Linux/Kernel: GStreamer/SK Telecom, Benchmarks, Libcgroup and Kernel "Whoops"

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- **Low latency streaming of security video feeds with SRT and GStreamer [2]**

  For remote security surveillance, like monitoring an industrial facility where expensive equipment or even human lives might be at stake, maintaining an immediate and high quality video streaming from the areas of interest is a must. With the advent of 5G networks, it's now possible to stream high quality video in real-time with a very low latency that wasn't possible with the past generations of mobile networks. In this domain, the SRT protocol has been picking up speed, and thanks to srtsrc and srtsink elements available since GStreamer 1.16 (see Olivier Crête's blog post) it's now easier than ever to incorporate low latency streaming into your application.

  Here at Collabora we've been lately participating in design and development of Hwangsaeul?a next generation security video feeds streaming platform with one of our customers, SK Telecom Co..

  Hwangsaeul is a cloud relay service that gathers live security video feeds from different locations into a single service to which clients can connect to watch the feeds. Additionally, it also enables continuous recording of each feed. The SRT protocol is utilized by both camera-to-relay and relay-to-client transport in order to minimize latency.

- **Benchmarking Linux 5.5 vs. Linux 5.6-rc1 On A Few Systems So Far [3]**

  Since the release of Linux 5.6-rc1 that is coming in as a very feature-packed kernel, here are benchmarks of Linux 5.5 stable up against Linux 5.6-rc1 on a few of the systems tested so far while more results are in-progress.

Linux 5.5 vs. 5.6-rc1 were benchmarked using the reference binaries from the Ubuntu Mainline Kernel PPA. For this quick article are results from a Threadripper 3970X, AMD EPYC 7742 2P, and Intel Xeon Platinum 8280 2P in distinctly different configurations in seeing if there is any widespread trends as of 5.6-rc1 for these high-end systems.

- **Libcgroup in the Twenty-First Century [4]**

  In 2008 libcgroup was created to simplify how users interact with and manage cgroups. At the time, only cgroups v1 existed, the libcgroup source was hosted in a subversion repository on Sourceforce, and System V still ruled the universe.

  Fast forward to today and the landscape is changing quickly. To pave the way for cgroups v2 support in libcgroup, we have added unit tests, functional tests, continuous integration, code coverage, and more.

- **Whoops, Linux 5.5 Missed Some "Critical" Intel Graphics Driver Patches [5]**

  While Linux 5.5 is out in the wild now as the latest stable version of the Linux kernel, it turns out some Intel kernel graphics driver patches were overlooked and this can spell trouble for some users.

  Longtime Intel open-source Linux graphics driver developer Chris Wilson noted on Tuesday that Linux 5.5 is missing multiple urgent patches. The ticket notes the lack of these patches is of severity "critical" and the highest priority.

Linux

Links:
[1] http://www.tuxmachines.org/taxonomy/term/63
[2] https://www.collabora.com/news-and-blog/news-and-events/low-latency-streaming-of-security-feeds-with-srt-and-gstreamer.html
[3] https://www.phoronix.com/scan.php?page=news_item&px=Linux-5.5-5.6-rc1-Benchmarks
[4] https://blogs.oracle.com/linux/libcgroup-in-the-twenty-first-century
[5] https://www.phoronix.com/scan.php?page=news_item&px=Linux-5.5-Intel-Missed-Graphics