I’ve just done a tech check for my LCA lecture. I had initially planned to do what I had done before and use my phone for recording audio and video and my PC for other stuff. The problem is that I wanted to get an external microphone going and plugging in a USB microphone turned off the speaker in the phone (it seemed to direct audio to a non-existent USB audio output). I tried using bluetooth headphones with the USB microphone and that didn’t work. Eventually a viable option seemed to be using USB headphones on my PC with the phone for camera and microphone. Then it turned out that my phone (Huawei Mate 10 Pro) didn’t support resolutions higher than VGA with Chrome (it didn’t have the ?advanced? settings menu to select resolution), this is probably an issue of Android build features. So the best option is to use a webcam on the PC, I was recommended a Logitech C922 but OfficeWorks only has a Logitech C920 which is apparently OK.

With the support of the open-source community behind it and a strict privilege system embedded in its architecture, Linux has security built into its design. That being said, gone are the days that Linux system administrators could get away with subpar security practices. Cyber criminals have come to view Linux as a viable attack target due to its growing popularity, the valuable devices it powers worldwide, and an array of dangerous new Linux malware variants that have emerged in recent years.

It has become apparent that the majority of attacks on Linux systems can be attributed to misconfigurations and poor administration - and failure to properly secure the Linux kernel is often at least partially to blame. Kernel security is a key determinant of overall system security, as the Linux kernel is the foundation of the Linux OS and the core interface between
a computer's hardware and its processes.

Luckily, the Linux kernel possesses an assortment of effective built-in security defenses - namely, firewalls that use packet filters built into the kernel, Secure Boot, Linux Kernel Lockdown and SELinux or AppArmor - that administrators should take full advantage of. This article will examine the importance of robust kernel security and explore various measures that administrators can take to secure the Linux kernel and protect their systems from malware and other exploits.

- **MGLRU Is A Very Enticing Enhancement For Linux In 2022 - Phoronix** [4]

  Going back a number of months Google engineers have been working to address the issue of the Linux kernel's page reclaim code being too expensive for which they devised the multi-generational LRU framework "MGLRU" and it continues being worked on with mainline ambitions.

  MGLRU has yielded very promising results from servers down through Chrome OS and Android devices too. MGLRU aims to make better choices than the current kernel page reclaim code and to do so more efficiently. Previous numbers punted by Google engineers were cold start times reduced by up to 16% while enjoying fewer low-memory kills, Chrome OS saw upwards of 59% fewer out-of-memory kills and 96% fewer low-memory tab discards in its browser, and server results have been very promising too.

- **Linux 5.16 Graphics Performance In Great Shape For AMD Ryzen APUs - Phoronix** [5]

  Back on Christmas Eve I noted how the Linux 5.16 performance was looking real good for AMD APUs as a performance improvement not widely noted to that point with significant uplift over Linux 5.15 stable. The good news is Linux 5.16 is set to debut as stable today and the benchmark results with AMD APU graphics is looking very promising after carrying out tests on additional available systems.

- **Linux 5.17 To Introduce Cirrus CS35L41 HD Audio Codec Driver - Phoronix** [6]

  Among many other sound driver changes destined for the upcoming Linux 5.17 cycle, Cirrus Logic has contributed CS35L41 HD audio codec support in the form of a new sound driver, cs35l41_hda.

  Cirrus Logic announced the CS35L41 back in 2019 as the "smallest, low-power boosted smart audio amplifier" and its product page talks it up as "the industry's most advanced smart
boosted audio amplifier solution for mobile devices. It features a top-of-the-line boosted Class D amplifier, combined with an integrated DSP and 5th generation enhancement and protection algorithms. A closed-loop digital input Class D amplifier and an 11 V Class H envelope-tracking boost maximize output power and efficiency. The amplifier features the lowest power consumption, lowest noise, and smallest package size of any amplifier in its class.”