Summer Reading

Here in the U.S. Northeast it is summer, and with summer comes summer reading. What better way to spend these days than reading about FreeBSD? This issue brings you several cool topics, including two pieces about ZFS, one on Tuning ZFS by Michael W. Lucas, the coauthor of two excellent books on the same topic, FreeBSD Mastery: ZFS and FreeBSD Mastery: Advanced ZFS. As a convert to ZFS on my laptop where I use boot environments to reduce the risk of kernel development, I can say that learning more about this filesystem always improves my productivity. Michael’s coauthor on the ZFS books, Allan Jude, has written an excellent article on the use of FreeBSD at ScaleEngine, a Content Distribution Network he has run since 2008. ScaleEngine uses FreeBSD, and specifically ZFS, to serve video and other content from a globally distributed set of data centers to clients all over the world.

Over the last couple years, many of us have watched as the Linux community tore itself apart over the systemd conflict. While schadenfreude is a fine thing, FreeBSD also needs to figure out a way to improve its own init system. Mark Heily has authored a piece on “Getting the Job Done” that will hopefully help FreeBSD to weather these waters with less Sturm und Drang.

While many readers of the FreeBSD Journal are familiar with FreeBSD as a whole system—from kernel to user space to tools, it has always been the case that various embedded operating systems, including the former Wind River’s VxWorks, have adopted components of FreeBSD for their own purposes. The most commonly reused part of FreeBSD is the TCP/IP stack, one of the large and more complex parts of the system, and one that has been under active development since the original Berkeley Software Distributions in the 1980s. Several developers of RTEMS discuss their use of parts of FreeBSD in their own “Real-Time Executive for Multiprocessor Systems,” which is an open-source, Real-Time Operating System (RTOS).

Batting cleanup for our main features is an article from Diane Bruce on Amateur Radio and FreeBSD. As Diane points out, the continuing drop in prices for computing power has brought this fascinating melding of the digital and analog worlds within the reach of nearly everyone who might have an interest in the topic.

As usual, our columnists keep you up-to-date on all things FreeBSD, including Steven Kreuzer with “svn update”; a Conference Report from Tim Moore; a profile on “New Faces of FreeBSD,” as well as the Events Calendar, both from Dru Lavigne, and wrapping it all up, the latest from the FreeBSD Foundation, contributed by the Executive Director, Deb Goodkin.

Hopefully once you’re done with our end-of-summer issue you’ll be looking forward to the cooler climes and cool articles we’ll have in September/October.

Sincerely, George Neville-Neil