



# Gaming on Linux

Is it even possible?!?!?



## Some resources



[gamingonlinux.com](https://gamingonlinux.com) -- News / Articles + Forum

[linux-gaming.kwindu.eu](https://linux-gaming.kwindu.eu) -- A community built wiki

[areweanticheatyet.com](https://areweanticheatyet.com) -- Are we anti-cheat yet?

[gamersonlinux.com](https://gamersonlinux.com) -- Forum

[protondb.com](https://protondb.com) -- Crowdsourced game compatibility report for Proton



# 01

## Launchers & Backends



How to install games and what they run on





# Lutris



- [lutris.net](https://lutris.net) - Python3, GTK
- Helps you install your games - Can connect with existing accounts like Steam, GOG
- Provides runners as well (.e.g compatibility layers, emulators, game engine re-implementations)
- Integrates with other game clients / launchers (e.g. Epic Games Store)



# Heroic



- [heroicgameslauncher.com](https://heroicgameslauncher.com) - Electron, TypeScript, NodeJS
- Launches games from Epic Game Store, GOG Games and Amazon Games



# Wine



- Wine = Wine Is Not an Emulator
- Compatibility layer - Runs Windows apps on POSIX systems
- Translates Windows API calls into POSIX calls



# Anti-cheats



easy<sup>™</sup>  
ANTI-CHEAT



- Measures: File integrity checks, behavioural measures,
- Some have proton runtimes but can be disabled by the game devs
- Userspace vs kernel space



# 02

## Hardware

Basically GPUS







Nvidia



**nVIDIA®**

- Mandatory video:  
<https://www.youtube.com/watch?v=MShbP3OpASA&t=2894s>
- Releases closed-sourced blobs
- nouveau - Open source project to build drivers for Nvidia cards  
- [nouveau.freedesktop.org/FAQ.html#technicalquestions](http://nouveau.freedesktop.org/FAQ.html#technicalquestions)
- TLDR; Nvidia and Linux works fine most of the time.  
Proprietary drivers are better than nouveau



AMD



- Has open-source drivers for Linux - Worked on by AMD as a development tree in kernel source code
- [kernel.org/doc/html/latest/gpu/amdgpu/index.html](https://kernel.org/doc/html/latest/gpu/amdgpu/index.html)



# 03

## Valve & Steam



Not an evil company... yet





# Proton



- A tool used within the Steam client to run Windows-exclusive titles on Linux. Recommended to use it within Steam client.
- Uses Wine under the hood
- [protondb.com](https://protondb.com)



# SteamOS



- Used to be Debian 8 (Jessie) (1.0 - 2.0), now Arch Linux (3.0)
- Optimized for the “living room experience”, not all hardware is supported
- Steam Deck, Steam Machines
- Now 3.0, not for desktop use!

## └ Remaining word salad ─┘

- OpenGL
- Vulkan
-

# THANKS!

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