Kernel: Linux 5.17 and Performance

By Roy Schestowitz
Created 09/01/2022 - 1:54am
Submitted by Roy Schestowitz on Sunday 9th of January 2022 01:54:00 AM Filed under Linux [1]

**Linux 5.17 to release improvements & optimizations to Intel, AMD, & even Apple M1, offers AMD P-State capability** [2]

Tomorrow should see the release of Linux 5.16, the newest and most stable kernel, delivering massive improvements to start off 2022 on a strong foothold. Linux users and enthusiasts are showing a lot of excitement for this new update, and are even more excited to see 5.17, the predecessor to tomorrow's kernel, which is to show some exciting enhancements.

**Linux 5.17 To Bring AMD P-State, Many AMD & Intel Improvements, New Optimizations - Phoronix** [3]

The Linux 5.16 stable kernel is slated for release tomorrow and it delivers on some grand improvements to kick off 2022. But as for great as the Linux 5.16 features are, we are already looking forward to the enhancements on deck with Linux 5.17.

After the Linux 5.16 kernel debuts, the Linux 5.17 merge window opens like clockwork. With my constant monitoring of Linux mailing lists and Git repositories, here is a look at some of the features on trajectory for landing over the next two weeks for Linux 5.17. The Linux 5.17 kernel in turn will debut as stable around the end of March. Linux 5.17 has a lot of work as usual on new AMD and Intel hardware support, new Arm improvements including the ongoing Apple M1 bring-up, new I/O and network optimizations in particular are exciting on the performance front, and a ton of other exciting hardware driver fun.

**Fast Kernel Headers v2 Posted - Speeds Up Clang-Built Linux Kernel Build By ~88% - Phoronix** [4]

What may end up being one of the greatest Linux kernel features of 2022 is the recently
published "Fast Kernel Headers" effort for cleaning up the kernel headers and dramatically speeding up Linux kernel builds both for absolute/clean and incremental builds. Fast Kernel Headers can cut the Linux kernel build time in half or greater and out this weekend are the v2 patches.

Last week Ingo Molnar sent out the initial Fast Kernel Headers work to cut the Linux kernel build time by 50~80%. The roughly 2,300 patches clean up the kernel's "dependency hell" and completely rework the header file hierarchy. Ingo was working on this patch series for more than one year and likely the single ever biggest "feature" to the Linux kernel.

Source URL: http://www.tuxmachines.org/node/160043

Links: