

New2Linux: WinE: the **Windows Emulator** (or **Wine Is Not an Emulator**)

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for

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Motivations

- There are some very useful Windows programs that have not been ported to Linux or other platforms
- Inability to run these programs might significantly inhibit use of Linux
 - Adobe Digital Editions (for public library borrowing)
 - Tax programs
 - Others?

Running Windows programs in a Linux computer

- Dual boot:
 - Can't run both Lin and Win at same time
 - Bootup can be slow
 - Maintaining a full system is a lot of work – 2 much more!
 - Window\$ cost\$ money
- Virtual Machine:
 - Still quite a large maintenance job, but does give full system – technically still must pay for Window\$
- Wine – the subject tonight

History of the Wine project

- Long standing project – started in 1993, but serious capability in late 1990s
 - winehq.com in 1997
- Corel charged in, then evaporated when M\$ threw money at them to disappear (c. 2001)
- Codeweavers and others have been supportive
- PlayOnLinux – since 2007: a nice GUI with scripts that wrap Wine tools

What is Wine

- ***Compatibility layer*** – an interface that allows foreign (i.e., Windows) binaries to run in a Linux platform
- NOT a full hardware emulator
- Won't run on non-x86 machines, though clever additional software might work

<https://hackaday.io/project/21023-run-wine-on-raspberry-pi>

- Somewhere between native and VM in nature

What works; what doesn't?

- <https://appdb.winehq.org/> reports on >27000 programs
 - I don't play games, so ...
 - M\$ Word: Mixed status
 - 2010(32bit) Gold; 2013(32bit) Bronze; 2016(32bit)
 - I use LibreOffice if I use word processing
 - Excel has varied reports. Use **Gnumeric**
- Warnings exist about copy protected programs, dongle requirements etc.

What about tax programs?

- Web consensus seems to be to use online programs
- Wine appdb does NOT mention Canadian tax s/w, but there are claims some US and Australian programs work
 - But TurboTax (US) gets poor ratings
- I'd use a VM (or dual-boot) to avoid a surprise after doing lots of data entry.

So what do users W(h)ine about?

- 9/10 platinum programs in appdb are games; 10th is .Net framework
- Gold top-10 is all games
- Silver list includes Photoshop, M\$ Office and 2 bible study programs

I'll turn to my own uses!

Tools

- Package winetricks is a wrapper, but it is not trivial to understand what is going on under the hood
 - Sometimes works, sometimes doesn't
- PlayOnLinux (independent of Wine project) is a wrapper GUI
 - Generally very nice IF IT WORKS

#1: Irfanview

- Have been using for over 2 decades
- Works well, reliably, and versatile enough
- Can share ideas with Win-users
- Seems to work well with Wine
 - Direct install “wine iview???.exe” (??? is version)
 - Download and install with winetricks (Should I explain?)
 - PlayOnLinux
- “Platinum” status on WineDB app database

Former use: PAF

- Genealogy program from Mormons.
- Worked well under Wine before 2017
- Then gave strange characters in menus and displays
- Still giving trouble. Program not updated since V5.2 (23 July 2002) and withdrawn 15 July 2013 (\$\$\$ from Ancestry), so no future!
- We switched to Gramps

Personal Ancestral File



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FotoSketcher

- Was using it in 2019 for photos -> drawings
- NOT in WineDB – until I tried to add it June 4, 2021
- Tried FotoSketcher_3.70_portable_32bit.exe with PlayOnLinux – failed
- wine FotoSketcher_3.70_portable_32bit.exe worked after (big) install of *wine32* package
- And PlayOnLinux installed
FotoSketcher_3.70_setup_64bit.exe OK
- Installed under wine-development in Kubuntu 20.04 OK

Wine AppDB / Forum issues

- My submission to AppDB rejected
 - I was honest that their dropdown list did NOT include the Wine version Ubuntu/Mint latest LTS use (5.0.3). wine-development says 5.5Ubuntu, which I suspect is 5.0.5
 - Attempt to revise using wine-development did not like that I had changed version
 - And ERASED my whole set of comments
 - Wine forum REALLY difficult for registration.
 - So far not accepted my advice to be more user-friendly

CloudLibrary

- A Windows application to read DRM'd Express eBooks from the Ottawa Public Library etc.
 - Platinum in appdb for Wine
- Installed in a 64bit virtual drive under PlayOnLinux
 - BUT needed to NOT launch program right away to get a launcher link set up
 - On first run, had to “authorize” my “computer” with my Adobe ID
- Managed to log in to OPL and borrow a book to read for 7 days.
 - NOT sure this is a good way to read books
 - AND the app was DISCONTINUED in Dec. 2020 with a new “solution” requiring Adobe Digital Editions

But ... Adobe Digital Editions

- According to AppDB, installs under recent versions of Wine as “Platinum”.
 - But my Wine is NOT latest.
- Many comments on earlier attempts, and it is noted that Ubuntu family installs all have some issues (I did not delve!)
- I tried many times in different ways (PlayOnLinux, winetricks, recipes from the Web). **No joy!**
- *Finally ...*

Almost success with ADE4.5

From: <https://wiki.winehq.org/Ubuntu> -- in Kubuntu VM

```
## Setup the "architecture" for Wine
sudo dpkg --add-architecture i386
## Download and add the repository key:
wget -nc https://dl.winehq.org/wine-builds/winehq.key
sudo apt-key add winehq.key
## Add appropriate repository
sudo add-apt-repository 'deb https://dl.winehq.org/wine-builds/ubuntu/ focal main'
sudo apt update
## install Wine Development branch
sudo apt install --install-recommends winehq-devel
## Prerequisite for ADE 4.5
export WINEPREFIX=~/.adewine
WINEARCH=win32 winecfg
winetricks -q corefonts
winetricks -q windowscodecs
winetricks -q dotnet40
## get the installer for Adobe Digital Editions (into actie directory)
https://adedownload.adobe.com/pub/adobe/digitaleditions/ADE\_4.5\_Installer.exe
wine ADE_4.5_Installer.exe## install it
```

And ...

- ADE opened OK (slow!)
- Authorized successfully
- (Slowly) downloaded a book from OPL
 - Wanted to install Gecko for Wine – accepted this.
- But would NOT open book.
- A second attempt: ADE would not start!!!!
- Attempts to clean up clobbered the VM so it would not boot!

Other tries

- In “real” LM20.1 on Asus UX303 – no joy whatever after several tries
- In new Ubuntu 21.04 VM with wine-development using winetricks (which offers ADE 4.5 install)

Very slow opening. Did seem to download a book, but it would not open (no messages).

Recommendations

- Wine is a “nice try, no cigar” system (my view!)
 - Developers say they want input from users
 - BUT they then treat those same users poorly (not just me!)
- VirtualBox VM more reliable and full featured
 - Note that ANY Win7 product key lets you install Win10 iso downloaded from M\$ with full capabilities.
- If (need to ask trusted advisors) you know something works e.g., Irfanview, then Wine makes sense.
- Otherwise, be prepared for disappointment
 - Also called a “learning experience” or “waste of time”

Links

<https://itsfoss.com/use-windows-applications-linux/>

<https://www.winehq.org/>