



BSDCan 2024

BY AYMERIC WIBO

A couple months ago, I had the opportunity to attend and speak at this year's BSDCan in Ottawa, one of the three big yearly BSD conferences (the other two being AsiaBSDCon and EuroBSDCon). This was my first time in North America — I hail from Belgium, the land of waffles, beer, and taking 652 days to form a government — so I started off my trip with a couple weeks of touring around the Northeast Corridor before flying out from Boston to Ottawa for BSDCan.

My scheduled talk was on my Google Summer of Code (GSoC) work on porting the BATMAN implementation in the Linux kernel (`batman-adv`) to FreeBSD, and, more generally, its use cases in projects like Freifunk, and the LinuxKPI system on FreeBSD for porting Linux kernel drivers.

Upon arrival at the quite quaint Ottawa International Airport, I was whisked away by bus and Ottawa's light rail to the University of Ottawa where the conference is held. I checked in to the speaker accommodations, the 90U dorms, which were quite nice. The students clearly have it quite good here! I was sharing a room with Kirk McKusick who hadn't yet arrived, so I headed over to the Father & Sons tavern, the de facto hangout spot for BSDCan attendees, to try and get to know some of them. I was arriving at the tail end of the Goat BoF (Birds of a Feather) so there were quite a few people there. I had a couple pints and some hearty poutine and then headed back to the dorms to meet up with Kirk, who I hadn't seen since last EuroBSDCon in Coimbra, Portugal.

On the first two days of BSDCan, tutorials are held in parallel with the FreeBSD DevSummit. I attended the DevSummit, which is where the FreeBSD developers and other guests get together to discuss the goings-on and future of the project. There were also a couple interesting talks, such as Mitchell Horne's presentation of RISC-V hardware and his work supporting it in FreeBSD, or Alex Pshenichkin's quite interesting talk on Antithesis' deter-

BSDCan is the definitive BSD event in North America and welcomes BSD Unix developers, administrators, and users of every level of experience.

ministic hypervisor (the “Determinator”, based on FreeBSD’s bhyve) for software testing and the different considerations in running deterministic virtual machines that aren’t immediately obvious at all.

During the DevSummit, there’s also a moment set aside for “Next Release Planning”. This is where everyone pitches in and discusses the features to enter (or be axed from) the next release of FreeBSD (15.0 in this case). These features are categorized into completed in-tree features, completed features that have yet to be upstreamed, features that are being worked on, features that really need to be worked on, and features that would be nice-to-haves but aren’t priorities. My very small contribution to this list was SOix idle support which is necessary for sleeping on newer CPU’s (including AMD Framework laptops), for which work was started but subsequently abandoned a few years ago. I see focusing on consumer hardware support as an important way to get FreeBSD into the hands of more people, and for them not to be turned away by X or Y feature not working on their shiny new laptop, and I’m glad to see that this sentiment seems to be echoed by others in the project.

The next two days were the main conference days. I attended Kirk’s talk on secrets to FreeBSD’s success and Shawn’s State of the Hardened Union (with whom I talked a couple times during the conference with regards to BATMAN and open wireless networks) before presenting my own. It was the first time I’d given a proper talk, so I didn’t really know what to expect or if I’d be comfortable speaking about a technical subject in front of an audience. In sum, I’m quite happy, but I did speed-run my talk a bit, and feedback I received after the talk did affirm that I was going much too fast. Something for me to work on for next time ;) I do think I managed to get my main points across, though, and I was happy with the questions I received afterwards.

On the last day, I attended Warner Losh’s talk on allowing people to contribute to FreeBSD through GitHub, which I think is very important for new contributors as it lowers the barrier to entry vs. learning how Phabricator works, especially for greenhorn developers who have learned their craft exclusively through tools like GitHub. In fact, when I first tried to submit my first FreeBSD contribution, it was through GitHub, before understanding that was not the preferred way to do it. The last talk I attended was on Sheng-Yi Hong’s work on kernel debugging with LLDB, which is something that I’m personally looking forward to. Sheng-Yi Hong was a fellow GSoC student during the year I was working on BATMAN, so it was great to meet him in the flesh and chat with him. He’s a cheerful and upbeat guy, and I’m looking forward to meeting him again at future conferences!

After the closing session and the ritual auction was the social event at Sens House, which is one of the things I enjoy most about these conferences. I feel like I almost get more value out of the social aspect of conferences than the talks themselves; it’s the opportunity to meet the people you only know through their handle or their patch notes. I

During the DevSummit, there’s also a moment set aside for “Next Release Planning”.

have made many friends and been exposed to a lot of different use cases and perspectives regarding FreeBSD and other software through these interactions that I likely wouldn't have had otherwise.

The next day, after an insanely copious breakfast at Father & Sons, Kirk and I packed up and headed to the airport as we had a flight to Chicago, where we were meeting up with Eric Allman (who sadly couldn't make it to BSDCan this year) at O'Hare.

Shortly after, we learned of the very unfortunate news that, after the last day of the conference, Michael Karels had passed away. Mike was a very important and beloved figure in the development of the 4.4BSD-Lite release, which all modern BSD's trace back to. I'm very grateful to have had the opportunity to meet him at BSDCan, and I wish his family and friends all the best in these difficult times.

After a day of sight-seeing in the Windy City, we took the 3-day California Zephyr train to Berkeley, where I stayed for a few weeks before it was time for me to fly back home, and that was the end of my BSDCan adventure.

Overall, the conference and its general organization were quite excellent, from the catering to the AV to the surrounding events. I'd like to extend a huge thank you to the people who broke their backs behind the scenes to get this all done and done extremely smoothly and professionally at that. BSDCan covered my travel expenses and handled everything related to accommodation on their side, which really helped to alleviate some of the major points of stress of a trip so far away from home. The talks were engaging, I got to meet a bunch of wonderful and interesting people, and the beer at Father & Sons was cold.

If you have a subject you'd like to talk about, I really recommend submitting a paper. I'm looking forward to attending again next year!

AYMERIC WIBO is a CS student at UCLouvain in Belgium and has been using and developing projects based on FreeBSD since high school. His primary interests lie in graphics and networking..