conference REPORT(s)

COSCUP by Benedict Reuschling

COSCUP (https://coscup.org/2019/en) is an open-source conference in Taipei, Taiwan, that has been running annually since 2006. This year, it happened from August 17 and 18, 2019, on the National Taiwan University of Science and Technology (NTUST) campus. Since I could not attend the BSD TW conference in 2017 (https://2017.bsdtw.org/) but people kept telling me what a great time they had there, I decided to submit a talk to this year's COSCUP conference. Similar to the FOSDEM BSD devroom, which is a separate track within the main conference about a specific topic, COSCUP has a BSD track called "BSDTW x Cat System Workshop." Luckily, my talk was accepted, and so I booked travel and a hotel for Taiwan.

I arrived on Wednesday afternoon and after checking into my hotel, I met up with Li-Wen, a friend of his, and Hiroki Sato, who had come over from Japan, for dinner. Not only was this an excellent opportunity to taste some local dishes, but we could also catch up on current happenings in FreeBSD and plan the next few days together. Li-Wen has been involved in the conference for a number of years in different capacities, knows a lot of the people as a result, and has organized the BSD-specific track there. Additionally, the FreeBSD Foundation had applied for a table to talk to people and hand out promotional material like flyers, stickers, and pens. Fortunately, we had enough people to man the table, including Philip "trouble" Paeps, Sato-San, Li-Wen, and me.

Philip had joined us the day before the first official conference day. He brought some extra swag in a suitcase with which he was travelling around the region from event to event to promote FreeBSD. He was also giving a talk about ZFS on Sunday in the BSD track. Together with Hiroki Sato, Philip and I went out to dinner together in one of the huge underground metro malls. We talked about various things going on in the project and the peculiarities of language learning from different perspectives.

That evening, conference speakers and people staffing the tables were invited to a welcome party on a fourth-floor patio overlooking the city, not far from the famous Taipei 101 tower. Similar to the BSDCan registration pub, people could pick up their badges the day before the first conference day while enjoying a drink and some snacks with other speakers.

Each person was given their own name badge and it wasn't long until Sato-San and Philip had both proper Chinese characters written on theirs by the registration staff. Philip's nickname "trouble" was especially funny to people reading it and proved to be a great conversation starter with them. Each new person we met asked him why his name was trouble. Apparently, the characters have a double meaning, but in any case, we were not alone for long.

My own name proved a bit more difficult to transliterate, but the people at the registration desk used the phonetic alphabet for mine, and so I also got some nice Chinese characters on my badge. After talking to some local people (FreeBSD port maintainers and translators) and meeting Li-Wen again (who was busy with some organizational things on the eve of the conference), we left to go up the Taipei 101 tower. As the name suggests, this is a 101-story building and the highest in town, making for a great landmark. There were long lines waiting for the elevator to take us to the upper floor, from which we saw the illuminated city at night. The wind-damper proved also an interesting technical aspect as some videos shown there had this massive weight swaying during typhoons and

strong winds.

On the first conference day, I arrived at the NTUST via the local MRT subway network and a short walk through a park to the campus. In the weeks prior to the conference, I had received my free speaker entrance in the form of a QR-code. As I was about to discover, QR-codes were playing a bigger role at the conference than I initially thought.

I found Li-Wen at the registration desk and after scanning my printed QR-code, I was handed another badge and swag bag with sponsor information. Copying my phonetic name to this new badge from the one received on the night before proved only partially successfull. The spacing between certain characters was a bit off, so I wrote my "western" name below it to avoid confusion. Then I headed for the second floor where Li-Wen had already set up our FreeBSD table. Philip was there already, and together, Li-Wen introduced us to the setup he had prepared for visitors.

A touchscreen was showing two QR-codes that attendees could scan. The first one was a link to the BSD Taiwan Facebook group and the second a small questionnaire about FreeBSD that participants could answer. After they showed us that they completed the survey, we in turn would scan their personal participant QR-code and they would get a stamp for visiting our table in the conference app. With enough stamps collected this way, they could pick up a special prize. Other tables around us had similar arrangements from small games to surveys that would keep people visiting the table occupied for a few minutes. I found this a great way to engage the attendees more and keep them long enough to start a conversation. I've been to other conferences where I felt that people just came to the table not because of interest, but to grab free giveaways and then to disappear just as quickly as they came. With the COSCUP stamp game, we got a much better feel for the audience, since the survey results showed us that most were still new to FreeBSD. Also, if people are shy, we would still get feedback from them. We had some interesting conversations with people who had tried out FreeBSD in the past or were running it on their servers for many years. Most attendees have not heard or even used FreeBSD before. Clearly, we need to come back.

What also intrigued me about COSCUP was the high number of staff walking around (all volunteers). They were wearing the same t-shirts and had small buttons in their ears with a microphone to communicate with each other. For example, if the ice-cold green tea kegs were empty (people were thirsty due to the high humidity), they would communicate that and someone came and brought a new one.

The conference day ended at 5 p.m., and we returned to our hotels, but not before visiting a local ice cream parlor that had interesting selections like basil or pork knuckle. Sato-San, Philip, and I met a couple of hours later for dinner at one of the night markets, which is another must-see in Taipei.

Early the next morning, we got the message that there had been a power break in the conference building overnight. Since they could not get it fixed on a weekend in time, they moved the whole conference (talks, tutorials, tables) to a nearby building on campus that was unaffected by the outage and still had power. Another sign of a well-organized conference is probably how well the organizers and staff deal with this kind of scenario. The COSCUP folks had not only sent emails to all participants with a map of the new location, but they also had found new rooms for the talks that day as well as the tables. Signs were posted on campus directing us where to find the new building, just as if this had been their plan all along. At no point did I get the impression that things were rushed, forgotten, chaotic, or simply not there as a consequence of the power outage. A fine job by all the organizers (who probably did not get much sleep the night before).

While Sato-San stayed at the table and continued scanning visitors' QR-codes, I went to the "BSDTW x Cat System" workshop to see Philip's talk about ZFS. It was well attended and I stayed on for the next talk about ports by a local FreeBSD maintainer. My own talk was in the afternoon. Li-Wen had organized boxed lunches for us for the two conference days, so I was not hungry when I gave my talk. The audience was interested in what I had to present, and I got a couple of questions from the audience. Some students came to me afterwards and we continued our conversation in the hallway. Afterwards, I joined Sato-San at the table.

My other observation from the conference was that there was a much higher number of women attending overall. Some of them had asked us questions at the table or after the talk, and from what they asked, I could tell that they were at least on the same technical knowledge level as their male peers. This was a very encouraging sight to see.

Sato-San and I were later interviewed by one of the "BSDTW x Cat System" workshop" group members. She also had very precise questions that showed she was not new to the BSDs. Both

Sato-San and I gave lengthy answers to her questions about community engagement, how to promote the BSDs more at conferences like this, and if we had any suggestions for improving COSCUP. By the time the interview was over, the last conference talk had also finished and Li-Wen had cleared our table and packed away leftover swag. Philip had already left that morning after his talk to catch a plane. While walking back to the MRT station, Li-Wen, Sato-San, and I reflected about the conference and what kind of talks or workshops we should offer there next time. We finished off the day with an amazing hot pot dinner at a nearby restaurant.

Overall, COSCUP proved to be an interesting experience to me. I've been to many conferences in different countries over the years. COSCUP left the impression on me that it was professionally organized (even without the power outage). There were a lot of helpers (just look at the staff list: (https://coscup.org/2019/en/staffs) and many interesting talks, a good amount of which were in English.

I'm glad I went to Taipei (despite the humidity and long travel time). I was greeted very warmly by people (sometimes unexpectedly), had a lot of good interactions with the people there, and felt that this is definitely a place where we should promote the BSDs more as the crowd seemed interested in what the OS can provide.●

Benedict Reuschling joined the FreeBSD Project in 2009. After receiving his full documentation commit bit in 2010, he actively began mentoring other people to become FreeBSD committers. He joined the FreeBSD Foundation in 2015, where he is currently serving as vice president. Benedict has a Master of Science degree in Computer Science and is teaching a UNIX for software developers class at the Darmstadt University of Applied Sciences, Darmstadt, Germany. Together with Allan Jude, he is host of the weekly BSDNow.tv (http://BSDNow.tv) podcast.

vBSDcon by Brad Alexander

Held every other year, I've attended the 2015, 2017, and 2019 vBSDcon. I work in the Reston, Virginia, area, less than a mile from the venue, the Hyatt Regency, and directly across the Dulles Toll Road from conference-sponsor Verisign, so there wasn't much travel involved for me except for the 50-mile commute home—which did limit some of my ability to linger into the night with other attendees.

I still consider myself a relative newbie with FreeBSD, as I have only been using it for approximately 5 years. A Unix and Linux system administrator for about 25 years, I have touched most of the major Unixes. I first delved into FreeBSD thanks to several things falling into place. First, I was a regular listener to *BSD Now* and became, as Kris Moore used to say, "BSD Curious." At the same time, Linux began to implement systemd. So, I started looking at FreeBSD because it was about as far away from systemd as I could get in an open-source operating system. The final thing, and the thing that got me completely hooked, was ZFS, especially ZFS on boot and boot environments.

My first projects were relatively small. I initially built out a FreeNAS to replace my aging Linux file-server that had no drive redundancy. Later, I purchased an HP T610 thin client and installed pfSense to replace my Linux firewall. So, my first year, I was totally new to BSD and spent a lot of time talking with Kris Moore and Dru Lavigne at the ixSystems and FreeBSD Foundation tables and learning in small increments. I joined the irc channels for PC-BSD, TrueOS, FreeNAS. At the time, my impression of FreeBSD was that it felt "right down the middle" with respect to the various Unixes I have worked with. Each commercial Unix seemed to have its own gimmick that made it feel unique. FreeBSD seemed to be one of the purest experiences I have had.

Each conference that I have attended has taught me more and more, and I have consequently

shown up with more confidence each time. The friendliness of the attendees and their willingness to suffer newbies was refreshing after many years in the Linux community. This year was no exception, and I had a chance to dip my foot further into the world of BSD. The major change for me in the past year is that due to the churn in the TrueOS world, I ended up switching my daily driver computing platforms, primarily my desktop and laptop, to vanilla FreeBSD 12.0.

This move allowed me to become more involved with the community. During David Fullard's talk on transitioning from FreeNAS to FreeBSD, he mentioned that he wished that freebsd-update would be ZFS aware. I had written a script called freebsd-upgrade that did just that. So, I made that available to him, and we collaborated on the concept. Colin Percival, who wrote freebsd-update had some suggestions as well. By the end of the conference, David had a working prototype.

I also enjoyed Benedict Reuschling's talk on replacing oracle with PostgreSQL, as well as Michael W Lucas's talk on jails, which redoubled my intent to transition all my OpenVZ linux containers to BSD Jails.

The first night, Benedict educated me on basic Ansible in the hacker lounge, and he showed me how to get a basic environment set up. This was one of the times that my commute proved an impediment to taking advantage of all I wanted to, both instructionally and socially.

Day 2 highlights included Allan Jude's "Explain to Me Like I'm a 5-Year-Old" on ZFS Caching; Colin Percival's talk on side channel attacks; and Conor Beh's talk on FreeBSD at work. That hit close to home since FreeNAS and pfSense were how I got involved with FreeBSD. I also talked to Mark Felder about a bug in pcdm in which services that started after it would not start. He helped me to fix it on my system and was looking into a more permanent fix.

All in all, I thoroughly enjoyed myself at the conference and felt that I came away with deeper and wider knowledge, as well as being more involved in the community. My goal is to be able to attend BSDCan next year. ●

Brad Alexander **After working in satellite communications in the Army, Brad Alexander transitioned into IT, where he found a home in Unix system administration. Over the years, he has worked with most of the mainstream Unixes, SunOS, Solaris, Xenix, AIX, HP-UX, BSDI, Linux, and FreeBSD. He lives in Virginia with his wife of 33 years and their dog.**

EuroBSDcom 2019 at Lillehammer

by Chris Iroanya

The four-day EuroBSDcon 2019 was convened in the historic city of Lillehammer, Norway, to bring together developers, testers, users, and enthusiasts, all for the love of BSD and its variants. I am a network administrator, a FreeBSD user, and the recipient of the Paul Schenkeveld Travel Grant, which is offered by the EuroBSDcon Foundation in honor of his dedication to the BSD community. My home country is Nigeria, and the grant supported my travel, hotel accommodations, the conference, and the social event.

Lillehammer is rich in history and culture, made clear merely by a walk through the hilly, peaceful town. Two Olympics have been hosted here—the 1994 Winter Olympics and the 2016 Winter Youth Olympics—and a third would have been if Norway had won the bid to host the 2022 Winter Olympics. A county administrative center for many years, Lillehammer is also a commercially viable tourist destination for lovers of aesthetics and culture as I am. The well-over two-hour train ride around the Norwegian countryside was a perfect way for me to see the country's rich livestock farming and the beautiful landscape. As a tourist, and a conference attendee, I would say

the EuroBSDcon planning committee made a great choice by selecting Lillehammer as our venue. The only drawback for me, and I am sure for many other tourists, is the cost of beer—yes, I said "beer."

The beginning of the first two days of the conference, September 19 and 20, found us either in a tutorial or a devsummit. This was a dream come true for me as I am sure it must have been for many others, the reason being that I was not only seated in the same room with many of the BSD greats but I was also being tutored by them. Another reason was that I was imparted with plenty of useful knowledge and information, with much more to research later. One of my interesting take-homes was from Dr. Kirk McKusick's lecture on "An Introduction to the FreeBSD Open-Source Operating System," where he explained memory management in the kernel IPC subsystem for the FreeBSD Mbufs and the Routing Design using the FreeBSD architecture.

Day 3 and 4 were even more interesting. I enjoyed the keynote address, "Embedded Ethics," given by Patricia Aas. She is by her very nature what I call a "shape shifter," meaning one who is able to effect change from her little world. Her talk can be summarized by the Peter Parker principle (Spider-Man), "With great power, there must also come great responsibility." Having this in mind, she states that we have a moral responsibility to stand up for the ethics of the Information Technology industry, despite all odds.

The cherry on my EuroBSDcon cake was the social event, when we visited the Maihaugen Open Air Museum. Spanning a land mass of about 2 square kilometers with 200 houses, it is the most visited tourist attraction in Lillehammer, and it was great that we added to the count. The museum prides itself on the preservation of Norwegian culture and history, which it represents through the three primary sections in the museum: the Rural Collection; Historic Town; and the Residential Area. This is indeed a must-see for anyone visiting Norway.

The conference closed at about 3:30 p.m. on the 22nd with the declaration that the next EuroBSDcon will be hosted in Vienna, Austria. We all greeted it with a loud cheer, knowing very well of Austria's richly brewed and affordable beer.

In summary, my experience at the EuroBSDcon 2019 was wonderful. It has given me a lot to research and provided possible project ideas to explore. Thank you to the FreeBSD Foundation, the FreeBSD community, the conference organizers, the speakers, and everyone who has kept this project alive. Looking forward to seeing you again in Vienna, Austria. Until then, "Habe ein tolles BSD-Entwicklungsjahr." Hope I got that right and that it means, "Have a great BSD development year" in German. ●

Chris Iroanya **Chris Iroanya is a network administrator with Wilforce International Services Limited, and sets up network servers using the FreeBSD OS. He lives in Nigeria with his wife, Mimi, and two lovely girls, Samantha and Chimamanda. He loves cooking and spending time with his family.**