FEDORA LINUX 36 RELEASE PARTY

Fedora Workstation

State of Gaming

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What would we talk about?

FEDORA WORKSTATION STATE OF GAMING

Popularity

IS IT GOING PLACES?

Let us take a look into whether Linux Gaming is still looked into by nerdy enthusiasts or appreciated by everyone.

Convenience

IS IT EASY ENOUGH?

Let us understand how difficult or simple it can be to set a gaming environment up on a Fedora Workstation installation.

Performance

IS IT ACHIEVING HEIGHTS?

Let us observe the way videogames run on Fedora Workstation and compare it against some leading platforms.

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IS IT GOING PLACES?

POPULARITY

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From humble beginnings

Back in the day, Linux Gaming was very less heard of. To a great extent, that was because of the complicated setup procedures for preparing the environment and the rough experiences inside of the video games themselves.

ARE THINGS ANY DIFFERENT NOW?

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Popularity

To Great Places & Good Words

Communities of dedicated developers and maintainers devoted their time and effort into changing the scene. Thanks to them, the video games played smooth and that made corporates see huge potential in gaming on GNU/Linux.

YES - PEOPLE HAVE AN INTEREST HERE

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Popularity

Gaming On Linux

A community of passionate GNU/Linux enthusiasts working on bringing the best GNU/Linux gaming news, guides and tutorials.

Linus Tech Tips

A passionate team of "professionally curious" experts aiming to inform and educate people through videos about consumer technology.

The Linux Experiment

A YouTube channel about accessible GNU/Linux desktop news, tutorials and opinions minus gatekeeping, technical lingo or command line magic.

GNU/Linux Gaming

A subreddit about videogaming on the GNU/Linux operating system consisting of helpful enthusiasts sharing configurations and news.

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IS IT EASY ENOUGH?

CONVENIENCE

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Convenience

From having to read so much

In times gone by, the process of setting up graphical drivers on GNU/Linux required great attention and the margin of error was small. On the top of all that, setting up different versions of Wine involved repeated interaction with the CLI.

ARE THINGS ANY DIFFERENT NOW?

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Convenience

To doing all with some clicks

CLI is cool and all but nothing is more comfortable to new users than to do things with the help of shiny GUIs. UI/UX designers have interacted with experienced and newbie users alike to work on shiny yet powerful interfaces.

YES - UI/UX FEEL A LOT EASY & STRONG

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Convenience

Bottles

Bottles is a free and open source software that uses environments to help you easily manage and run Windows apps on GNU/Linux distributions.

Lutris

Lutris is a video game preservation platform aiming to keep your video game collection up and running for the years to come, be them old or new.

Play On Linux

PlayOnLinux is a graphical frontend for Wine compatibility layer which allows Linux users to use Windows-based videogames and softwares.

Retroarch

RetroArch is a frontend for emulators, game engines and media players - allowing users to tailor-configure their videogames and emulate platforms.

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IS IT ACHIEVING HEIGHTS?

PERFORMANCE

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From having a poor framerate

Prior to the present time, users experienced poor framerates as compared to the other platforms due to inefficient translation of platform-exclusive instructions. Incomplete conversion graphical information across APIs caused visual glitches.

ARE THINGS ANY DIFFERENT NOW?

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To having more score than rest

Nowadays the platform-exclusive instructions are translated precisely and quickly which results in more smoother framerates. Accurate translation of graphical instructions help render stunning visuals, even on a low-powered handheld device.

YES - VIDEOGAMES LOOK & FEEL GREAT

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Performance

GameScope

A tool that lets you upscale and play any game or graphical application full screen while rendering in a lower resolution on AMD/Mesa drivers

Wine

A free and open-source compatibility layer to allow Windows software and videogames run on Unix-like operating systems

Feral's GameMode

A daemon/lib combo for GNU/Linux for videogames to request a set of optimisations be temporarily applied to the host OS and/or a game process

Steam Proton

A tool for use with the Steam client which allows games which are exclusive to Windows to run on the GNU/Linux operating systems using Wine

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Where does Fedora Workstation fit in this equation?

Benchmarks

Notice

Usage

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Benchmarks

Control (2019)

-12.50%

Framerate

Compared to Windows 10

A certain amount of framerates are lost due to the inefficiencies of translating platform-exclusive instructions of a video game on a different platform.

The gap was huge back in the day and is progressively reducing to a point that it is almost unnoticeable.

-6.25%

GPU Power Usage

Compared to Windows 10

Being able to deliver an almost identical performance while using comparatively lesser GPU power indicates a great deal of execution efficiency.

Widening of this gap would make GNU/Linux distributions more fit for use on portable and handheld gaming platforms.

+2.50%

CPU Power Usage

Compared to Windows 10

An additional amount of computation need to be performed for cross-translating the instructions and hence, it causes a loss of efficiency.

The gap was large back in the day and is progressively reducing to a point that it is almost just as efficient.

-56.25%

Memory Usage

Compared to Windows 10

GNU/Linux desktop environments are light and efficient due to which maximum resources could be dedicated to the videogame.

Certain custom skins and desktop environments are even more lighter than GNOME and can increase the gap.

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Benchmarks

Far Cry 5 (2018)

+62.50%

Framerate
Compared to Windows 10

-21.25%

Video Memory Usage
Compared to Windows 10

-31.25%

System Memory Usage
Compared to Windows 10

HD

Textures
Compared to Windows 10

+56.25%

Framerate
Compared to Windows 10

-31.25%

Video Memory Usage
Compared to Windows 10

-36.25%

System Memory Usage
Compared to Windows 10

Non-HD

Textures
Compared to Windows 10

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Notice

Incompatibility

Certain videogames require patches and custom additions before they can run. Please be mindful of those and help accordingly.

Optimization

Some videogames might not be as optimized even after applying the patches as they are on other platforms due to their design.

Distinctive

GNU/Linux desktop environments could look and feel very different from one another and hence can lead to a disjointed perspective

Do make a **calculated move**

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Use Fedora Linux

For building videogames

YOUR OWN CREATIVE PLATFORM

With a wide array of updated packages available on the official repositories, and those on RPM Fusion - developers get to build on the latest and the greatest out there

For gaming enthusiasts

YOUR OWN GAMING CONSOLE

With the fast performance, optimized power usage and stunning visuals across a variety of videogames - enthusiasts can enjoy playing and tailor-configuring their games

For sharing in friends

YOUR OWN FRIENDLY COMMUNITY

With a variety of subprojects, special interest groups and subcommunities to hang out in and contribute to - people can come around to help the community grow and maintain

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Contact Information

FOR QUESTIONS OR COMMENTS

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