

conference **REPORT**

by Roller Angel

BSDCan 2017

Prior to the first day of the Devsummit, I traveled to Ottawa, Canada, by plane from Colorado. After dropping off my luggage, I headed straight over to the Goat BoF which took place at The Royal Oak. There were already a number of people engaged in conversation over food and drink. The Royal Oak was only a few streets away from where I stayed and it was nice to walk to the conference each day, the pubs, and the grocery store. I was delighted that the people sitting with me were also into the BSDs and were happy to talk about them the whole time. I felt right at home from the start as people were very nice and were interested in what I was working on. I honestly didn't know that I would fit in so well.


I had a preconceived notion that people could be a bit hard to approach, as some are famous and so technically advanced. At first, people seemed to only be working in smaller circles. But once I got more familiar with the faces, I realized that the circles didn't always contain the same people and that they are "just people" talking about specific topics. I found it easy to participate in the conversation and also found that people were happy to get feedback. I volunteered to help wherever possible and got to work on the video crew that recorded the audio and slides of the

talks. It's nice to feel welcome and a part of the community. Dan Langille mentioned in his welcome on the first day of BSDCan that the conference is like home for many.

Devsummit: Day One

On the morning of the first day of the Devsummit, I arrived early to collect my name badge and find a place to sit. Gordon Tetlow greeted me and helped me find my badge. I recognized Dru Lavigne, and so I walked over to introduce myself. Dru introduced me to Warren, who gave me a FreeBSD dog food sticker as a reward for eating my own dog food by running FreeBSD on my laptop. I introduced myself to Allan Jude, Benedict Reuschling, Sean Webb and Kirk McKusick. Shortly after, Gordon started with an introduction and information about the events of the day. There was some discussion about a new code of conduct by Benno Rice, who mentioned that people are welcome to join a group that is forming to help work out issues related to code of conduct. Allan introduced the idea of creating a process for formally discussing big project changes or similar discussions that are going to be known as FCP or FreeBSD Community Proposal. In Python, we have the Python Enhancement Proposal or PEP which is very similar to the idea of FCP.

There was some discussion about taking non-code contributions from people and how to recognize those people in the project. There was a sug-



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gestion to have a FreeBSD member status that could be given to people whose non-code contributions are valuable to the project. This seemed to be on a lot of people's minds as something that should be put in place soon. The junior jobs on the FreeBSD Wiki were also mentioned as a great place to look for ideas on how to get involved in contributing to FreeBSD. During the break, Benedict talked to me about being new to the community and how I'm welcome to join the conversations and share my ideas. After the break, Intel had a representative speak about their Quick Assist Driver technology and how they have implemented it on FreeBSD. While getting lunch, I met Pierre Pronchery and ended up going with him to the hacker lounge.

Pierre offered to work with me on my security skills as he is a security consultant by trade. While in the hacker lounge I worked with Pierre on joining the EdgeBSD project as a systems administrator. We began talking about rebuilding the edgebsd.org website using Flask, as I've been studying Python web development this past year and thought that it would be great to get some experience working on a real project using Python. Pierre helped me get my PGP and SSH keys created so I could securely authenticate to the virtual machines we would be working on. Pierre then showed me how to communicate via an old program called talk. It lets you communicate with other users who are logged into the same machine as you via each other's terminals. Talk is pretty awesome! I plan on using one of the recent articles from *The FreeBSD Journal* to help get Salt working with the new website infrastructure based on Flask. Before I left the hacker lounge I spoke with Michael Dexter; he let me know that the documentation team could really use my help and that there is plenty of mentorship available to help me. I let Michael know that I planned on attending the doc lounge to get up to speed on using the tools to edit the documentation and be able to help out.

Devsummit Day Two

On day two of the Devsummit, Ed Maste spoke about the items we have, need, and want in the upcoming release of FreeBSD 12. (There was discussion about when to stop supporting the SPARC infrastructure that was pretty entertaining.) There really is a lot of planning that goes into a release. We walked to a staircase at University of Ottawa and took a few group photos. Afterwards there was a mentorship and orientation session for newbies to be able to meet new people and to find out who else is interested in similar things so that they can talk with one another, and work together. After

attending the newbie session, I helped with packing the conference registration materials into the FreeBSD handbags. The handbags were then transferred from the University to the Red Lion, where I also did some training on the gear for recording the talks. Before the training, I sat with Peter Hansteen and talked about using JavaScript for writing slides for talks and how that approach makes sense although it does spark some controversy. Once I finished with the training, I visited the doc lounge and began getting my computer set up for editing documentation.

BSDCan: Day One

On the first day of BSDCan, I arrived early to coordinate with the team that records the talks. We selected the rooms where each of us would do the recording, and set up a group chat via WhatsApp for coordination. When the conference began, we heard from Dan Langille in the welcome session. The keynote address was by Professor Michael Geist of the Canada Research Chair in Internet and E-commerce Law. He focused on the reality that the legal industry needs to hear the voices of the technical community, and also highlighted 10 major issues in law and technology. One of the issues is access—all should have access to decent Internet speed to ensure better competition by allowing the smaller players to use roaming services on the larger networks. He concluded by stating that the legal industry desperately needs ideas, expertise, and more voices speaking out. After Michael answered a number of questions from the audience, we branched out into the different rooms to begin the talks.

I recorded Michael Tuexen's talk about packetdrill which was very interesting and the only talk in the FreeBSD Developers Summit track. After that, I attended the talk about FreeBSD on ARM by Emmanuel Vadot. The poudriere image BoF was next (in the same room), which seemed to be a great fit as the discussion was already on embedded devices and naturally evolved into discussion about creating the device images. I asked about current support for building images for the MIPS architecture boards. I found out that the support isn't in poudriere at the moment and is being worked on under the FreeBSD WiFi build project. After that, I stayed in the same room for the talk on the realities of DTrace on FreeBSD by Brian Kidney. The talk went great, there was a lot of information on the state of DTrace and there was a good amount of participation and questions from the audience. After taking a break to get some much-needed rest, I went to the doc lounge to sharpen my skills. Tim Moore was there and helped me get my text editor set up to

conference report • BSDCan 2017

make it easier to edit documentation. I found out how to edit and submit documentation patches in no time. Dru was sitting right next to me answering any questions I had as I went through the process.

After the doc lounge, I visited the hacker lounge. There were already several tables full of people talking and working on various projects. In fact, there was a larger, jolly group of people who were collaborating on the new libtrue library. I did a little socializing and then got on my laptop and did some more work on the documentation using my new skills. I really enjoyed having a hacker lounge to go to at night.

BSDCan: Day Two

On day two of the conference, I arrived early to help the video crew extract the previous day's recordings from the laptops and get the laptops set up in each room for the last day of talks. The first talk I recorded was Ken Moore's talk on SysAdm. Ken shared the progress made on the project and discussed the various features and how they were implemented. Next, I recorded the session on Hardening Pkgsrc by Pierre Pronchery. I didn't realize that pkgsrc can be secured in multiple ways without too much pain and that it will actually work on any BSD you would like. Using tips from this talk, I plan on digging deeper into pkgsrc in the future. After the morning sessions, I grabbed some lunch and quickly went to the BSD User Group BoF. There we had great discussions of past BUGs and how they were successful, current BUGs and how they're operating, as well as ideas for those starting a new BUG. I talked about my experiences with Colorado BSD Users Group (CoBUG) and Front Range BSD Users Group (FRBUG). I also asked for feedback on my interest in starting a Python BSD Users Group, a group for people using Python on the BSDs. I was told to just give it a shot and see if there's any interest, and that may be exactly what I end up doing as I find the time. After the BoF, the video crew had enough people recording talks, and so I decided to attend the talk on building high-performance websites with FreeBSD in the cloud by Kylie Liang from Microsoft. A live demo of Microsoft Azure was a large part of the session. It was strange to see someone from Microsoft using Windows to deploy FreeBSD, but it worked out great and seemed simple enough to use.

The next talk I attended was given by Stephen Herwig, a PhD student working in the systems and networking lab of the University of Maryland. He had developed a new security model for NetBSD, similar to OpenBSD's pledge and FreeBSD's capsicum, and called it `secmodel_sandbox`. This was a very technical talk, but one that I found quite interesting. There were several hard questions asked by the audience and Stephen was very detailed and thorough in his

responses. The last talk of the day that I attended was by Rodney Grimes, and it was about challenges and opportunities to better use FreeBSD in enterprise environments. Building an open-source operating system is a lot of work, and the relationship between the volunteers of the FreeBSD Project and the vendors is very important. The talk covered a lot of previous experiences and suggested ways that we might be able to take advantage of current trends.

After the talk, the closing session began. There was an exciting announcement of a new conference in Taiwan, <http://bsdtdw.org>. There was also a surprisingly entertaining charity auction. Once all the goods had been auctioned off, everyone headed to the closing social event at The Red Lion. I had my picture taken with Henning Brauer wearing an I love FreeBSD t-shirt for donating \$10 to charity. I also kept a running list of the names of people that I had conversations with during the conference, not counting those conversations that took place at the closing social event, as there were too many and I wasn't keeping track at that point. There are over 30 people on my list, including all three of the Moore brothers (the Moore Dynasty), Allan Jude, Michael W. Lucas, Benedict Reuschling, Kirk McKusick, Reyk Floeter, Pierre Pronchery, Sean Webb, Peter Hessler, Michael Dexter, Aaron Poffenberger, Dan Langille, Gordon Tetlow, and others.

I want to extend a big thank you to the FreeBSD Foundation for approving my travel grant. It was a great experience to meet the community and participate in discussions. I'm grateful that I was able to attend my first BSDCan. After visiting the doc lounge a few times, I managed to get comfortable using the tools required to edit the documentation. By the end of the conference, I had submitted two documentation patches to the FreeBSD Bugzilla with several patches still in progress. Prior to the conference, I expected I would be spending a lot of time working on my Onion Omega and Edge Router Lite projects, but I actually found that there was always something fun going on that I would rather do or work on. I can always work on those projects at home anyway. I had a good time with the FreeBSD community and look forward to continuing to work with them by editing the documentation and working with Bugzilla. ●

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