Linux 5.4 and Linux Foundation's Reactive Foundation

By *Roy Schestowitz*
Created *16/09/2019 - 4:35pm*
Submitted by Roy Schestowitz on Monday 16th of September 2019 04:35:23 PM Filed under Linux [1]

- **Google's FS-VERITY File Authentication Called For Inclusion In Linux 5.4 Kernel** [2]

  Linux kernel engineer Eric Biggers of Google has sent in a pull request adding FS-VERITY support to the Linux 5.4 but it remains to be seen if Linus Torvalds is content with pulling the code at this stage.

  FS-VERITY is the code Google has been working on for a while now in the context of Android. The focus is on providing transparent integrity/authenticity support for read-only files on an otherwise writable file-system. See this presentation to learn more on this file-based authenticity protection.

- **Linux 5.4 Brings Working Temperature Reporting For AMD Ryzen 3000 Series CPUs** [3]

  Due to a combination of poor timing and an oversight at AMD, the CPU temperature reporting under Linux for the Ryzen 3000 series processors isn't in order until this new Linux 5.4 cycle. Back at the Ryzen 3000 series launch event I was told everything was "all good" from the Linux support perspective for thermal monitoring, after having been closely following the situation for past Zen CPUs and ended up myself adding the Linux CPU temperature monitoring support for Threadripper 2 among other hudles in the past. That all-good though just ended up meaning that there is no Tcontrol offset needed for these new CPUs, which is great news no longer needing the temperature offset by an arbitrary amount. But the oversight was the Family 17h Model 70h ID was never added to the AMD k10temp driver. As a result, temperature monitoring wasn't actually working and took an extra kernel cycle before this trivial addition landed.

-

The Linux Foundation has announced the launch of the Reactive Foundation, a community of leaders established to accelerate technologies for building the next generation of networked applications. The foundation is made up of Alibaba, Lightbend, Netifi and Pivotal as initial members and includes the successful open source RSocket specification, along with programming language implementations.

The aim of reactive programming is to build applications that maintain a consistent user experience regardless of traffic on the network, infrastructure performance and different end-user devices (computers, tablets, smartphones). Reactive programming uses a message-driven approach to achieve the resiliency, scalability, and responsiveness that is required for today's networked cloud-native applications, independent of their underlying infrastructure. The Reactive Foundation establishes a formal open governance model and neutral ecosystem for supporting open source reactive programming projects.

[...]

The aim of reactive programming is to build applications that maintain a consistent user experience regardless of traffic on the network, infrastructure performance and different end-user devices (computers, tablets, smartphones). Reactive programming uses a message-driven approach to achieve the resiliency, scalability, and responsiveness that is required for today's networked cloud-native applications, independent of their underlying infrastructure. The Reactive Foundation establishes a formal open governance model and neutral ecosystem for supporting open source reactive programming projects.
"From the beginning of our work on RSocket during my time at Netflix, our intent was to have an open system that encouraged broad adoption, which is essential for networking technology. We're thrilled to be hosted at the Linux Foundation with commitment from leaders and disruptors in the industry, and are excited to make progress enabling reactive programming," said Ryland Degnan, Co-Founder, and CTO at Netifi and Foundation community chair.

[Linux](#)

Source URL: http://www.tuxmachines.org/node/128194

Links:
[1] http://www.tuxmachines.org/taxonomy/term/63
[2] https://www.phoronix.com/scan.php?page=news_item&px=Linux-5.4-FS-VERITY-PR
[3] https://www.phoronix.com/scan.php?page=news_item&px=Linux-5.4-Hwmon-Zen-2-Thermal
[4] https://appdevelopermagazine.com/all-about-reactive-foundation,the-linux-foundation's-new-baby/