

Linux Kernel 5.16 officially released with great features for gamers

The Linux Kernel just got its big update of the year - and if you're a gamer, this one is really cool!

Linus Torvalds has officially announced the release of Linux Kernel 5.16. This Linux Kernel release has been delayed by several weeks due to several objective reasons.

What's New in Linux Kernel 5.16?



Linux Kernel 5.16 introduces a new kernel system called FUTEX2, or `futex_waitv()`.

Contributed by Collabora, this feature can help improve the gaming experience on Linux, but most obviously with Windows games running through Wine. It allows the game to wait for multiple 'futexes' with a single system command. This will help reduce CPU usage and increase FPS for many games.

Additionally, file system health reporting has also been enhanced by a new API based on fanotify, although Kernel Newbies notes that this feature currently only supports the EXT4 file system. This tweak improves system health monitoring daemons by only reporting to them the first error that occurs since the last error message and then logging the number of additional messages.

Every kernel update improves graphics support and version 5.16 is no exception. It provides DisplayPort 2.0 for AMD GPU drivers; prepares the foundation for DG2/Alchemist graphics and provides related stable support for Intel Alder Lake S (ie DG1) graphics.

Other notable changes include:

1. Intel AMX . instruction support
2. Task scheduling for L2/L3 cache shared CPU "clusters"
3. Memory management features Memory Folio
4. Active memory enhancement based on DAMON
5. Improved management of bottlenecks during recording

Linux Kernel 5.16 also introduces support for the Nintendo Joy-Con and Nintendo Pro gamepads; the 2021 revision of the Apple Magic keyboard; new Realtek 802.11ax drivers; improved support for Microsoft's Surface Pro 8, Surface Laptop Studio, and (apparently both) Surface Go 3.

The side buttons of the Xiaomi Mi wireless mouse, as well as the DualSense LED on the Playstation 5 controller (a full driver has been added to Linux Kernel 5.12), should now work as expected. In addition, the experience on Wacom's latest Intuos tablets and Nitrokey FIDO U2F has also been improved.

A host of file system updates, kernel tweaks, driver additions, and other network improvements are also available.

Download Linux Kernel 5.16

Linux Kernel 5.16 is free, open source software. You can download the latest release from the official kernel.org website.

Rolling release distributions (as well as those with faster kernel releases, like Pop! _OS) will receive the Linux Kernel 5.16 update in the coming days.

Distributions like Ubuntu are different. They usually don't include every kernel release. Most provide an easy way to install the mainstream kernel, but without any kind of official support or stability guarantees - i.e. not recommended.

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