Linux as a video game preservation platform

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What is Lutris?

- Not only a Wine launcher
- Targets all video games
- Favors playability over accuracy
- Focus on preservation

Evolution of Linux gaming

- 1998-2001: Native ports from Loki, creation of SDL
- 2001-2009: Native ports from LGP, Wine becomes more and more compatible with games
- 2009-2012: Humble Indie Bundle starts, requiring Linux versions for all games included. Lutris is created.
- 2012-2015: Valve releases Steam on Linux, SteamOS, Steam Machines. Feral, Aspyr, VP start porting games to Linux.
- 2016-2021: Vulkan is released, DXVK and VKD3D are created. Valve releases Proton.

Current status

- Support for all game consoles until 6th gen
- Partial support for 7th and 8th consoles
- Wine regressions are now very rare
- Vulkan all the things!
- Support for RTX, DLSS, BattlEye, EAC, ...
- Steam Deck!

What can't be preserved

- Live services
- Kernel level anticheats
- Mobile games
- Linux games?

Game runtimes

- Wine
  - Excellent backwards compatibility
- LD_LIBRARY_PATH overloading
  - Can have issues with different versions of glibc
- Containers (Docker / Flatpak / Snap)
- Emulation
- Game open sourced or reverse engineered

Future transitions

- Removal of 32bit

- Switch to ARM architecture

- Switch to read only systems?

Status of x86 emulation

- PCem
- Box86
- Rosetta
- Fex-emu

Thanks!

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