Gaming on Fedora

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Gamer!

(AAA) Native games

Started appearing with Steam on Linux in 2012

Lots of games use “Wrappers”

The Witcher 2, Dota 2, CS:GO and many others!

Quality varies a lot (Dota 2 x War Thunder)

Wine

Almost every Windows game can run on Wine

Performance heavily variable

Regressions & Bugs

PlayOnLinux

- “Wine” for newbies
- Automatic fixes
- Separate namespace for every application
- Multiple wine versions

Wine Compatibility

Almost all OpenGL and D3D9 are OK

Few D3D10 and D3D11 titles work

No D3D12 gaming

PunkBuster and lots of DRM are broken

appdb.winehq.org

Wine Performance

Terrible performance in D3D Games

CSMT - off main thread DirectX > OpenGL

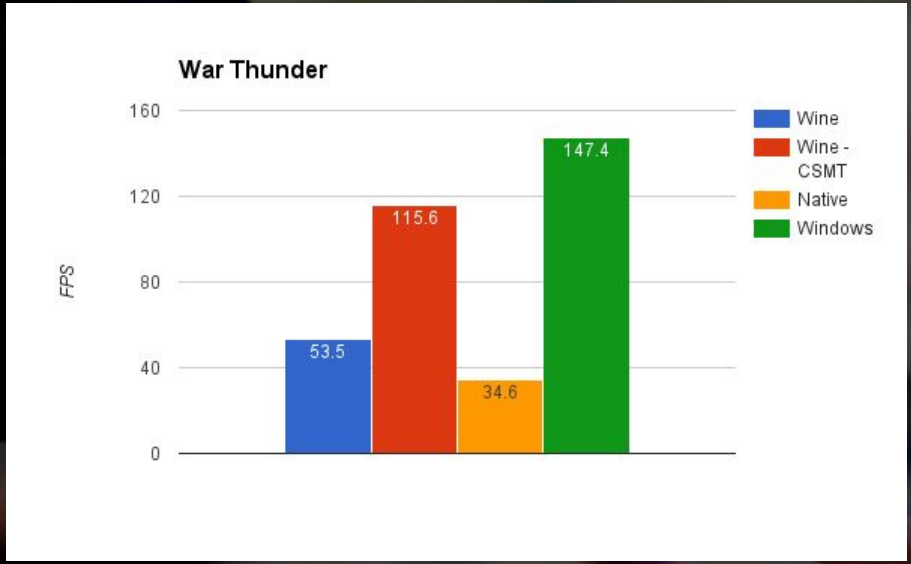
Gallium Nine - “Native DirectX9” on Linux!

Benchmarks!

RX 480 & Core i5 6600K

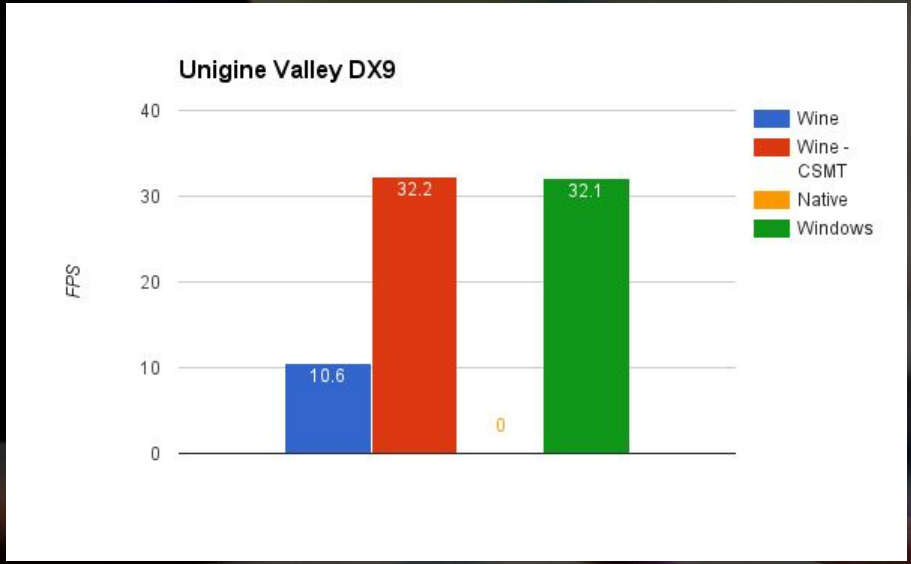
Fedora 25 x Windows 10

OSS driver x AMD Crimson



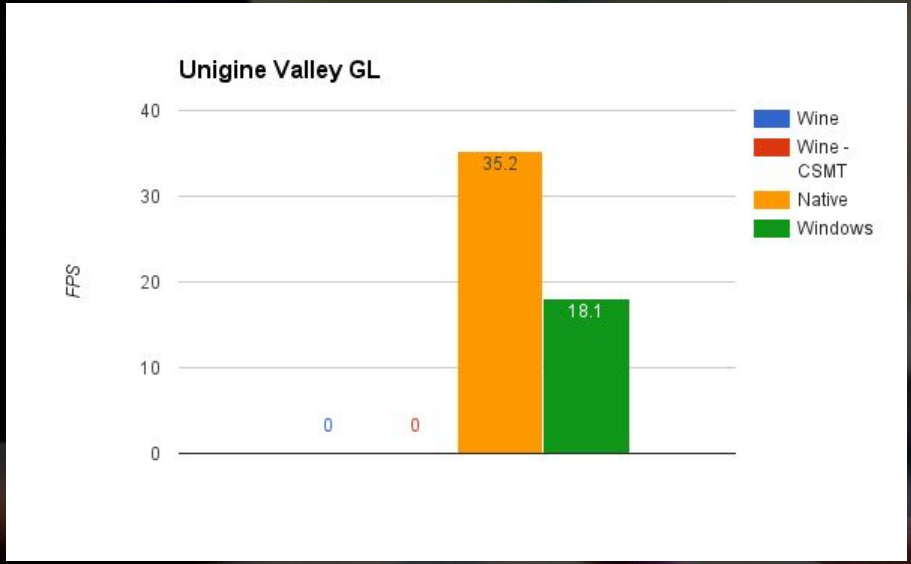
War Thunder

*Broken OpenGL renderer



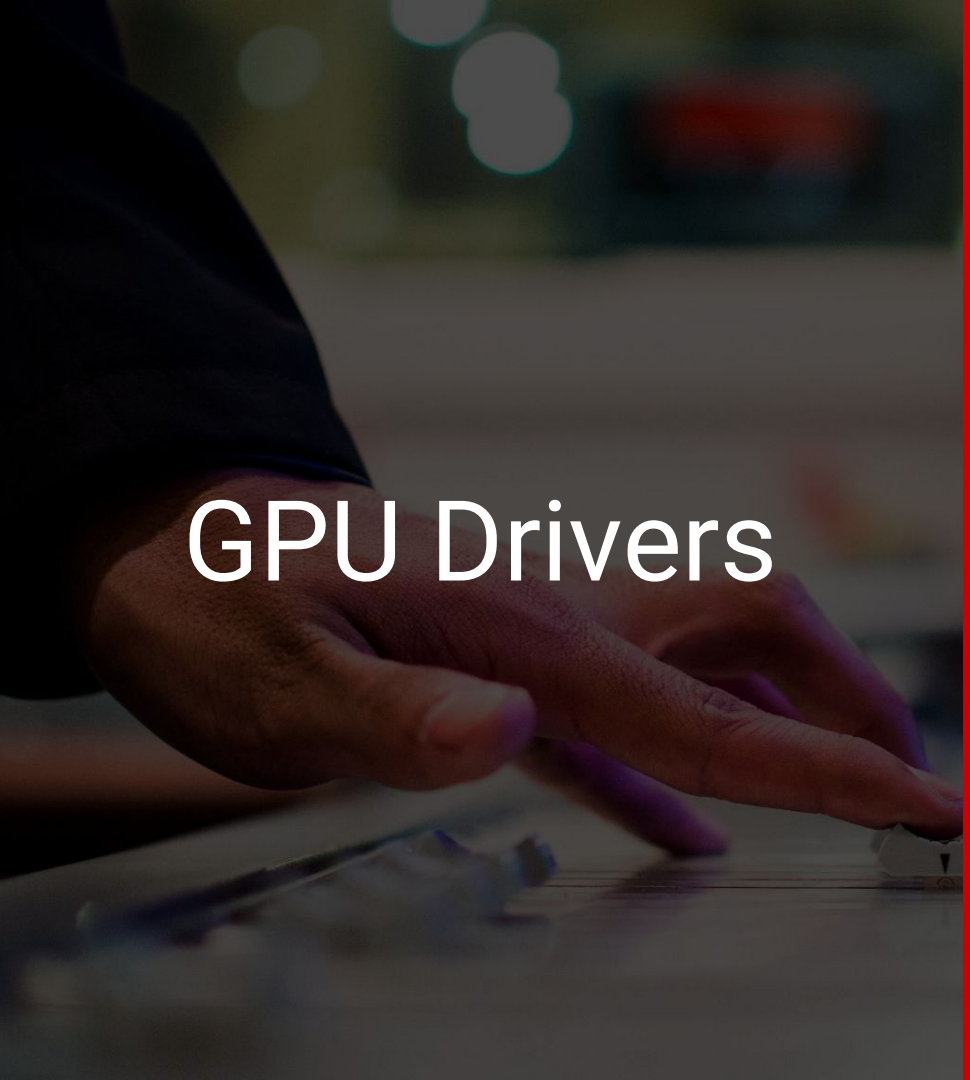
Unigine Valley

*Wine CSMT > Windows



Unigine Valley

*Broken OGL on Windows



GPU Drivers

3 main GPU manufacturers

AMD, nVidia, Intel

6 drivers

AMD
RADEON
GRAPHICS
+Mesa
Drives way under the speed limit, but follows all traffic laws and drives safely.

AMD
RADEON
GRAPHICS
+AMDGPU
Doesn't even have his driver's license yet and everyone expects him to be the next Dale Earnhardt.

NVIDIA
+nouveau

AMD
RADEON
GRAPHICS
+Catalyst
Usually drives faster than Mesa, but still drives under the speed limit. Likely to crash.

+proprietary
NVIDIA
He drives fast.
He drives well.
But he's a massive douche.

intel
+Mesa

Look to the Future

AMD killed fglrx, pushing OSS driver

nVidia and Intel are improving constantly

Vulkan (!!!)

Any questions?

Thanks for your attention!

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