this month
In FreeBSD
BY DRU LAVIGNE

January is a month of new beginnings—a time to reflect on the past and to consider resolutions to implement in the coming year. Using software as a metaphor, it is a time for a new release that implements known bug fixes and possibly introduces new features! The FreeBSD Project often publishes a new release in January, so let's take a look back in time to see which releases the Project was working on then. Where did your FreeBSD experience begin and which at-the-time "cutting edge" features do you now take for granted?

Jan. 2013

FreeBSD 9.0-RELEASE was announced on January 6, 2013. Being a "dot zero" release, this one was chockfull of new features. One of the interesting aspects of this release is that a number of the larger frameworks, which take significant developer time to design, implement, and test, were sponsored by the FreeBSD Foundation, often in collaboration with other organizations.

For example, the Capsicum framework for application sandboxing is the result of collaboration between the University of Cambridge Computer Laboratory, Google, and the FreeBSD Foundation in which FreeBSD became the reference implementation for new research in application security.

The pluggable congestion control framework, along with five new compression control algorithms, is the result of collaboration between the Foundation and the Swinburne University of Technology's Centre for Advanced Internet Architectures. It represents the cutting edge of TCP compression control research, which is needed in this ever-changing world of networking technologies.

The Foundation collaborated with OMCnet Internet Service GmbH and TransIP BV to implement the Highly Available Storage (HAST) framework, which allows for synchronous block-level replication of any storage media over a TCP/IP network. The Foundation also sponsored the porting of userland Dtrace.

For better or worse, this release finally replaced the "interim" sysinstall framework that Jordan Hubbard introduced for 2.0.5-RELEASE in mid-1995.

The FreeBSD Project dedicated this release to the memory of Dennis M. Ritchie, one of the founding fathers of the UNIX operating system and creator of the C programming language.

2008

The first hour of Marshall Kirk McKusick's course on FreeBSD kernel internals, based on his book, *The Design and Implementation of the FreeBSD Operating System*, was recorded and downloaded in 2008. This course has been given at BSD Conferences and technology companies around the world. **http://www.youtube.com/watch?v=nwbqBdghh6E**

Jan. 2009

FreeBSD 7.1-RELEASE was announced on January 5, 2009. Being the second release in the 7.x series, it didn't introduce too many new features. However, some of the changes it did introduce remind us how far computing has moved along since the turn of the century: the ability to boot from USB devices, the ability to boot from GPT, the ability to use the VESA BIOS for DPMS during suspend and resume, and the ability for traceroute(8) to display an AS number.

Jan. 2004

FreeBSD 5.2-RELEASE was announced on January 12, 2004. While many of us remember waiting with baited breath for a very long time for the much anticipated 5.0 (SMP release) in 2003, the other releases in this branch averaged every six months as the fledgling SMP support matured. While 5.2-RELEASE contained a number of significant stability and performance improvements over FreeBSD 5.1, it was still advertised as "a New Technology release that might not be suitable for all users." That is a testament to both the cautious, let's-not-break-production-usage philosophy of the Project and the amount of work and testing needed to move a code base from its uniprocessor assumptions to the new SMP world.

Jan. 1994

This was an interesting time for the newly minted FreeBSD Project. Its first 1.0-RELEASE had moved from EPSILON status and had been unleashed to the world on November 1, 1993. Its future was in a state of flux as the USL vs. BSDI lawsuit marched toward the settlement that was finally announced, minus most of the terms of the agreement, on February 6, 1994.

The settlement allowed the Project to continue its work on FreeBSD 1.1-RELEASE, which was announced on May 6, 1994. That announcement includes this text:

The FreeBSD team is very pleased to announce FreeBSD 1.1 Release, our second full distribution of the FreeBSD Operating System.

FreeBSD 1.1 represents a milestone in our free software efforts, both technically and legally. For quite some time, the future of BSD has been somewhat in doubt due to the UCB/USL lawsuit, and all Net/2 derived distributions have rested on uncertain legal ground. With the resolution of the lawsuit, and subsequent clarification and agreements from USL on our distribution terms, we can bring you this distribution without legal ambiguity, and with clear plans for a fully unencumbered future.

...And the rest, as the saying goes, is history.