

A row of gamers sitting at a long table in a dimly lit room, likely a gaming tournament. They are wearing large headphones and are focused on their computer monitors. The table has several water bottles and a yellow water cooler. The background is dark with some blurred figures of people. The text "Gaming on Fedora" is overlaid in the center in a large, white, sans-serif font.

Gaming on Fedora

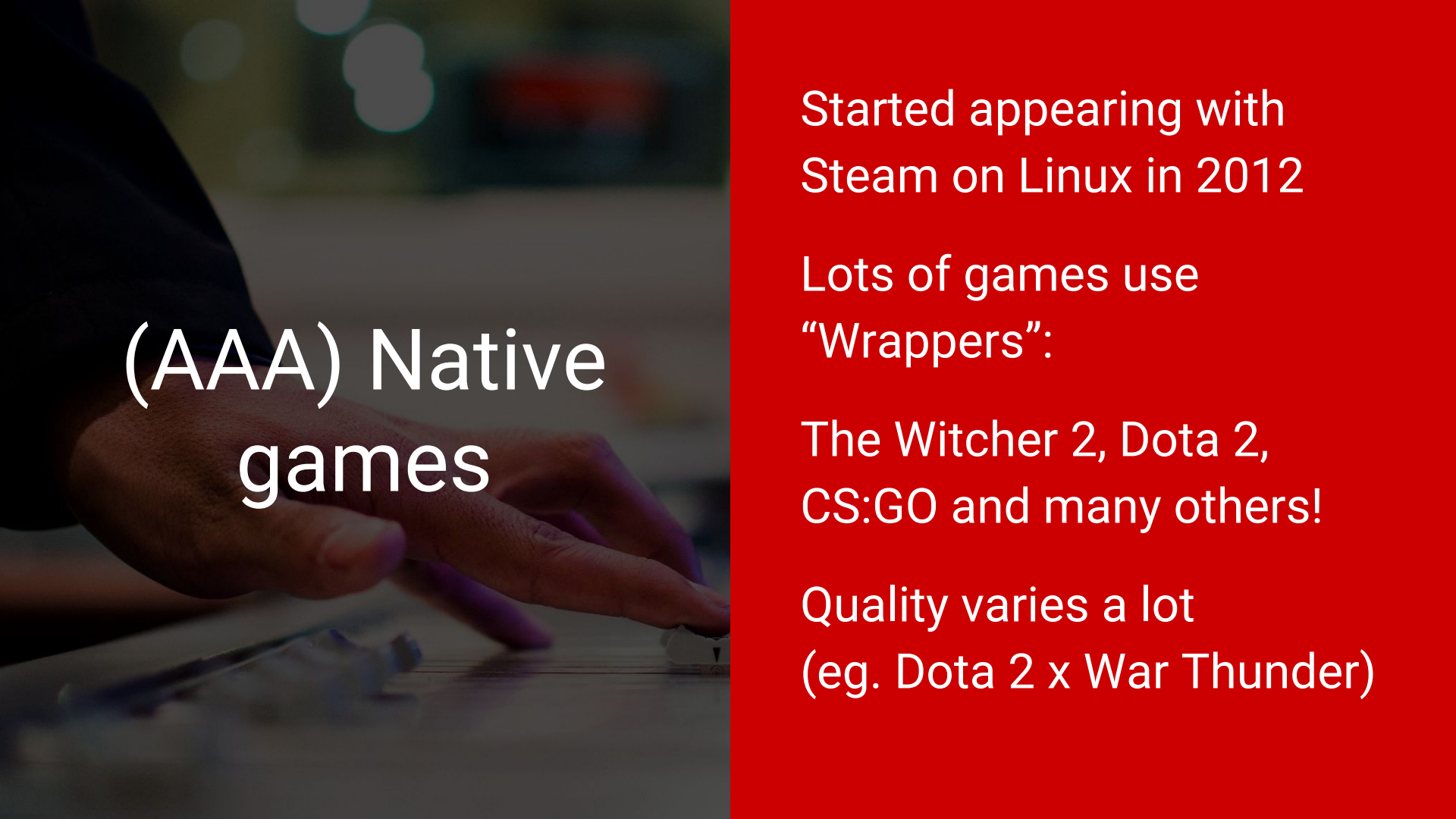
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Gamer!



(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)

A photograph of a person's hands typing on a keyboard, with a red vertical overlay on the right side of the image. The word "Wine" is written in white text over the left side of the image.

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!



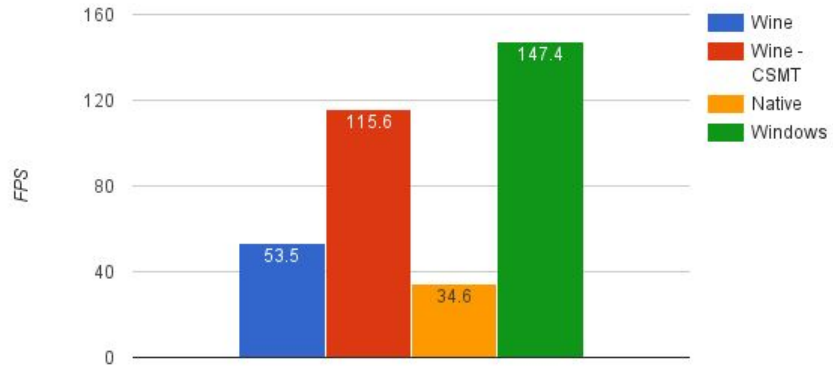
Benchmarks!

RX 480 & Core i5 6600K

Fedora 25 x Windows 10

OSS driver x AMD Crimson

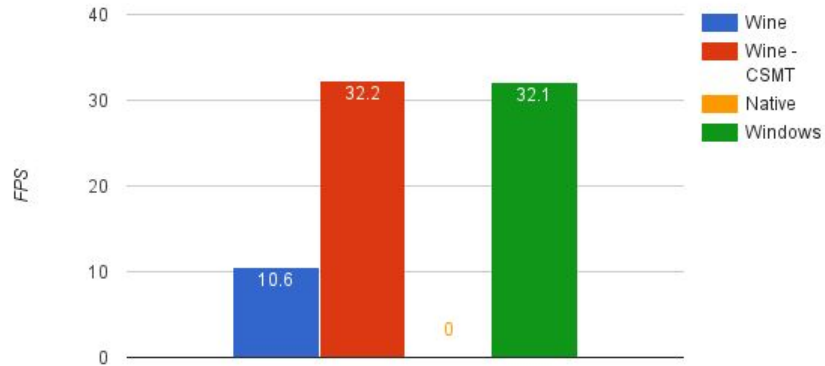
War Thunder



War Thunder

*Broken OpenGL renderer

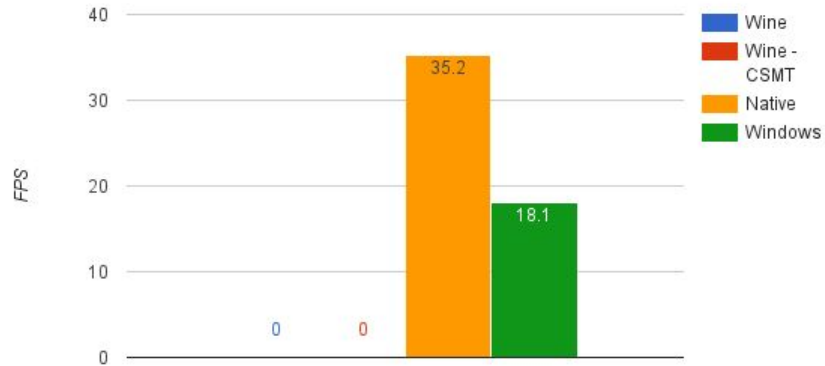
Unigine Valley DX9



Unigine Valley

*Wine CSMT > Windows

Unigine Valley GL



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.



nVIDIA
+proprietary

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



intel
+Mesa

X496 HLB

A person's hands are shown writing on a whiteboard with a marker. The background is dark and out of focus, with some bokeh lights. The text 'Look to the Future' is overlaid on the image in white.

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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