

Nest With Fedora 2022



Fedora Workstation's

State of Gaming





THIS TALK IS
Brought to you by



Aakashdeep Dhar

Objective Lead (W&A), Fedora Council
Red Hat Community Platform Engineering



Onuralp Sezer

Representative (W&A), Fedora Mindshare
Fedora KDE SIG Member and Packager

WHAT WE PLAN TO COVER

The things that we would talk about



WHERE WE ARE NOW

Deep Learning Super Sampling, FidelityFX Super Resolution and Ray Tracing exhibited on Fedora 36



PROJECTS TO CONTRIBUTE TO

Technologies that make videogaming possible on GNU/Linux distributions that can use your help



HOW TO GET STARTED

Every contribution is appreciated - no matter how big or small they are, but it is important to start

Where are we now



DLSS 2.0

NVIDIA

Tested on
Rise of the Tomb Raider (2015)



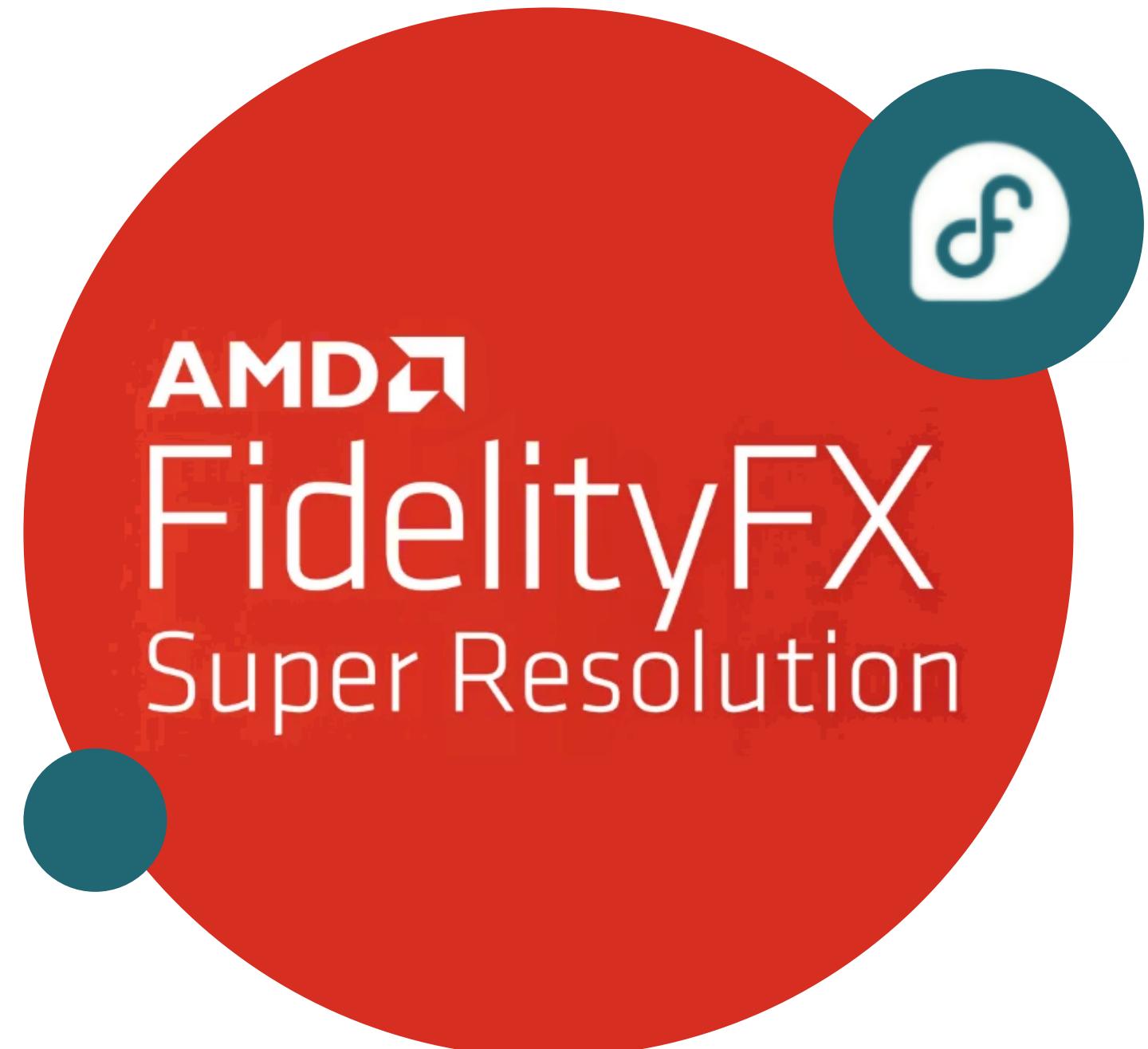
FSR

AMD

Tested on
Minecraft (2011)



EXHIBITING ON FEDORA LINUX
Nvidia DLSS 2.0



EXHIBITING ON FEDORA LINUX
AMD FSR

Our testbench

Intel Core i7-10875H

32GB 3600MHz

Fedora Linux 36

Geforce RTX 2070
SUPER MAX Q

Samsung PM981a



AMD Ryzen 9 5900X

32GB 3600MHz

Fedora Linux 36

AMD Radeon
RX 6800 XT

Crucial P2

Fedora Workstation's State of Gaming



IMROVING THE EXPERIENCE
Projects to contribute to

Fedora Workstation's State of Gaming



GAMEMODE

GameMode is a daemon/lib combo for Linux that allows games to request a set of optimisations be temporarily applied to the host OS and/or a game process, originally designed to control CPU governors.



GAMESCOPE

Valve-led micro-compositor that is focused on optimized game presentation with efficient Wayland usage and various optimizations there to reduce frame latency and can handle nested use-cases. Also added extra features like integer scaling and AMD FidelityFX Super Resolution upscaling or NVIDIA Image Scaling.



DVXK

A Vulkan-based translation layer for Direct3D 9/10/11 which allows running 3D applications on Linux using Wine. (It is default in wine since Fedora 33)

PROJECTS THAT ENHANCE Performance

Fedora Workstation's State of Gaming



GREENWITH

ENVY



CORECTRL



PROTON

System utility designed to provide information, control the fans and overclock your NVIDIA card. Show general GPU stats (model name, driver version, gpu/memory/power usage, clocks, temps, etc)

CoreCtrl is a Free and Open Source GNU/Linux application that allows you to control with ease your computer hardware using application profiles. It aims to be flexible, comfortable and accessible to regular users.

Proton is a compatibility layer for Microsoft Windows games to run on Linux-based operating systems. Proton is developed by Valve in cooperation with developers from CodeWeavers.

PROJECTS THAT HELP YOUR Experience

Fedora Workstation's State of Gaming



LUTRIS

A free and open source game manager for Linux-based operating systems and games that require using Wine, community installer scripts are available that automatically configure the Wine environment.



BOTTLES

Bottles' Gaming Environment comes pre configured to support a large set of Windows video games on Linux. You can have immediate access to the most famous game stores and play them normally.



WINETRICK

Winetricks is a helper script to download and install various redistributable runtime libraries needed to run some programs in Wine. These may include replacements for components of Wine using closed source libraries.

PROJECTS THAT HELP YOUR Experience

Fedora Workstation's State of Gaming



STEAM/PROTON

Proton supports some common anti-cheat middleware, including

- **Easy Anti-Cheat**
- **BattlEye**

If your title's functionality was previously blocked or limited by anti-cheat, but you've since completed steps in steam docs and didn't work. You can resubmit your game for a follow-up review. Please see the Steam Deck Compatibility Review documentation for more details.



OTHER GAMES

There are other game companies supports anti-cheat in GNU/Linux distributions, and some games have a way to handle anti-cheat within Wine as well.

If your title's functionality was previously blocked or limited by an anti-cheat implementation. You can ask your game company for support and try to get help.

PROJECTS THAT HELP YOUR
Experience without cheating (or do we ?)

PROJECTS THAT HELP WITH
Monitoring



MANGOHUD



GOVERLAY

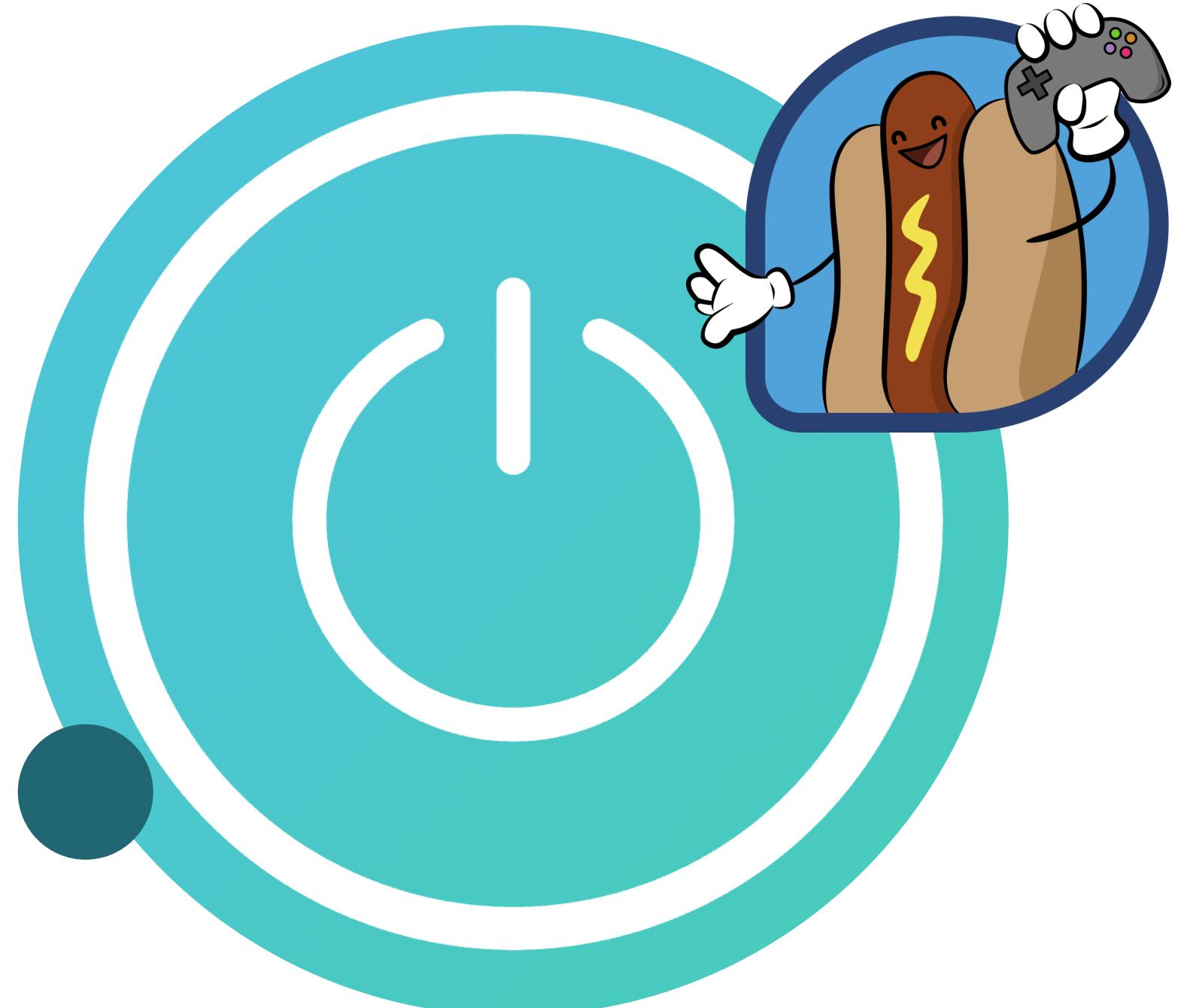


DXVK HUD

A Vulkan and OpenGL overlay for monitoring FPS, temperatures, CPU/GPU load and more. MangoHUD is packaged and distributed in the official Fedora Linux repositories and can be used alongside Proton and native videogames.

GOVERLAY is an open source project aimed to create a Graphical User Interface to manage Vulkan/OpenGL overlays such as MangoHUD. It lets users to easily customize the statistics and metrics shown.

The DXVK_HUD environment variable controls a HUD which can display the framerate and some stat counters. It accepts certain options like `fps`, `framerate`, `gpuinfo`, `gpuload` and many more.



GETTING YOUR FEET WET
How to get started

Starting Contributions

TRIAGING ISSUES

Prioritizing what tickets are important/urgent from the ones that are not

#1

WRITING CODE

Helping to build new features, fix bugs and issues that may arise and plan advancements

#3



#2

TESTING RELEASES

Being the first ones to test new releases to mark out bugs and inconsistencies

#4

MAINTAIN DOCS

Keeping up with the changes and explaining the features and requirements clearly

Within the Fedora Project

INTRODUCTION

The new contributors get to introduce themselves to the community, subscribe to the Join mailing list and added to the Join Pagure group.

INTERACTION

From time-to-time we check progresses that our prospective contributors are making. You can always come back if you give up at some time.



EXPLORATION

We let you loose in the vibrant world of Fedora to check out the awesome subprojects and SIGs we have and to contribute to them.

I AM FEDORA

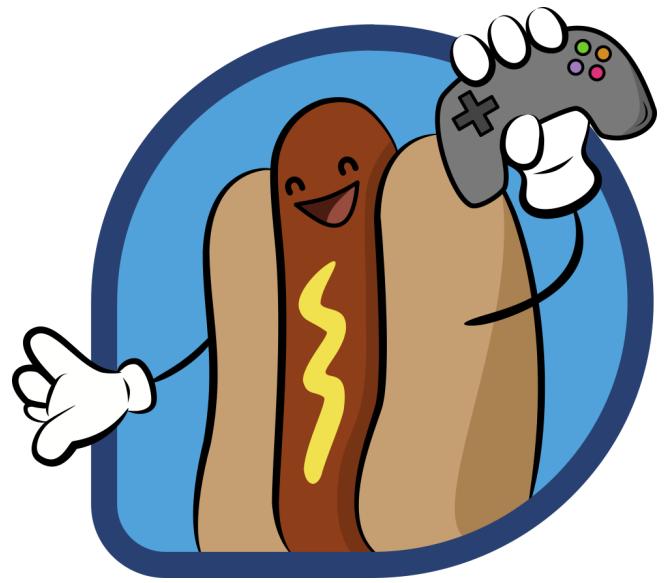
Now that our prospective contributor has joined a team, they have become a valuable member of the community. Time to celebrate!



fedora GAMING

JOIN US!

Whether you want to help write documentation, magazine articles, package games and game development tools, work with game developers, market Fedora as a gaming platform, or even just talk about playing games.



MISSION

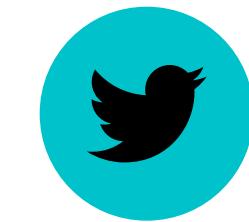
Help make gaming and game development on Fedora Linux better for everyone!

The Fedora Project is full of gamers and game developers, and we want to talk about it! Whether you want technical help or just want to discuss gameplay, you can come to the Games SIG and feel at home

Fedora Workstation's State of Gaming



Thank you!

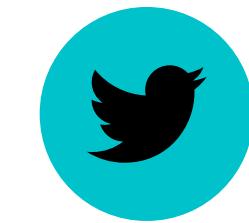


@t0xic0der



CONTACT

Feel free to reach out to us
Follow us on Twitter



@onuralpszr