Supporting the FreeBSD Community World Wide for Over 14 years



FreeBSD Foundation September Update

The chill in the air reminds me that Fall is upon us and with that new season comes new opportunities and milestones for the Foundation. From upcoming conferences and a new book release to funding new projects and a new fundraising campaign, we're gearing up for a busy and productive few months. Please take a few minutes to see what's been happening and what you have to look forward to over the coming months.

Deb



FreeBSD Development Projects Update

The FreeBSD 10.1 release cycle remains on target under the leadership of Foundation staff member Glen Barber. With a little over one month to go, 10.1 is shaping up to be a very exciting release. A a number of Foundation-sponsored technologies will appear for the first time, after being merged from the FreeBSD-Current development branch.

Many improvements have been made to the vt(4) system console, both under Foundation sponsorship and from experts in the FreeBSD community. UEFI boot support is now merged from FreeBSD-Current, and available in the BETA release snapshots. The new autofs automounter has been merged, after review and positive test results in FreeBSD-Current.

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Getting everything ready for the release has kept us all very busy, and now we're entering the homestretch. I look forward to describing the exciting new projects we'll move onto for the final part of the year.

contributed by Ed Maste



FreeBSD Foundation Announces IPsec Enhancement Project

Internet Protocol Security (IPsec) suite is used to implement virtual private networks on FreeBSD and other operating systems. As the networking world continues its transition from 1 to 10, to 40 gigabit per second speeds, and faster, improvements in IPsec's cryptographic building blocks are necessary to keep pace.

Upcoming Events

EuroBSDcon 2014

Sept. 25-28, 2014 Sofia, Bulgaria

USENIX Diversity '14

October 5, 2014 Broomfield, CO

USENIX OSDI '14

October 6-8, 2014 Broomfield, CO

Grace Hopper Celebration 2014

October 8-10, 2014 Phoenix, AZ

MeetBSD California 2014

November 1-2, 2014 San Jose, CA

USENIX LISA '14

November 9-14, 2014 Seattle, WA

FreeBSD Journal



The latest issue of the FreeBSD Journal is available! The July/August issue is all about FreeBSD and Virtualization. Articles include topics such as FreeBSD on Amazon's EC2, and FreeBSD's own native virtualization system, bhyve.

See what others are saying about the lournal: The FreeBSD Foundation is pleased to announce that long-time FreeBSD developer John-Mark Gurney is adding modern AES modes to FreeBSD's cryptographic framework and IPsec. This project is co-sponsored by the FreeBSD Foundation and Netgate, a leading vendor of BSD-based firewalls and networking gear.

The project adds new encryption modes while also importing infrastructure updates from OpenBSD giving FreeBSD users unprecedented support for high performance, encrypted communications.

New modes include AES-CTR and AES-GCM with hardware acceleration using Intel's AES-NI instructions. According to John-Mark, "on a modern 64-bit x86 CPU one core can process about 1 gigabyte per second of data" using the new AES-GCM mode.

Concurrent with this project, FreeBSD committer and pfSense employee Ermal Luçi will update the FreeBSD IPsec stack to take advantage of the new cryptographic modes.

Jim Thompson, a co-owner of both Netgate and ESF (the company behind pfSense), said "We are pleased to contribute to this project. Our interest in high-performance IPsec is obvious, however we also recognize the importance of contributing this capability to the FreeBSD project. Not only because our own software is based on FreeBSD, but for the benefit it brings to the entire community. We plan to have AES-GCM support for IPsec with AES-NI acceleration available in the 2.2 release of pfSense software."

The project is currently in progress, with a planned completion at the end of September 2014.



EuroBSDcon 2014 is Almost Here!

EuroBSDcon 2014 is less than a week away and The FreeBSD Foundation is proud to be a Gold Sponsor.

We awarded 4 travel grants for people to attend the conference and we'll be there as well. Not only will we be offering new giveaways (with a donation, of course), but we'll also be raffling off a copy of the newly released *The Design and Implementation of the FreeBSD Operation System (2nd Edition)* written by FreeBSD Foundation board members Marshall Kirk McKusick, George Neville- Neil, and Robert M.N. Watson.

EuroBSDcon 2014 takes place September 25-28 in Sophia, Bulgaria. We hope to see you there!



Fundraising Update: Fall Fundraising Kickoff

I'm sitting here looking at the cool swag I'm going to attempt to pack with my belongings as I prepare for my trek across the world to represent The Foundation at EuroBSDCon 2014. I'm excited to venture to a new place and meet FreeBSD enthusiasts who I haven't met before. Traveling to a place I've never been, where I can't even read or understand the maps, always makes me a little bit nervous. I only hope that I will be guided by friendly locals who will be able to direct me to the right place. This is how people new to FreeBSD must feel when they want to get involved, but they don't know how to get started. We can only hope that a member of the FreeBSD community will take on the job of being a mentor to help steer them in the right direction and give them constructive feedback, so they can grow into a much needed FreeBSD contributor.

"Awes ome! This is the best way to popularize FreeBSD!!" San lose. California

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

Not a subscriber? Sign up today!

New FreeBSD Book



The Design and Implementation of the FreeBSD Operating System (2nd Edition) is now available! When you order your copy via amazon smile and choose the FreeBSD Foundation as your charity, we will also receive a donation. Order your copy today!

Why Choose FreeBSD?

"Atlantic.Net is a hosting solutions provider specializing in Cloud & SSD VPS (Virtual Servers) services. We were founded in 1994, initially providing dialup Internet access to second-tier and rural markets throughout Florida. Our business model has changed through the years, from providing residential dial-up Internet access, Enterprise connectivity and business solutions, server co-location, and most recently managed hosting & VPS services.

FreeBSD has been an integral part of shaping many of today's Internet technologies which benefit all Internet users worldwide. We have been using FreeBSD for decades, and based on our history, it has been a

This is where the Foundation can help. We are putting more resources and funds into providing educational material, via the FreeBSD Journal, white papers, brochures, and other literature to help educate and advocate for FreeBSD. We are contributing to research projects in universities, and striving to make the path to getting involved in FreeBSD easier to navigate. We are attending the Grace Hopper Women in Technology conference to encourage more involvement by women, and we are also attending the USENIX Diversity conference to present opportunities on getting involved in FreeBSD.

In order to continue and increase this type of support, as well as funding more development projects, BSD-events, and FreeBSD infrastructure, we are kicking off our Fall Fundraising Campaign to help us meet and exceed our 2014 goal of raising \$1,000,000.

Here's how you can help:

- 1) You can make a donation.
- 2) You can spread the word of the important work we are doing to support and improvie FreeBSD.
- 3) You can ask your employer to make a donation. Please let them know they can get their logo on our website with a donation of \$10,000 or more. For an even bigger incentive, these logos will soon rotate on our homepage. Our goal is to add 10 new corporate logos on our website by end of next quarter.

As an added bonus, if you make a donation at EuroBSDcon, you will be entered into a drawing for a copy of the new Design and Implementation of FreeBSD book.

Thank you for all your support. We couldn't do it without you!

contributed by Deb Goodkin

flexible tool adapting itself to the changing conditions that have occurred as the Internet has grown. Along the way, FreeBSD has been hallmark of stability, order, and management of one of the Internet's most valuable resources -- the "free" BSD operating system.

We wholeheartedly recommend FreeBSD and believe it to be one of the best gifts and lasting treasures of the global Internet. So many Internet technologies, decades later, are still deriving their work from the foundation that FreeBSD has provided. Over the last 20 years, we are very proud of how FreeBSD and the community have evolved and improved. We can't wait to see what the next 20 years bring!

--Marty Puranik Founder/CEO <u>Atlantic.net</u>