

# conference **REPORT**

by Samantha Bonham

## MeetBSD 2016

The BSD operating system first came to life at the U.C. Berkeley campus in the 1970s, and this year I had the chance to meet FreeBSD enthusiasts from all walks of life at the place where it all began. MeetBSD 2016 did not follow the typical conference format; instead, it was a mix of formal talks, group discussions, and break-out sessions, which made it the perfect conference for someone like me, who is new to the FreeBSD community and still learning the technical side of things.

### The Day Before the Conference

On the day before the conference, our Documentation Team decided to meet at the Berkeley campus for a bit of a “hacking session.” It was a little over an hour’s drive before I arrived at the campus, significantly less travel time than the majority of my team members who flew in from Tennessee.

While the drive was relatively short and full of scenic views, it was not without its challenges. If you are new to driving stick shift, I highly recommend avoiding driving anywhere near the U.C. Berkeley area, and travelling by train instead. One-way streets, hordes of student pedestrians, and stoplights on hilly roads will make even the most seasoned stick shift driver a little bit twitchy.

Google Maps took me on a slight diversion, as it kept telling me to turn left on a one-way street, but despite my lack of navigational skills, I did finally make it to the Clark Kerr campus at around 3

p.m. The lush greenery and quiet atmosphere at the campus offered the right amount of Zen to counteract my travels. Once I met with the team, we went straight into an outdoor hacking session. This involved playing musical chairs with power outlets, gigantic mutant spiders, testing TrueOS on a virtual machine, and hacking a Raspberry Pi which was missing some parts. After an hour-long hacking session, we decided it was time to check into the hotel before going out to dinner. At 7 p.m., a group of us strolled down Durant Avenue in search of food, and after seriously considering eating donuts for dinner, we ended up having a nice meal at the hotel.

### First Day of the Conference

After a six-minute ride with Uber, we arrived for the first day of the conference at 9 a.m. The first formal talk was scheduled for 10 a.m., so we had plenty of time to mingle, drink coffee, and munch on an



assortment of tasty pastries. We also had time to collect our swag bags, and I ended up making a donation for a FreeBSD Foundation thermos, which kept my coffee warm throughout the conference.

The scene at the conference hall was that of a typical college lecture, except the “students” had better laptops and an affinity for daemon horns. The conference format was split into 45-minute segments, with talks covering a variety of FreeBSD-related subjects, ranging from jail networking to the History of ZFS and OpenZFS. After each talk, there was 10 minutes for questions.

The first talk was given by Devin Teske, who did a live demonstration on creating and managing `vimage` jails. During her talk, I learned that `netgraph` and `if_bridge` can be used to create multiple jails with proper network configuration. I also found out that while it is technically possible to run a ZFS server in a VNET jail, it is not recommended, as systems have been known to kernel panic when there is an active NFS mount.

In the afternoon, there was a “Topic Brainstorm Session,” where we were given the link to a Google Doc and asked to share topics we wished to discuss. About six topics were shared, but the one that generated the most interest at our table was definitely “Trolling Linux Admins for Fun and Profit.”

After we took a break for lunch, Matt Ahrens, one of the cofounders of the ZFS filesystem, walked us through a brief history of ZFS and OpenZFS. During his talk, he touched on key milestones of the project, such as the first implementation of deduplication in 2009 at Sun. He also spoke about the project’s future goals, which included performance improvements on all SSD pools, integration with cloud management, object storage management, and fault management.

The conference came to a close at 6 p.m., just in time for a pizza party at the Hillside Club. I guess everyone was really hungry because the pizza ran out quickly. I had fun meeting new people, and the party really started to liven up when the FreeBSD mascot, Beastie, made a guest appearance.

## Last Day of MeetBSD

Day two of the conference got off to a great start with a talk by Rod Grimes about the early days of FreeBSD. Having the conference in the Bay Area meant that a lot of old-timers in the FreeBSD community were able to participate in the conference this year. Mr. Grimes was one of them, and his talk was particularly inspiring as he was FreeBSD’s first release engineer. Mr. Grimes recently rejoined the FreeBSD release engineering team after a 20-year-plus hiatus.



Later that morning, cofounder of the FreeBSD Project Jordan Hubbard gave a live demo of FreeNAS 10. It is a complete rewrite of the original FreeNAS operating system with an asynchronous user interface and middleware, offering features like Docker support and bhyve VMs. Jordan also touched on the challenges of using FreeBSD to build a modern storage platform. At the end of his talk, he encouraged any interested developers to contribute to the FreeNAS 10 project.

Another great talk was the unveiling of the TrueOS platform, which is the successor to PC-BSD. TrueOS is a desktop or server operating system based on FreeBSD. Founder of PC-BSD, Kris Moore, explained the reasoning behind the name change and discussed some of the new features that have been added to the TrueOS desktop environment, like support for 4K and newer Intel/AMD graphics cards and encrypted home directories. The desktop version of TrueOS is a truly unique experience; I have enjoyed tinkering around with it on my new laptop.

## Conclusion

It doesn’t matter if you’re new to the open-source community or a FreeBSD expert, MeetBSD is an experience that should not be missed. The nontraditional structure of the un-conference and the laid-back attitude of the people combine to create a truly unique way to learn about the vibrant FreeBSD culture. ●

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