Upcoming Events

BSDCAM: 2015 Cambridge DevSummit
August 17-19, 2015
Cambridge, UK

vBSDcon 2015
September 11-13, 2015
Reston, Virginia

SNIA Storage Developer Conference 2015
September 21-24, 2015
Santa Clara, CA

womENcourage 2015
September 24-26, 2015
Uppsala, Sweden
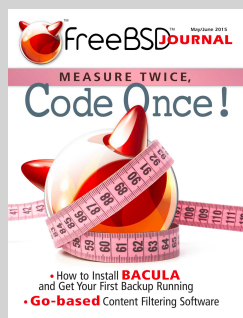
EuroBSDcon 2015
October 1-4, 2015
Stockholm, Sweden

BSDCon Brazil 2015
October 9-10, 2015
Fortaleza, Brazil

Grace Hopper 2015
October 14-16, 2015,
Houston, Texas

FreeBSD Journal

Message from the Executive Director

It's hard to believe that 2015 is half-way over. July has been a very productive month here at the Foundation. Not only have there been new developments in Foundation sponsored projects, but we have successfully promoted and recruited for the Project at OSCON 2015. We also continued making progress on our initiative to bring more women into the FreeBSD Community, and have branched out into new partnerships. I'm excited to see what the end of summer has in store for the Foundation and I hope you are too. In the meantime, take a look at what we've been up to during this past month.
Deb

Development Projects Update

We had excellent progress on the Foundation-sponsored FreeBSD/arm64 port over the last month. Recent improvements include ACPI, SMP enhancements, DTrace and hwpmc performance profiling. Community interest in the port has also been increasing. Stacey Son added FreeBSD/arm64 support to the QEMU emulator's user mode emulation, and Sean Bruno used this to start building package sets for the platform. Over 14,000 packages successfully build now. Changes are now in progress to fix issues found in the first run, and should enable an additional 5,000 packages or so.

The Semihalf developers working on Cavium ThunderX hardware support identified and fixed a number of SMP stability issues and added workarounds for hardware errata. FreeBSD is now running on 48 real ARMv8 cores! The changes are currently being reviewed and committed to the FreeBSD subversion repository. Ongoing work will add support for dual-socket configurations (96 cores) and a driver for ThunderX's 10/40 gigabit Ethernet controller.

Edward Napierała continued work on the reroot project. This allows the system to boot with an initial root file system, perform some configuration or other setup tasks, and then replace the temporary root with the real one.

Konstantin Belousov continued work on the DMA remap (DMAR) project, and also committed fixes to a number of kernel subsystems. Konstantin is also working on improving atomic operation support, with a goal of improving correctness and performance when complete.

Foundation employee Glen Barber, with the Release Engineering Team, worked on the FreeBSD 10.2 release, starting with the code freeze at the beginning of the month and keeping release notes up-to-date throughout the process. Glen built two beta releases from the branch, and one release candidate, in order to have the release ready by the target at the end of August. At least one more release candidate build is planned before the final release is available.

Glen worked with Brad Davis to add Vagrant support. Virtual machine images for VMWare Desktop and VirtualBox will be provided for use with Vagrant. At present, the Release Engineering Team supports three third-party (also known as "cloud") providers -- Amazon EC2, Microsoft Azure, and Vagrant -- with support for the final 10.2-RELEASE expected to also be available on Google Compute Engine. Glen also performed general maintenance and updates to the FreeBSD.org infrastructure with the FreeBSD Cluster Admins team.

-- contributed by Ed Maste

New Event: SNIA 2015 Storage Developer Conference

The FreeBSD Project and Foundation are pleased to be an Association Partner at the 2015 SNIA Storage Developer Conference taking place September 21-24, 2015 in Santa Clara CA.

SDC brings together prominent developers, technical professionals, and engineers from the worldwide storage community. It is an event created BY developers FOR developers. The SDC 2015 agenda includes over 90 breakout sessions across as many as 5 tracks over 4 days that will cover topics such as File Systems, Software Defined Storage, SMB, Security, Performance, and more.

SNIA has offered a registration discount to the FreeBSD Community. Register here with the discount code, SDC2015FreeBSD, by August 22, 2015 to receive $500 off the regular price.

-- contributed by Anne Dickison

Fundraising Update and Conference Recap: O'Reilly OSCON 2015 and Beyond

I just returned from O'Reilly's OSCON 2015, where Anne Dickison and I promoted FreeBSD and the Foundation. We were both very thrilled by the number of people that stopped by our booth. We spent two full days plus another evening, talking to people about FreeBSD.

computing platform known as Microsoft Azure, a growing collection of integrated services - analytics, computing, database, mobile, networking, storage, and web - for moving faster, achieving more, and saving money.

The drive to make FreeBSD on Hyper-V successful rests almost exclusively on fact that many major appliances (network, storage, security and etc.) leverage FreeBSD as their base OS to build their product.

With the continued trend of virtualization, appliance vendors are increasingly moving from the physical appliance business to virtual as it significantly increases their gross margin by decreasing development and manufacturing costs. Ensuring these virtual appliances based on FreeBSD run well on Hyper-V, and eventually in Azure, is a strategically important investment for Microsoft as it ensures that as this trend continues that the Microsoft stack is the best for customers with private and public cloud deployments.

– Jason M. Anderson, Principal PM Manager, *Microsoft*

Not only were people interested in FreeBSD, but many were interested in offering FreeBSD workshops at their meetings, teaching FreeBSD in their operating systems classes at universities and community colleges, and using FreeBSD in computer classes offered to disadvantaged kids. We also spoke with people looking to try out FreeBSD for the first time, or going back to it again after many years away. It was very satisfying to see people become genuinely enthusiastic about trying it after hearing all that FreeBSD has to offer. While we were too busy to attend most of the sessions, the conference was well received and we are looking forward to watching videos of the sessions online. Overall, OSCON 2015 turned out to be a valuable event for FreeBSD and the Foundation.

We are excited about these opportunities, since these efforts align with what we are working on to teach people about FreeBSD and recruit more people to the Project. Attending conferences like this helps the Project profoundly. We need to attend more of these, and get FreeBSD contributors to staff booths and give FreeBSD presentations. People are interested in learning about FreeBSD, and we need to take advantage of these opportunities now.

Our fundraising efforts help provide funding to send people to these conferences, create FreeBSD curriculum for middle school to graduate level students, and create marketing material to hand out at conferences. It is also aiding in our initiative to recruit more women to the Project by helping to fund the creation of women-only FreeBSD workshops. We've identified some women in tech organizations that want to offer our workshops to their members. For us to continue and grow these efforts, we need to increase our fundraising efforts.

At this writing, we have raised $372,000 from 512 donors. Our goal is to raise $1,250,000+ from over 2000 donors. Though, most of our fundraising dollars arrive in the last three months of the year, we've been approaching commercial users since the beginning of year to ask for their support. There are a lot of commercial users who benefit from using FreeBSD, with the permissive license, having the opportunities to attend vendor and developer summits around the world, recruiting experienced and well-trained FreeBSD developers, and having Foundation team members visit companies to help facilitate collaboration with the Project.

Companies and individuals are benefiting from our professional online magazine the FreeBSD Journal. At this point, it has over 9800 subscribers! That means there are almost 10,000 people out there

reading and learning about FreeBSD every other month. We take great pride in this publication, and our goal is to spread FreeBSD awareness and hopefully break even. Some people think that buying a subscription is synonymous with making a donation to the Foundation. Unfortunately, most of the subscription fee goes to the application service provider and our publisher.

So, if every subscriber made a small donation, we would have 10,000 donors, and exceed our fundraising goal of over 2000 donors! Plus, it would be a great reflection on the Project and the community of hardworking, committed, and passionate FreeBSD contributors.

This month we were pleased to add iXsystems as a Silver level donor. They've donated to the Foundation every year, since 2008. By being a Silver donor, your logo will be showcased on our website by rotating in our footer. That means it will be displayed on every page!

This is a great opportunity to show your support. And, by donating earlier in the year showcases your logo on our website longer!

Please show your support for FreeBSD by making a donation today.

Thank you for your continued support!

-- contributed by Deb Goodkin