conference **REPORT**

by Tim Moore

BSDCan—educational, social, open source

BSDCan 2016 can be described as a whirlwind—a deluge of information crammed into a section of the University of Ottawa for four days. Large companies like Microsoft give slick presentations about their latest and greatest innovations, while down the hall a hobbyist excitedly shares for an hour about his successes and failures in building a home network with FreeBSD. Walking the convention hallway reveals vendor displays and conference-goers eagerly discussing some facet of the vendors' products. Small knots of programmers huddle around one or more laptops, collaborating on a project or just laughing over a silly Internet video.



The Journey Begins

My journey began on a day like so many others, with an early morning trip to the airport. One advantage to living in the Middle-of-Nowhere, Tennessee, is that the local airport is always quiet and simple to navigate. After one rather uncomfortable plane ride, my coworkers and I arrived at Newark airport, where we immediately bumped into another individual on the way to BSDCan. It is easy to find another conference-bound person at the airport when in the sea of business suits there is someone wearing a Star Wars shirt and typing furiously on a laptop festooned with BSD stickers. We boarded the flight to Ottawa, and after another uncomfortable, albeit short, flight, I was standing on sweet terra firma once more.

Oh, Canada!

Ottawa airport is great. It strikes that perfect balance between being large enough to have all the

amenities (bus service, customs, currency exchange, etc.) and still small enough to be simple to self-navigate. Conveniently, the bus service runs from Ottawa airport to the university, so I decided to purchase some bus tickets and enjoy the scenery on the way to the hotel. My employer booked me at a hotel just down the street from the university, but a university residency building was also available to conference attendees as an affordable alternative. Exploring Ottawa was a delight. Despite large construction projects making the city center something of a mess, it was easy enough to walk everywhere and explore the sights. I was excited to see some kind of Star Trek convention was scheduled for the weekend, but unfortunately my returning flight prevented me from attending. Still, a charming airport, a walkable city, and interesting sights made my time in Ottawa enjoyable.

Developers Summit

Wednesday, June 8, was the first day of the preconference Developers Summit. The Dev Summit brings together FreeBSD contributors in one place for two days to discuss issues in the FreeBSD Project and develop solutions. After registering and receiving my name tag and other goodies, everyone gathered in one of the larger classrooms for the opening session. Following a few introductory remarks, a Microsoft representative gave a presentation about FreeBSD in Microsoft Azure. At this point it was announced that a virtual machine (VM) image of FreeBSD 10.3 would be available in the Microsoft Azure Marketplace, with Microsoft providing technical support. This generated quite

a bit of buzz in the room. Next, representatives from Intel discussed the Intel Quick Assist Driver and a FreeBSD port. This presentation was more interactive, with Intel actively soliciting feedback from the developers on the technology and ways to improve or expand its features. Once this presentation concluded, the general session broke up for lunch and smaller working group sessions.

After lunch, the various developer working groups convened in smaller classrooms. These groups generally focus on specific aspects of the FreeBSD Project and ideas for improvements. I attended the documentation working group, where the primary topics were improving the documentation website and simplifying the contribution process in order to attract more interest in the documentation project. If my working group was any indication, a lively spirit of discussion and idea generation is the norm for these sessions. Once the working groups wound down for the day, we had options for dinner and continued work via even less formal sessions which wound late into the evening.

Day 2 of the Dev Summit was similar to the first. The first general session was spent compiling a list of major changes in the impending release of FreeBSD 11. While probably not a comprehensive list of all changes, I was still struck by how much individuals and companies contribute to this opensource project. After a short recess, another list of desired additions for FreeBSD 12 was compiled so as to illuminate the path forward for the contributors. Then a final list was created of all the additions the developers had brought forth and were willing to incorporate into FreeBSD. Once again, I was surprised by the general spirit of cooperation and support for the project. After lunch, we divided into smaller working groups for the rest of the day, discussing varied topics such as the efforts to teach BSD at schools or improving performance-monitoring tools in FreeBSD.

I think it is also important to note that during the Dev Summit and Conference, there are far more working groups, presentations, or tutorials being offered than any one person can attend. As someone who generally tries to experience as much as possible during a conference like this, I am definitely planning to map out my activities much more thoroughly for future conferences.

The Conference Begins

The general structure of the conference was to begin with a unified session; then the rest of the day was broken down into one-hour blocks of four to five presentations on differing topics. Every presentation offered a unique learning experience, from topics in which I was professionally interested to

those discussing a utility or program I did not yet know I needed. In the first day alone, I learned some of the intricacies of VXLAN, the hidden complications of "Hello, World," and puzzled over concerns with the potential monoculture arising within the Tor Project, to name a few. In addition to the presentations, vendors had set up tables in the main hallway, demonstrating products or giving out freebies like usb drives or pens. Once the presentations concluded for the day, attendees had opportunities to socialize and explore the city, or continue working on projects and documentation in the nowempty classrooms. These sessions would often continue late into the evening.

The final day of the conference was similar to the first. A full day of fascinating presentations concluded with a party at the Lowertown Brewery. I attended a very informative discussion of processes to streamline fuzz testing, then listened to a description of the beginning days of the FreeBSD Project, as told by Rodney Grimes, one of the original founders of the project. After lunch, a power-user's frank discussion of the limitations (in a collegiate lab) of the various BSD projects was my food for thought, followed by a demonstration of new tooling to assist release engineering with FreeBSD for dessert. Unfortunately, due to a very early flight the next morning, I had to return to the hotel and prepare for the trip home without attending the final sessions. Hopefully, I will have the opportunity to attend next year and rectify that mistake.

Final Thoughts

If you are active with the FreeBSD community, curious about the world of open-source computing, or just want to see exactly how many programmers it takes to change a lightbulb, BSDCan is for you. It is attended by friendly, knowledgeable people with a dizzying variety of backgrounds, all looking to both teach and learn something new. The University of Ottawa is a fine venue, with an abundance of space and plugins for several hundred people with laptops, and the city of Ottawa provided a very low-stress backdrop to the busyness of the conference. Going to BSDCan was an engaging, informative experience that I heartily recommend. If what I described sounds like paradise, then you really should plan on attending.

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