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LETTER from the Board

"Isn't FreeBSD just a Linux distro?"

is a frequent guestion from those who come to FreeBSD from the Linux world. Readers of this publication know the response is "No," but they also know that's not the entire answer. FreeBSD isn't just a different code base; it's also a different philosophy and community, and in this issue, we take the guestion head on and show, through a set of articles, that FreeBSD is not a Linux distro. The title of the first piece, written by your humble Editor in Chief, first occurred to me when I was asked to give a talk about FreeBSD to a group of engineers at Digital Ocean in early 2015. Many of us who work on FreeBSD shy away from any mention of that other open-source operating system, but I felt it was time to take on the topic, and did so in a talk that was recorded at the event (https://www.youtube.com/ watch?v=wwbO4eTieQY). After that first presentation, I found there were requests for the talk to be given at other venues and with more updates. Then FreeBSD Foundation Director Philip Paeps gave an updated version of the talk in his own style at Rootconf this year (https://www.youtube.com/ watch?v=ps67ECyh0sM). When we began to put together this issue on FreeBSD vs. Linux, it was obvious that the talk needed to be turned into an article.

While an overview of how the two systems are different is interesting, we wanted to dig more deeply into how FreeBSD was not Linux. FreeBSD vs. Linux: ZFS by Allan Jude covers the only open-source, well-supported, filesystem for petabyte storage. With the demise of BRTFS on Linux, the only viable alternative is OpenZFS, and OpenZFS runs perfectly on FreeBSD. Jonathan Anderson takes us through the various techniques and technologies used for sandboxing on Unix systems, with special attention paid to Capsicum, the native capability system on FreeBSD. And Kirk McKusick, who was instrumental in helping define the early governing structure of the project, and Benno Rice, one of the current members of the core team, have coauthored the definitive article on how the FreeBSD Project is run.

Sit at a conference lunch or dinner with a bunch of FreeBSD developers and mention the lack of Control-T, aka SIGINFO, on Linux, and you will get a very loud chorus about how they all are completely annoyed by the lack of this feature on Linux. It seems like such a small difference, but to working programmers, it really matters. Benedict Reuschling has contributed a fine, short article on this feature of large importance.

And lastly, our themed articles are rounded out with an experience piece on Microservices by Dave Cottlehuber. Microservices are all the rage and they can easily be implemented on FreeBSD. Dave tells us how.

We trust that when you've finished this issue, you will have a definitive reply for your coworkers should they ask, "Isn't FreeBSD just a Linux distro?"

George Neville-Neil

President of the FreeBSD Foundation Board of Directors