## FreeBSD Foundation Q4 2017 Update



# Dedicated to supporting the FreeBSD Project and community

## **Upcoming Events**

#### FreeBSD Mini-Dev Summit 2018

February 2, 2018 Brussels, Belgium

#### **FOSDEM 2018**

February 3-4, 2018 Brussels, Belgium

#### APRICOT 2018

February 19-28, 2018 Kathmandu, Nepal

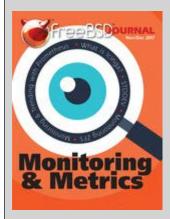
#### AsiaBSDCon 2018

March 8-11, 2018 Tokyo, Japan

#### SCALE 16x

March 8-11, 2018 Pasadena, CA

#### FreeBSD Journal



The November/December issue of the FreeBSD Journal is now available. Don't miss articles on What is Icinga?, Monitoring ZFS, and more.

### Message from the Executive Director

Dear FreeBSD Community Member,

As we get ready to publish our last newsletter of the year, I'm sitting here overflowing with pride for my team and what we've accomplished this year. Though we are in the high tech world, our sole purpose is to serve the FreeBSD community and Project. We couldn't do this work without our team's dedication and passion in supporting the FreeBSD community and making FreeBSD the best operating system available for free to everyone around the world.

Below, you can see just some of our accomplishments from the past year, such as, software development projects to improve FreeBSD, our college internship program, FreeBSD Advocacy at past and future events, and how beneficial it is having a full-time staff member leading the release engineering efforts.

However, it takes more than a dedicated staff and a group of volunteers to provide the amount of support we provide for FreeBSD. It also takes a lot of funding. Since we are not a trade organization, like many other open source projects out there, we rely solely on individuals and corporations who benefit from FreeBSD, to give back in ways that will keep us sustainable.

Now that we're heading into the final week of 2017, I'm going to ask you for one more thing. Please help us meet our fundraising goal so we can continue the work we are doing. Your support directly impacts the Project by allowing us to help keep FreeBSD secure and reliable, to increase the adoption of FreeBSD around the world, and to increase our software development contributions, truly making FreeBSD the best platform for education, research, computing, and products.

Deb

## **Q4 Development Projects Summaries**

September 2017



Did you miss the <u>September/October</u> issue? Check out articles on FreeBSD vs. Linux: ZFS, FreeBSD is not a Linux Distro, and more.

**New Feature!** Browser-Based subscribers now have the ability to download and share PDFs of the articles!

Sample Issue! If you've ever wanted to read through an entire issue of the FreeBSD Journal, now's your chance. <u>Download</u> the sample issue and be sure to share with your friends and colleagues.

Not a subscriber? Sign up today!

See what others are saying about the Journal:

"Awesome! This is the best way to popularize FreeBSD!!" San Jose, California

"I've found it really practical, and great reading...it caters to all levels of users." Brooklyn, NY

## Why Choose FreeBSD?

## cleverbridge

"Headquartered in Cologne, Germany with offices in Chicago, San Francisco and Tokyo, cleverbridge has used FreeBSD for more than 12 years in our development, test and production environments. FreeBSD offers us unique security features, reliability, industry-leading technologies and an amazing performance. From our web servers, email servers to our storage servers, FreeBSD helps drive our global ecommerce solutions."

Paul Herman, Director of IT – Technical,

For this month's update, I'll describe the collaboration between the FreeBSD Foundation and University Politehnica in Bucharest. The FreeBSD Foundation is



funding stipends for two students to contribute to the port of FreeBSD's Bhyve hypervisor to the 32- and 64-bit Arm architectures. Mihai Carabas is a Ph.D. student and teaching assistant at the University Politehnica, and will oversee the student's work. Read more...

#### November 2017

There's a lot of work in progress right now supported by the Foundation! We have projects supported by individual grants and student stipends, as well as work being done by the Foundation's own staff and co-operative education students from the University of Waterloo. This month, I'll give a brief update on the many Foundation-supported projects that are in progress. Read more...

#### Dececmeber 2017

The holidays are approaching, and that also brings to an end the work-term for the Foundation's two co-op students from the University of Waterloo, Heqing (Scottie) Yan and Zakary Nafziger. Scottie and Zak will be back at school in January continuing their studies. This is the second time the Foundation employed Waterloo students, and two new students will start in January. Here, I'll describe some of Scottie and Zak's projects over the term. Read more...

-- contributed by Ed Maste

## 2017 Fundraising Update



First, I want to send out a heartfelt thank you to everyone who has donated to us this year! Not only do I love seeing the donations come in, but I also love reading the feedback and comments. It's a wonderful opportunity for us to hear from FreeBSD users on what they like and what they'd like to see supported. As of this publication, we've raised around \$962,700 with only 10 days left to meet our 2017 fundraising goal of \$1,250,000.

We still have a lot to raise over these last few days of the year, and I'm confident we'll do it. Why? First, I believe companies and individuals recognize that the work we are doing is important in keeping FreeBSD relevant, secure, and innovative. Second, a day doesn't go by where we aren't approached by a community member or company, that requests some type of assistance from us. Without the necessary funding, we wouldn't be able to constantly address and support these requests.

As I mentioned in the intro, I'm proud of our team. They will step up to solve problems, answer questions, and jump in when needed to support FreeBSD, no matter what time of the day. They bring in new and innovative ideas to advance FreeBSD, and are leaders in the community. They travel the world to give



FreeBSD presentations and workshops, run developer and vendor summits, meet with companies to support their efforts or convince them to use FreeBSD, and help grow the community, by recruiting more users and contributors to the Project.

This year, your support helped us advance FreeBSD through:

- Increasing the software development projects we are managing and funding, by internal and external software developers, including the OpenZFS RAID-Z Expansion project, Broadcom Wi-Fi infrastructural improvements (bhnd(4) driver), increasing Intel server support, and extensive progress towards a fully copyfree toolchain.
- Growing the number of FreeBSD contributors and users from our global FreeBSD outreach and advocacy efforts, including expanding into new regions like China, India, Africa, and Singapore.
- Keeping FreeBSD secure and reliable by having staff members fill leadership roles on the Security and Release Engineering teams.
- Starting up nascent internship/stipend programs by participating in the University of Waterloo Co-op program, where we are hiring interns for four-month periods to work directly on FreeBSD, and the University Politehnica Bucharest, where we are providing stipends to students doing research projects with FreeBSD.
- Providing face-to-face opportunities such as developer and vendor summits and company visits to help facilitate collaboration between commercial users and FreeBSD developers, as well as helping to get changes pushed into the FreeBSD source tree, and creating a bigger and healthier ecosystem.
- Utilizing a full-time staff member to ensure stability, reliability and high performance via ongoing maintenance and bug fixes.

Read our <u>year-end fundraising appeal</u> to find out more about what we plan to support next year.

We accomplished a lot this year, and have big plans for 2018. Please consider making a donation today, so we can make these plans a reality.

Thank you again for your support. We really can't do it without you.

Deb

-- contributed by Deb Goodkin

## Q4 2017 Conference Recaps and Trip Reports

From sponsoring events to attending conferences and awarding travel grants, the Foundation continued its mission of advocacy and fostering community in Q4. Over the past few weeks, members of the Foundation team and travel grant recipients shared their stories of attending events around the world. Below are just a few of the conference recaps and trip reports.

#### BSDCam 2017 Trip Report - contributed by Mathieu Arnold

It seems that every time I try to go to England using the Eurostar, it gets delayed between 30 minutes an 2 hours. This year, it got my 45 minute layover down to 10 minutes. Luckily, King's Cross is literally across the street from Saint Pancras, and I managed to get into my second train just in time. https://www.freebsdfoundation.org/blog/bsdcam-2017-trip-report-mathieu-arnold/ Read more...

#### EuroBSDcon 2017 Conference Recap - contributed by Deb Goodkin

EuroBSDCon is one of the largest BSD-related conferences that is held in a different European country each year. Each one is organized and run by local BSD contributors, under the umbrella of the EuroBSDCon Foundation, who help provide resources, financial support, and guidance for each conference. This year, EuroBSDCon was held in Paris, France and the FreeBSD Foundation was proud to be a Silver Sponsor. Many of our team members attended and participated in the conference and preceding FreeBSD developer summit. Read more...

#### **USENIX LISA '17 Conference Recap - contributed by Deb Goodkin**

There are a lot of areas we support to make FreeBSD the best platform for computing, education, research, and products, and a large part of our efforts are dedicated to FreeBSD advocacy. We are driven to not only help make this the best operating system available, but to get more people and companies using FreeBSD. We do this by promoting FreeBSD at computing conferences around the world.

A few weeks ago, I had the pleasure of promoting FreeBSD at the USENIX LISA (Large Installation System Administration) conference in San Francisco, CA. I was joined by Ed Maste, our Director of Project Development, Allan Jude, long time FreeBSD contributor and co-owner of ScaleEngine, Dru Lavigne and Warren Block from iXsystems. Read more...

#### EuroBSDcon 2017 Trip Report - contributed by Mahdi Mokhtari

My summer kicked off in pretty awesome BSD-flavored form as I was invited by Netzkommune GmbH to work on the following FreeBSD-focused projects:

- Making FreeBSD suspend/resume work and test it on X240 (Haswell chip)
- Making VirtualBox-SharedFolder support work for FreeBSD guests
- Maintaining ports (like MySQL)
- Porting latest-stable of mod\_pagespeed for FreeBSD

Naturally, my goal for attending EuroBSDCon was to connect with the right people to talk about things I've done and/or how to do (and finish it) in the best way. Read more...

#### EuroBSDcon 2017 Trip Report: Li-Wen Hsu

Thanks to the FreeBSD Foundation's support, as well as the encouragement from my friends, I attended EuroBSDcon 2017.

Originally, I did not have plans to attend EuroBSDCon this year, but then changed my mind. I'm glad I did, as I definitely would have regretted not

attending since it turned out to be an amazing conference.

I arrived in Paris on the morning of October 19th. During the first two days, I did some sightseeing with Hiroki Sato, and had dinner with Sofian Brabez and other friends. We continued our discussions from the last meetup, and exchanged some new ideas. Read more...

#### BSDTW 2017 Conference Recap: Li-Wen Hsu

Last month, we held BSDTW 2017 on November 11-12th, 2017 in Taipei, Taiwan. It was the second largest BSD conference in Taiwan and the first one in this decade. In 2004, the first AsiaBSDCon was also held in Taipei. Then all of the following AsiaBSDCon conferences were held in Tokyo, Japan.. (AsiaBSDCon 2018 will be in Tokyo again next year, please submit your talk proposal by December 31th 2017, and attend the conference on March 8th-11th)

We wanted to start small with the first BSDTW because we were not sure how much sponsorship or how many volunteers we might have. BSDTW 2017 was a single track, two-day conference with 11 selected 50 minute presentations and 1 WIP/lightning talk session consisting of 8 short talks. I do regret that we did not have any local presenters this year. It is also a similar problem at AsiaBSDCon. Unsurprisingly, as with AsiaBSDcon, the travel reimbursement took up a large part of the whole conference budget. We do have many good people that work in Asia, but we still need to encourage people to present their work more.

We had over 130 registered attendees, with 30% of them coming from outside of Taiwan. To our knowledge, in recent years, this is the only open source conference in Taiwan to be held entirely in English, and to have such a large portion of international attendees. This is also the first open source conference in Taiwan to focus entirely on operating systems. The attendees included students, professors, engineers or CTOs, and CEOs from technology companies. This is also the first time that GroffTheBSDGoat visited Taiwan! We were surprised that after the silence for so many years, there are still so many people that use and love BSD near us. We saw many old friends, who had "disappeared" for a long time, came back, and were glad to meet many new friends at the conference. I am really happy that this conference was able to bring together these people, from local and abroad. After attending BSD conferences around the world for many years, I feel that the friendship between BSD users is the most important thing in the BSD community, and one of the main reasons people stay. It has been my pleasure to bring this community back to my friends in my homeland.

After the two-day event, I truly understand that bootstrapping a new conference is a very hard job. One with many aspects that you don't even imagine until you're really in the process of planning an event. I now have an even greater respect for all of the conference organizers and realize that we need to have more people help them, to keep these conferences continue to get better and better. Plus, there will always be room for a new conference!

Thanks to the FreeBSD Foundation for being the biggest sponsor of BSDTW 2017 and always being the strongest backend of our

community. We are excited about the many local companies and organizations that helped us whether with people, materials or financially. We even had 21 personal sponsors, more than two times the number of other big open source conferences in Taiwan.

As I said in the closing session, I'm not sure if there will be 2nd BSDTW next year. It still depends on the amount of sponsorship and number of volunteers. However, we will definitely hold more smaller meetups in the next year to keep building up the local BSD community.

Finally, in the beginning of this month, we had a "post-conference media workshop" for organizing the media files we collected in the BSDTW 2017. Here are the review article in Traditional Chinese and the photos:

https://medium.com/@bsdtw/bsdtw-2017-總回顧-a402788daede https://www.flickr.com/photos/bsdtw/albums/72157689410035911

The videos will be published and be announced through our social network:

https://www.facebook.com/BSDTW https://twitter.com/bsd\_tw

Please stay tuned!

-- contributed by Li-Wen Hsu, General Chair of BSDTW 2017

#### **BSDTW 2017 Trip Report: Guangyuan Yang**

BSDTW '17 was the first international BSD conference I've attended since BSDCan '17, during which I was an intern at the FreeBSD Foundation. As a sophomore and a fairly new contributor to the project, the friendliness and inclusiveness of this community, and the degree of recognition that I have received for some of my small contributions really made me enjoy staying in the FreeBSD community and continuing to make contributions. After my internship, I became a FreeBSD committer and continued to be involved in the FreeBSD world. I appreciate that the FreeBSD Foundation provided me with the valuable opportunity to attend this years BSDTW in Taipei, Taiwan. Read more...

## 2017 Release Engineering Recap

Take a minute to read up the efforts of the FreeBSD Release Engineering team in 2017. Your support helps us fund a full-time release engineer to ensure ontime releases, provide better documentation, and facilitate getting others involved in the Release Engineering team. Thanks again to everyone who has supported the Foundation this past year and congrats to the RE team for a successful 2017.

This past year was undoubtedly a rather busy and successful year for the Release Engineering Team. Throughout the year, development snapshot builds for FreeBSD-CURRENT and supported FreeBSD-STABLE branches were continually provided. In addition, work to package the base system using pkg(8) continued throughout the year and remains ongoing. Read more...

-- contributed by Glen Barber

#### 2017 Advocacy Recap

Advocating for FreeBSD is an important part of how we support the Project. Advocacy takes many forms, from attending conferences to promote FreeBSD, to creating literature to educate and inform on the latest FreeBSD features and technologies. We talk about the latest developments on social media, interview community members about their experiences with FreeBSD, and work with companies to share why FreeBSD is their operating system of choice.

In 2017, we brought FreeBSD to a number of new events and locations around the world. From Linux.Conf.Au in Australia to FOSSASIA in Singapore, to RootConf in Bangalore and the Open Source China Open Source World Summit in Beijing, members of the Foundation team and FreeBSD Community gave presentations about FreeBSD and helped introduce a new group of people to the Project. We also returned to key events such as OSCON in Austin and USENIX LISA in San Francisco, to re-enforce our message about the power of FreeBSD and continue to recruit new members. In addition to supporting and attending conferences, the Foundation also provides travel grants to bring members of the FreeBSD community face-to-face to both further development of the Project, and share their knowledge on FreeBSD. This year the Foundation provided grants to 11 contributors to attend events all over the world. A full list of past events can be found here and be sure to check out our blog for trip reports and conference recaps. Don't forget, if you'd like to help with our advocacy efforts at events and meetups, PDFs of all our brochures and stickers are available online for you to print and distribute. If you don't see what you're looking for, please let us know so that we can assist you.

We celebrated the first ever FreeBSD Day on June 19th, where we were able to join members of the community in honoring the FreeBSD Project's pioneering legacy and continuing impact on technology. If you're wondering how that date was selected, June 19, 1993 was the day the official name for FreeBSD was agreed upon. See part of the email thread here. Find out more about our FreeBSD Day efforts <a href="here">here</a> and be sure to mark your calendars to celebrate on June 19, 2018.

The above highlights just a small sampling of our advocacy work over the past year. Your support has been instrumental in what we were able to accomplish in 2017, and we look forward to expanding our efforts in 2018!