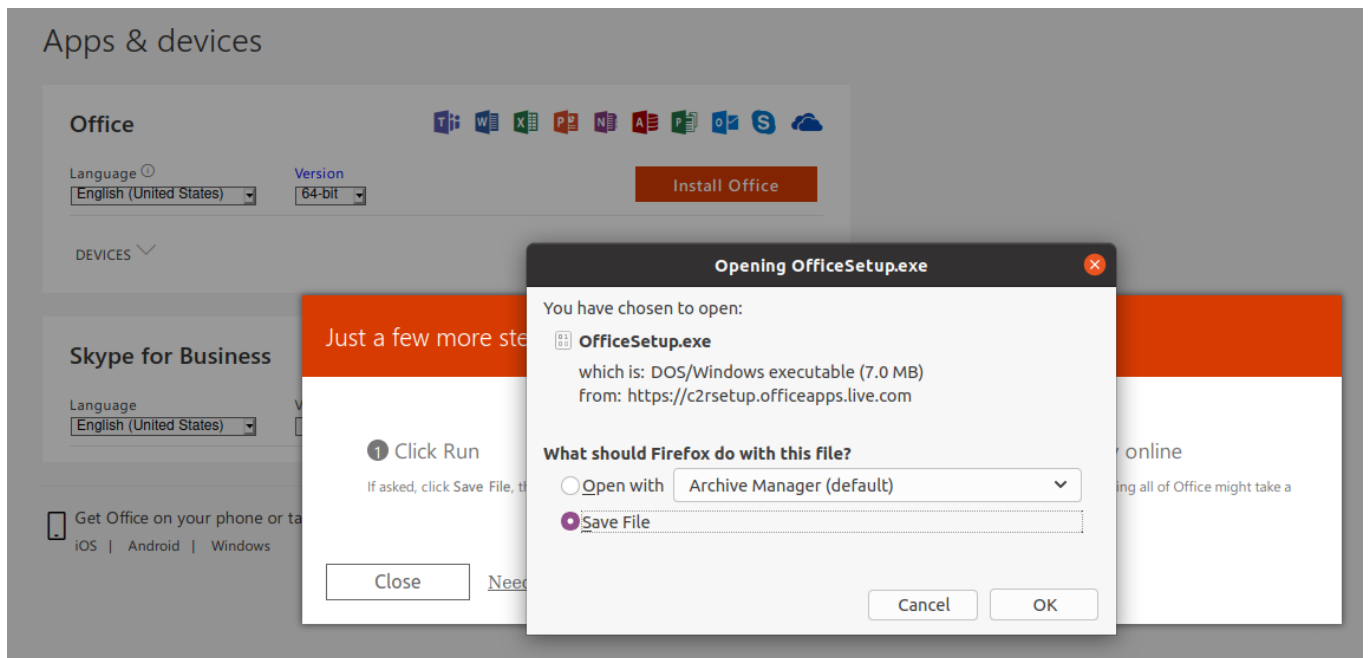
Con:

- Outlook and Access just don't work. But do you truly needed these two?
- The performance isn't quite there, and every so often you get some visual bugs interacting with menus.
- No 64 bits, just 32, but unless you're handling massive 2GB spreadsheets, you wouldn't be able to tell anyway.
- Not many people would actually find it to be cool.

Just to be clear, this is a standard fully updated Ubuntu 20.04 VM with nothing but the standard stuff. But you're not forced to just use Ubuntu, just adapt according to your circumstances.

Alright, with that out of the way, let's get to it.

First things first, you must download the installer. Here's the [link](#).



You might want to an agent switcher on your browser. I used [this](#) extension for Firefox. Just switch to trick the browser to be recognized as a Windows PC.

Next, we'll open up the terminal. We'll begin to install all needed dependencies. This will, among other things, add the Wine repo to your system and all of what is or may be needed. It's always good practice to read the code before you run it though.

don't want to do this, feel free to add a `sudo` before all the below commands.

```
s/winehq.key | apt-key add -
```

```
rg/wine-builds/ubuntu/ $(lsb_release -cs) main"
```

```
able  
ient winetricks #Note: I actually had to apt install winbind a second time, but maybe was a coi
```

With this out of the way, we can logout from root, either with CTRL+D or with the command `logout`.

This is where the fun begins.

Now that we have all the dependencies worked out, we'll be working on an unprivileged user level. No need to escalate from this point on, and we want Office to just be installed with this user.

```
export WINEARCH=win32  
mkdir ~/.msoffice  
export WINEPREFIX=~/.msoffice
```

This is defining the Windows architecture that will be used and where this Wine instance will be installed.

```
wineboot -i
```

This will boot the wine instance, and will also ask for some a few things to be installed in this instance, as the screenshot below.

```

Setting up libsane:i386 (1.0.29-0ubuntu5.2) ...
Setting up libwresample:i386 (7:4.2.4-1ubuntu0.1) ...
Processing triggers for udev (245.4-4ubuntu3.6) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for wine-support (3.0-4ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for libgl1:amd64 (2.64.6-1ubuntu0.4.3) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
Processing triggers for man-db (2.9.1-1) ...
Setting up libgdk-pixbuf2.0:i386 (2.40.0+dfsg-3ubuntu0.2) ...
Setting up libharfbuzz0b:i386 (2.6.4-1ubuntu4) ...
Setting up libcairo-gobject2:i386 (1.16.0-4ubuntu1) ...
Setting up libgstreamer1.0-0:i386 (1.16.2-2) ...
Setcap worked! gst-ptp-helper is not suid!
Setting up libpango-1.0:i386 (1.44.7-2ubuntu4) ...
Setting up libgstreamer-plugins-base1.0-0:i386 (1.16.2-4ubuntu0.1) ...
Setting up gstreamer1.0-plugins-base:i386 (1.16.2-4ubuntu0.1) ...
Setting up libpangot2-1.0-0:i386 (1.44.7-2ubuntu4) ...
Setting up libpangocairo-1.0-0:i386 (1.44.7-2ubuntu4) ...
Setting up librsync2:i386 (2.40.9-1ubuntu0.20.04.1) ...
Setting up librsync2-common:i386 (2.40.9-1ubuntu0.20.04.1) ...
Setting up libavcodec58:i386 (7:4.2.4-1ubuntu0.1) ...
Setting up libfaudio:i386 (20.04-2) ...
Setting up wine-stable-i386:i386 (6.0.0-focal-1) ...
Setting up winehq-stable (6.0.0-focal-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
Processing triggers for libgdk-pixbuf2.0-0:i386 (2.40.0+dfsg-3ubuntu0.2) ...
root@localbass:~# logout
tester@localbass:~$ export WINEARCH=win32
tester@localbass:~$ mkdir ~/.msoffice
tester@localbass:~$ export WINEPREFIX=~/.msoffice
tester@localbass:~$ wineboot -i
002c:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0040:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
002c:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0040:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0048:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0048:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0050:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0050:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0048:err!ole:StdMarshalImpl_MarshalInterface Failed to create ifstub, hr 0x80004002
0048:err!ole:CoMarshalInterface Failed to marshal the interface {6d5140c1-7436-11ce-8034-00aa006009fa}, hr 0x80004002
0048:err!ole:apartment_get_local_server_stream Failed: 0x80004002
0050:err!ole:StdMarshalImpl_MarshalInterface Failed to create ifstub, hr 0x80004002
0050:err!ole:CoMarshalInterface Failed to marshal the interface {6d5140c1-7436-11ce-8034-00aa006009fa}, hr 0x80004002
0050:err!ole:apartment_get_local_server_stream Failed: 0x80004002
0050:err!ole:start_rpcss Failed to open Rpcss service
0064:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0064:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.
0064:fxmefont:get_name_record_codepage encoding 20 not handled, platform 1.

```

Just accept and install all that's requested.

Once that's over, run this:

```
wineptricks cmd corefonts msxml6 riched20 gdiplus
```

This will take about 20 to 30 minutes to be installed. Go grab yourself a snack, and wait patiently.

```

Resolving web.archive.org (web.archive.org)... 207.241.237.3
Connecting to web.archive.org (web.archive.org)[207.241.237.3]:443... connected.
HTTP request sent, awaiting response... 302 FOUND
Location: https://web.archive.org/web/20180612201004/http://ftp.hp.com/pub/softlib/software/msl/InstMslW.exe [following]
--2021-05-28 23:05:19-- https://web.archive.org/web/20180612201004/http://ftp.hp.com/pub/softlib/software/msl/InstMslW.exe
Reusing existing connection to web.archive.org:443.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://web.archive.org/web/20180612201004/http://whp-aus2.cold.extweb.hp.com/pub/softlib/software/msl/InstMslW.exe [following]
--2021-05-28 23:05:20-- https://web.archive.org/web/20180612201004/http://whp-aus2.cold.extweb.hp.com/pub/softlib/software/msl/InstMslW.exe
Reusing existing connection to web.archive.org:443.
HTTP request sent, awaiting response... 302 FOUND
Location: https://web.archive.org/web/20180612201007/http://whp-aus2.cold.extweb.hp.com/pub/softlib/software/msl/InstMslW.exe [following]
--2021-05-28 23:05:20-- https://web.archive.org/web/20180612201007/http://whp-aus2.cold.extweb.hp.com/pub/softlib/software/msl/InstMslW.exe
Reusing existing connection to web.archive.org:443.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/octet-stream]
Saving to: 'InstMslW.exe'

InstMslW.exe           [          ] 1.74M  402KB/s  in 4.9s

2021-05-28 23:05:26 (366 KB/s) - 'InstMslW.exe' saved [1822848]

Executing cd /home/tester
Executing cabextract -q --directory=/home/tester/.msoffice/dosdevices/c:/windows/temp /home/tester/.cache/wineptricks/msl31/InstMslW.exe
Executing cp -f /home/tester/.msoffice/dosdevices/c:/windows/temp/msl31.dll /home/tester/.msoffice/dosdevices/c:/windows/system32
Executing w_do_call gdiplus
Executing mkdir -p /home/tester
Executing load_gdiplus
Executing mkdir -p /home/tester/.cache/wineptricks/wln7sp1
Executing cd /home/tester/.cache/wineptricks/wln7sp1
Downloading https://download.microsoft.com/download/0/A/F/0AFB5316-3062-494A-AB78-7FB0D4461357/windows6.1-KB976932-X86.exe to /home/tester/.cache/wineptricks/wln7sp1
Resolving download.microsoft.com (download.microsoft.com)... 23.36.48.137, 2001:15d8:2:29d::e59, 2001:15d8:2:29d::e59
Connecting to download.microsoft.com (download.microsoft.com)[23.36.48.137]:443... connected.
HTTP request sent, awaiting response... 404 Not Found
2021-05-28 23:05:33 ERROR 404: Not Found.

Executing cd /home/tester/.cache/wineptricks/wln7sp1
Downloading https://web.archive.org/web/2000/https://download.microsoft.com/download/0/A/F/0AFB5316-3062-494A-AB78-7FB0D4461357/windows6.1-KB976932-X86.exe to /home/tester/.cache/wineptricks/wln7sp1
--2021-05-28 23:05:34-- https://web.archive.org/web/2000/https://download.microsoft.com/download/0/A/F/0AFB5316-3062-494A-AB78-7FB0D4461357/windows6.1-KB976932-X86.exe
Resolving web.archive.org (web.archive.org)... 207.241.237.3
Connecting to web.archive.org (web.archive.org)[207.241.237.3]:443... connected.
HTTP request sent, awaiting response... 302 FOUND
Location: https://web.archive.org/web/20110608165548/http://download.microsoft.com/download/0/A/F/0AFB5316-3062-494A-AB78-7FB0D4461357/windows6.1-KB976932-X86.exe [following]
--2021-05-28 23:05:35-- https://web.archive.org/web/20110608165548/http://download.microsoft.com/download/0/A/F/0AFB5316-3062-494A-AB78-7FB0D4461357/windows6.1-KB976932-X86.exe
Reusing existing connection to web.archive.org:443.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/octet-stream]
Saving to: 'windows6.1-KB976932-X86.exe'

windows6.1-KB976932-X86.exe [          ] 75.46M  514KB/s

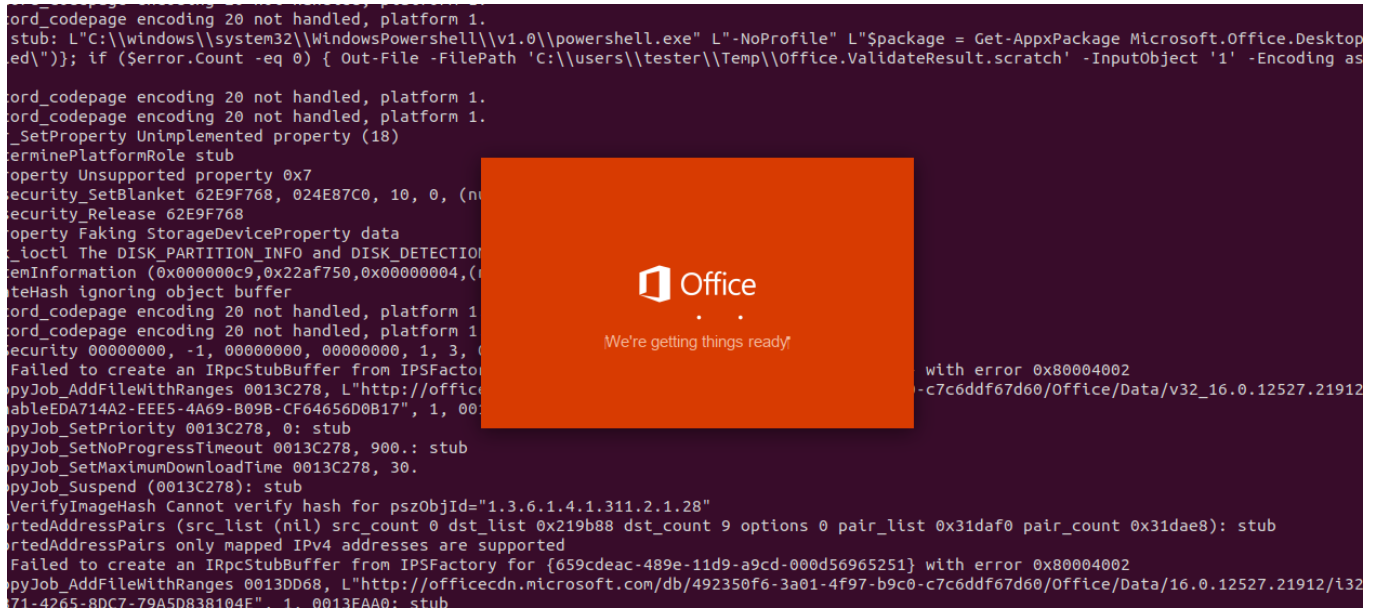
```

You're back? Still running? It ends eventually, don't worry.

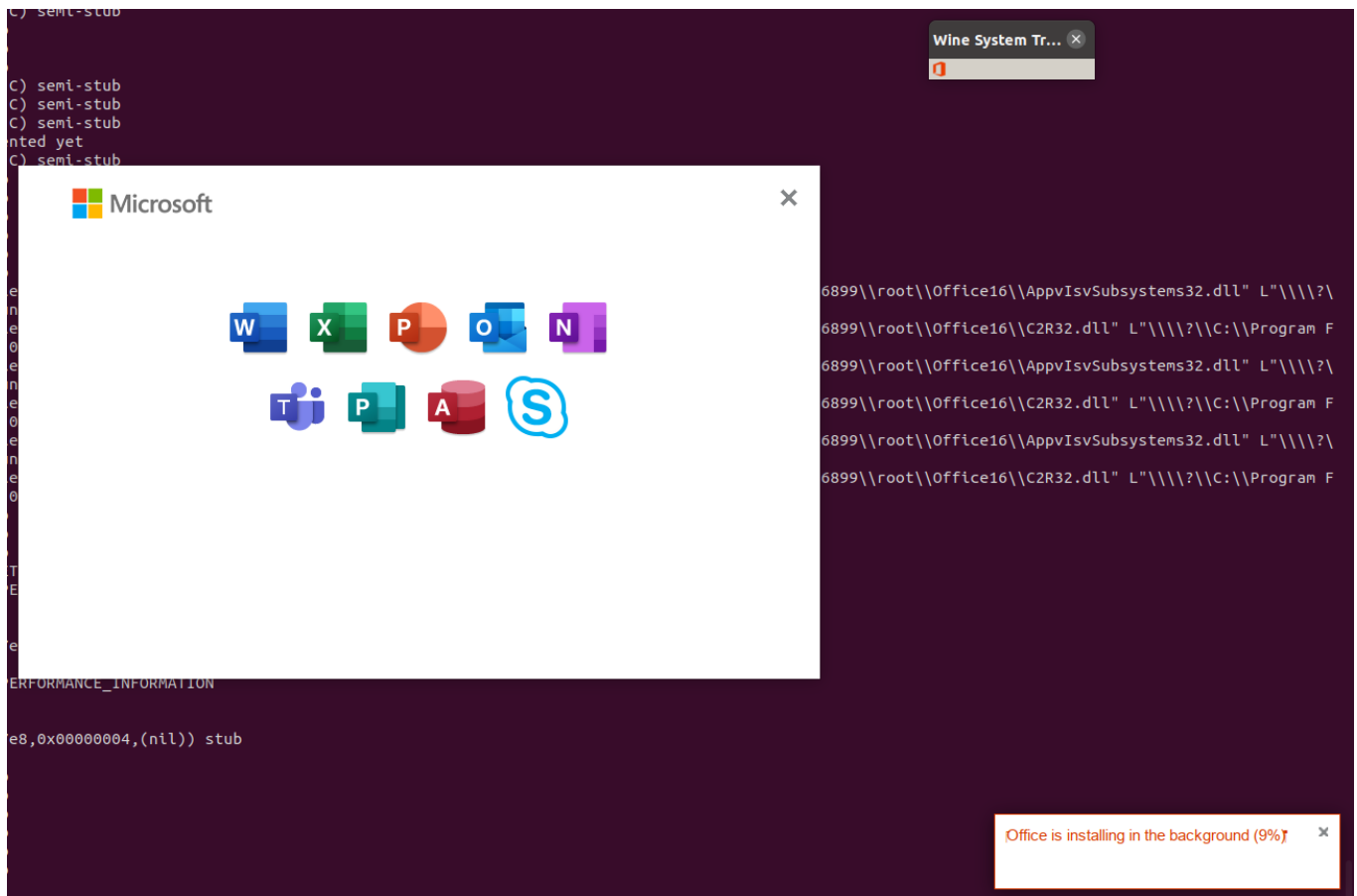
Ok, now that's over, we can actually begin installing the Office. It's rather simple. Again, without leaving the terminal:

```
wine path/to/the/installer/OfficeSetup.exe
```

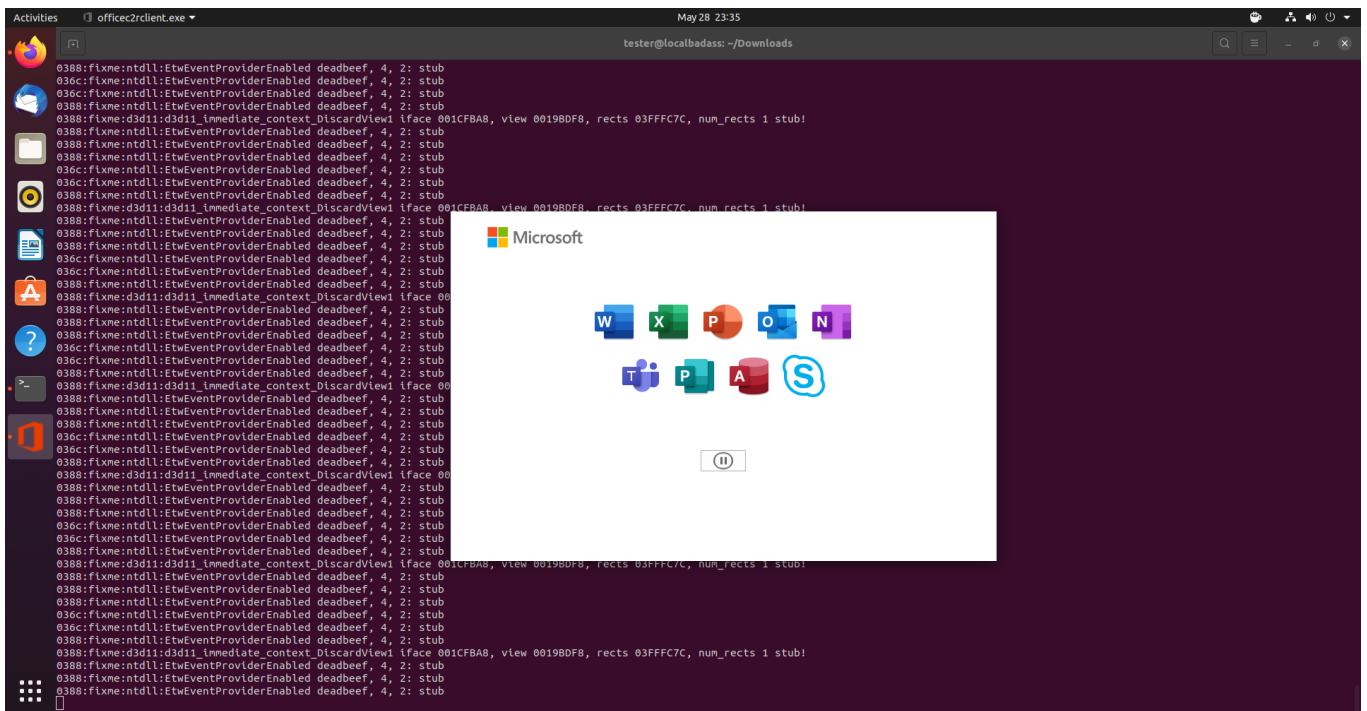
Ok, now you should see the following:



If it passes this screen, it means we worked out all needed dependencies. If any missing (like above I mentioned winbind was missing) see the terminal output and where the error is, or what step was missed. Now you should see this:



Yes, you'll notice that the progress bar doesn't display anything, but if you click on the system tray icon, you can see the progress there on the corner.

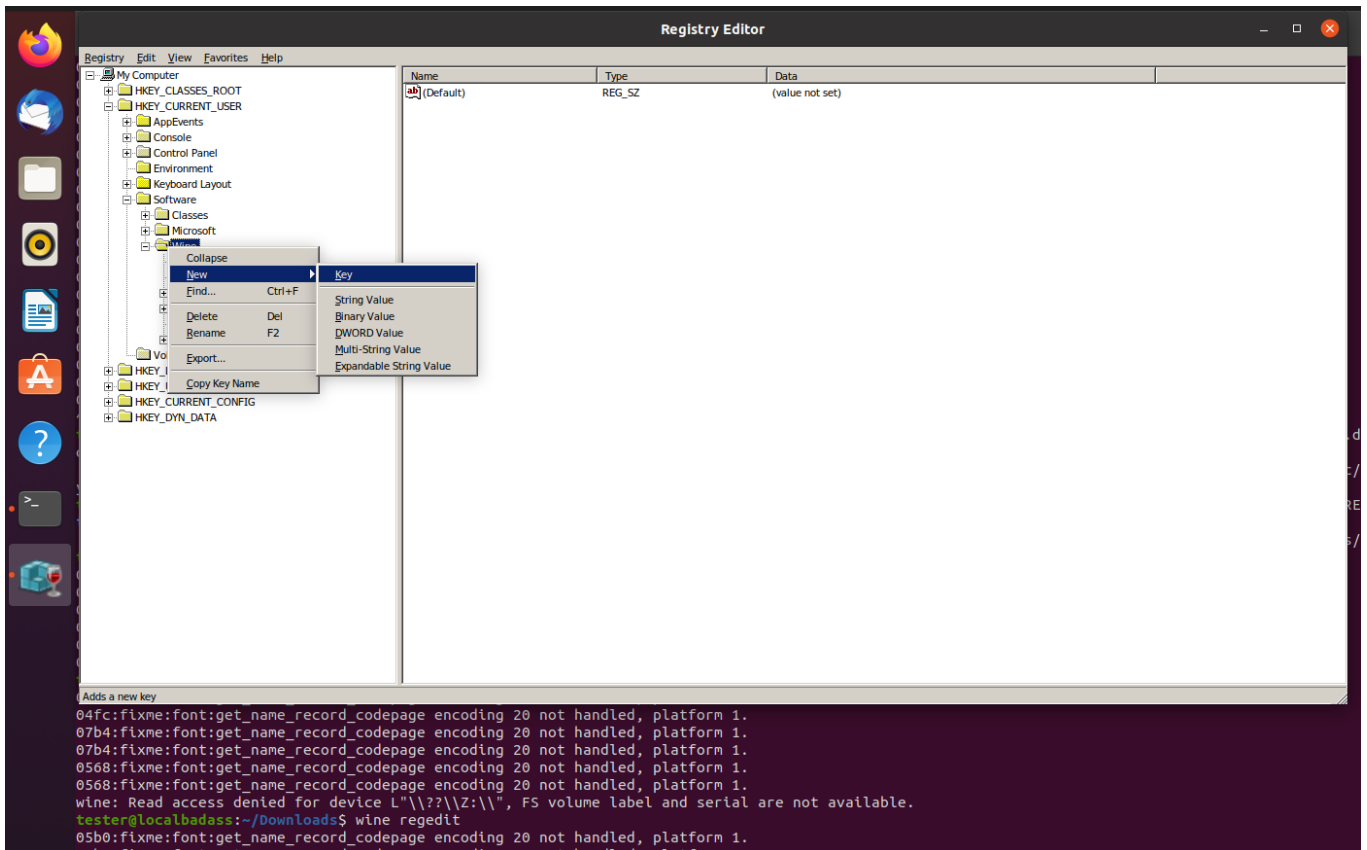


If you see this, the installation of the office is over, but not quite yet for us I'm afraid. However you can close the window and CTRL+C on the terminal. Run the following:

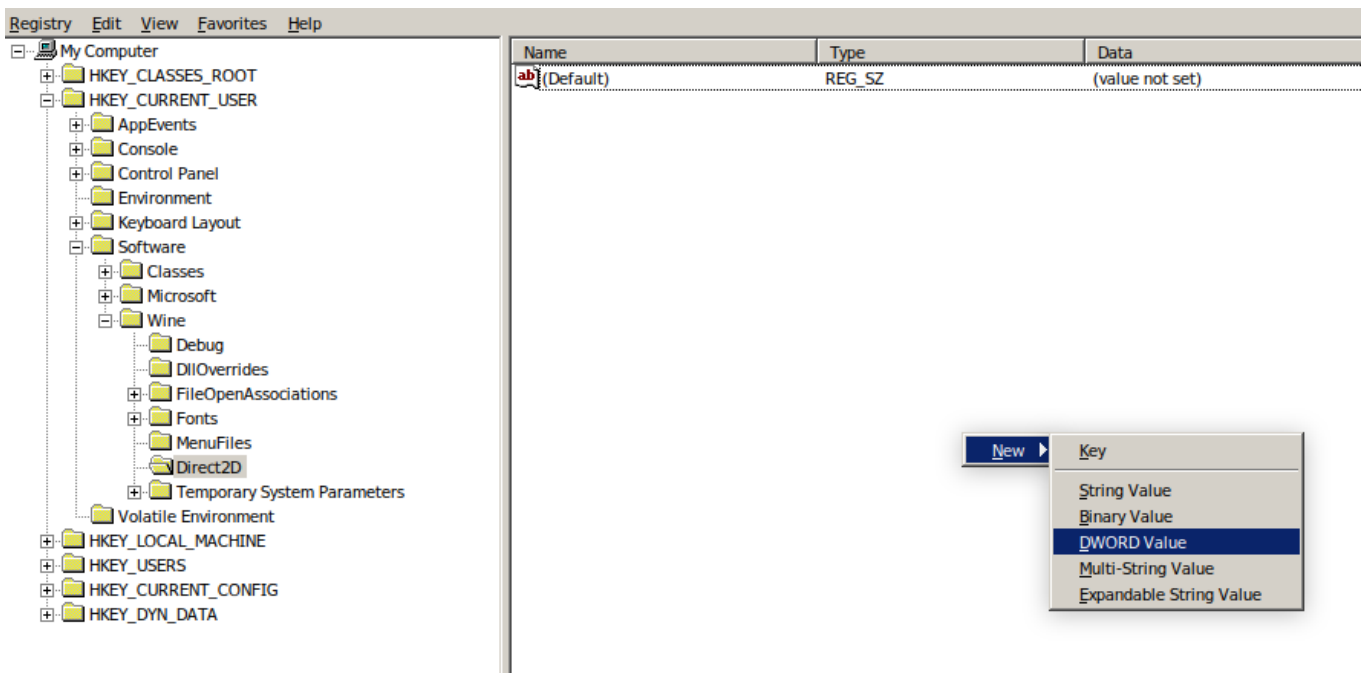
```
sofware Shared/ClickToRun/AppvIsvSubsystems32.dll" "${WINEPREFIX:~/.wine}/drive_c/Program Files/
sofware Shared/ClickToRun/C2R32.dll" "${WINEPREFIX:~/.wine}/drive_c/Program Files/Microsoft Offi
```

This puts copies DLL files to the right place. Still one step missing. That's right, it's everyone's favorite thing on Windows, regedit. We need to create 2 keys and 2 dwords, as below.

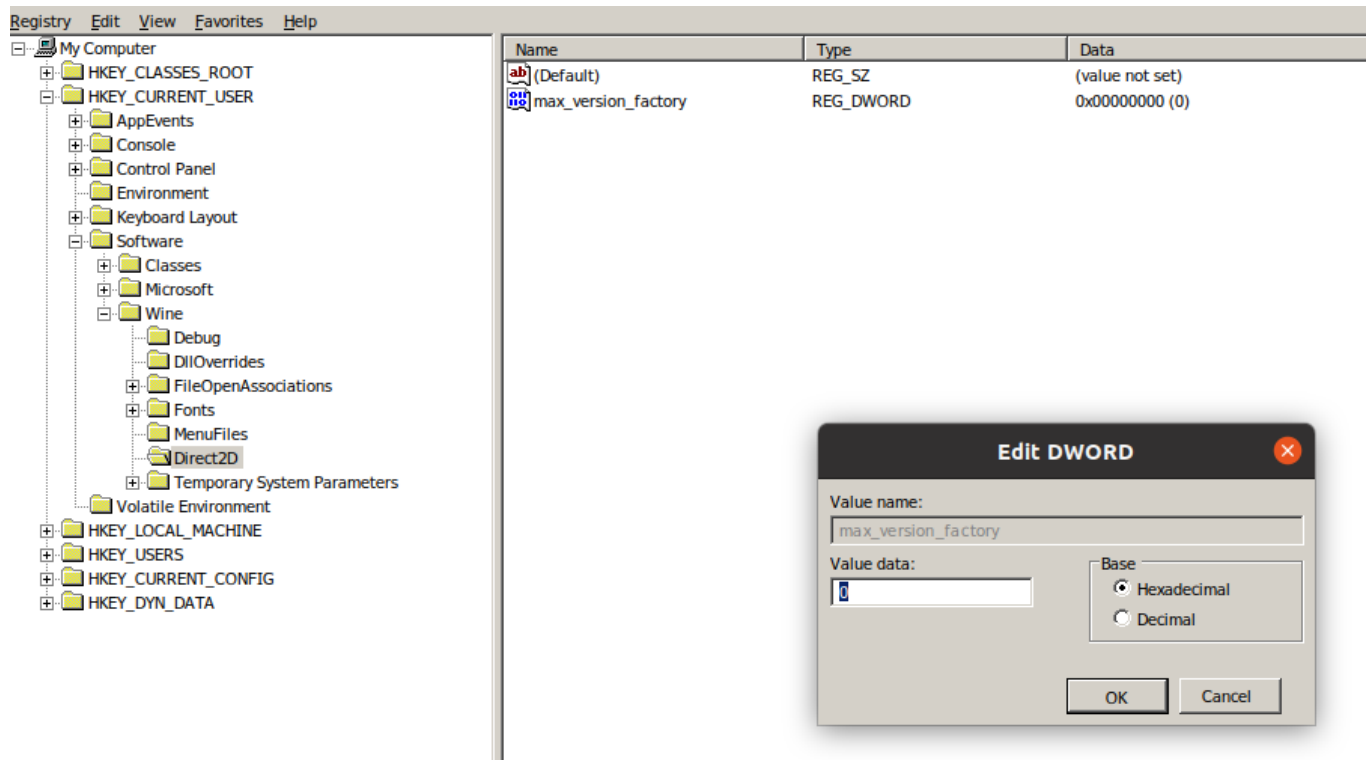
```
wine regedit
```



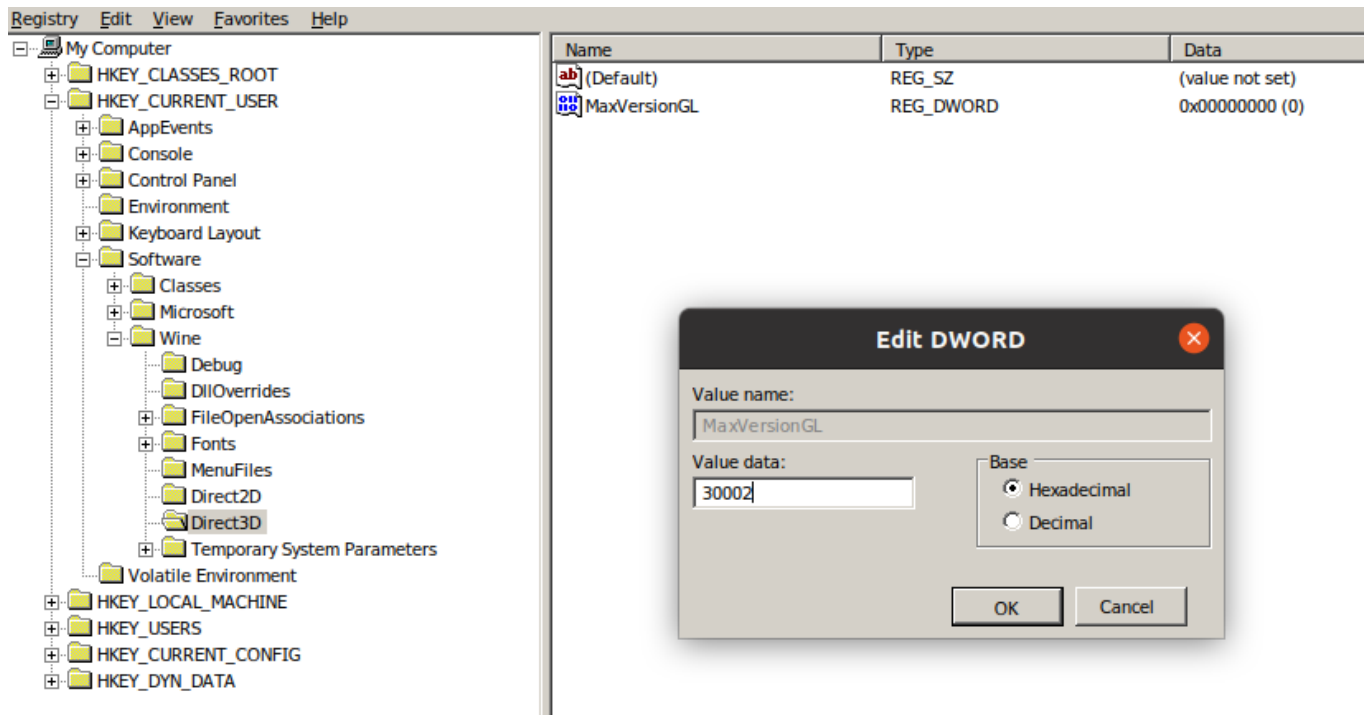
This will create the missing key. The path is as above. So HKCU/Software/Wine. Right click->New->Key Key name is "Direct2D".



Now inside this key, again right click->New->DWORD Value. The name and value is as below:



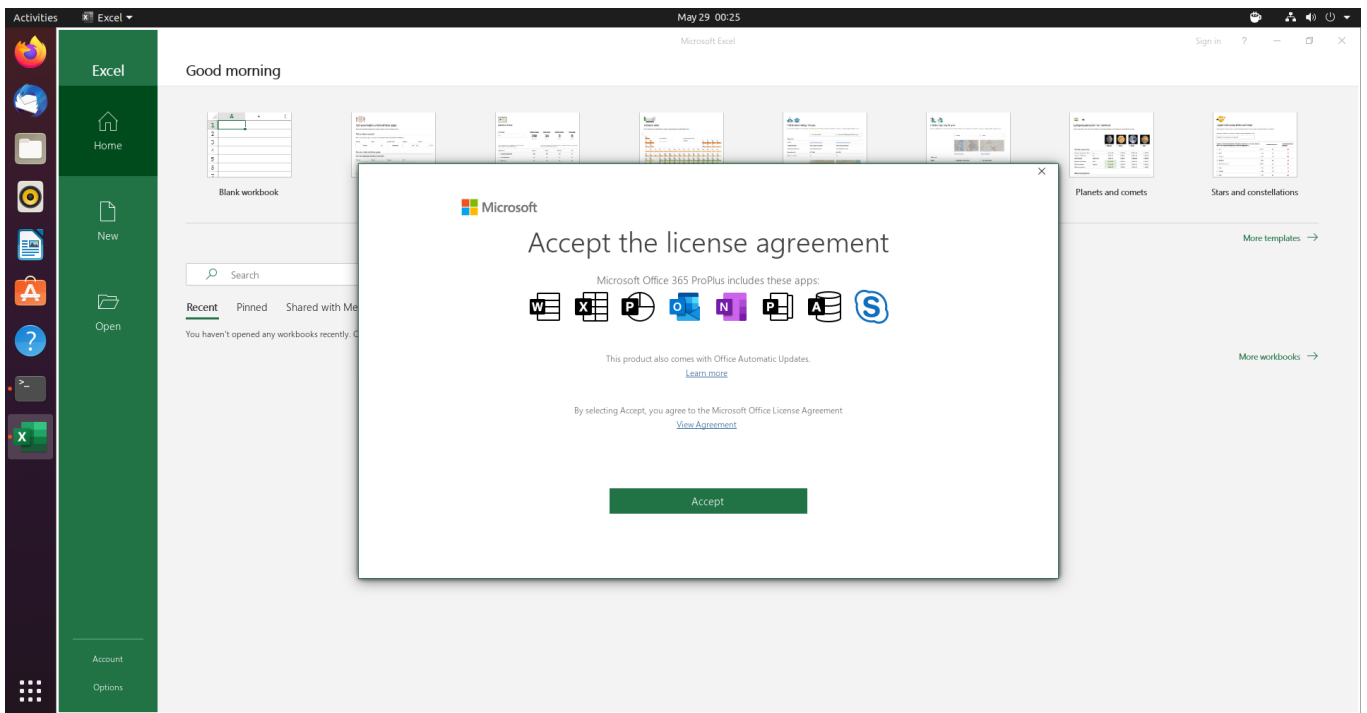
One more key and DWORD missing. Again, like next screenshot:



You can now close regedit and never look at it again. What were they thinking when regedit was created I wonder.

Anyhow.

It's over!



Now you can enjoy the most recent MS Office(2019 maybe? Who keeps track of this anyway?) on Linux.

Lastly, I must thank the Manjaro(and Arch, I guess) community for figuring this out and sharing each other's progress on the forum. The links unfortunately are dead(I took note of them two years ago), but they may still work on the wayback machine.

Source:

<https://forum.manjaro.org/t/office-365-using-wine-4-1/77418/8>

<https://forum.manjaro.org/t/is-there-any-way-to-run-office-365-with-word-pp-excel-etc-without-using-a-vm/55978/15>

<https://appdb.winehq.org/objectManager.php?sClass=version&iid=35527>

This is the most recent version on the wine page:

<https://appdb.winehq.org/objectManager.php?sClass=version&iid=36167>

See you space cowboy.

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