



# The First **PORTS REPORT** by Thomas Abthorpe

**W**elcome to the inaugural Ports Report column for the new *FreeBSD Journal*. I am Thomas Abthorpe, the FreeBSD Ports Management Team secretary, aka portmgr-secretary@. It seemed to be a natural fit for me to be asked to do this column, as I take care of most of the correspondence for the team. So what can you look forward to reading in the Ports Report? It will be a summary of recent activity in the Ports infrastructure, news in the world of Ports, tips and tricks, plus whatever bits of trivia I can slip in.

## RESOURCES TO BUILD AND TEST YOUR PORTS

**B**eing a porter is one of the easiest ways to contribute to the FreeBSD Project. Maintaining leafs ports usually requires few resources, and can basically be done on a small home-based system. But what happens if you maintain a port that relies on GTK or QT or something else that requires a substantial number of ports to build first? This is where RedPorts.org comes to the rescue. RedPorts is a cluster of machines maintained by portmgr@ for use by the porter community at large. All you have to do is sign up for an account, and familiarize yourself with checking in your personal ports tree for testing. Once a port has been committed for test purposes, it will be passed off to a builder who will assemble all the dependencies leading up to your port being built. At the end of the process, a log is retained on the server, which you can then

review for completeness. Do not get frustrated; sometimes a port has to be tweaked a couple of times before it compiles cleanly.

## WHAT'S NEW IN THE PORTS TREE?

The nature of the ports tree is that it is forever evolving, growing, and being updated with new software. From time to time, notable changes are inserted into the infrastructure that improve and/or alter how ports are built. In July 2013, pkg\_install stopped being built on 10-CURRENT, this was done in anticipation of pkgng. In September 2013, Stack Protector support was introduced for amd64 and i386 in 10-CURRENT.

One of the newest additions to the infrastructure is staging, whichg allows a port to be built into staged directory, instead of getting installed into a production environment. Among other functionality, this allows a package to be created and bundled with a non-privileged account. You can read more about it at <http://lists.freebsd.org/pipermail/freebsd-ports-announce/2013->.

## VALUE-ADDED SERVICES FROM PORTMGR@

**S**ometimes, a commit to the ports tree, or for that matter, to the src tree, seems so very trivial, but has far-reaching consequences to userland. When called upon, portmgr@ can perform a full run of the ports tree to see how the change may impact how a port will or will not build. There are generally some high profile changes that will take some coordination—for example, changing the default versions of Perl, Ruby, or Python. There are many others, and you can always call upon your portmgr@ for assistance.

## DOING YOUR PART TO IMPROVE THE PORTS TREE

One of the strengths of FreeBSD ports is the diversity of our porters, dedicated volunteers who continually test and update the ports to keep them current and secure. As the infrastructure evolves, new ways of manipulating the Makefile get introduced. The tried-and-true method of validating a port is to run portlint(1). This finds syntax errors, whitespace, and a myriad of other nits to clean up in your port. A recent inclusion into the infrastructure gives enhanced warnings about additional changes you can perform on your Makefile. Set an environment variable DEVELOPER=yes or add it to your /etc/make.conf. By doing this, you may get prompted to alter Makefile to use the newest features being supported.

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## NEW PORTS COMMITTERS

It is a long-standing joke that if you submit too many PRs, fix too many ports, and contribute on the mailing lists in a helpful manner, you get punished with a commit bit. So in recent months we have punished the following: John Marino (marino@), a contributor to many BSD projects, notably DragonflyBSD, in which he is responsible for DPorts; Rusmir Dusko (nemysis@), who has concurrently been working with both FreeBSD ports and PC-BSD PBIs; David Chisnall (theraven@), who has spent recent years as a src committer, and with his wealth of experience will be instrumental in getting ports working in the upcoming FreeBSD 10 release cycle; and Danilo Gondolfo, a long-time contributor to the ports tree.

## TIPS FOR PERSPECTIVE PORTERS

If you are fortunate enough to maintain a port that just builds with little or no manipulation, then you are quite lucky. This is not the case with all ports. You will often need to patch snippets of code to make it run for FreeBSD. One of the most tedious aspects of this task is maintaining the list of patches in the files subfolder of your port. Instead of running the diff manually to generate your patches, run “make makepatch” from your port, which will assemble all the patches for you. Please also remember to share your patches with the developer of your port, as this will ensure ongoing compatibility and portability. ●

Thomas Abthorpe is a server administrator with over 20 years in the industry. He got his Ports commit bit August 2007, joined the Ports Management Team in March 2010, and was elected to FreeBSD Core Team in July 2012. When he is not busy doing FreeBSD business, he volunteers as an apprentice bicycle mechanic with Bicycles for Humanity.

# Events Calendar

BY DRU LAVIGNE



The following BSD-related conferences are scheduled for the first quarter of 2014. More information about these events, as well as local user group meetings, can be found at [bsdevents.org](http://bsdevents.org).

### FOSDEM ● Feb. 1 & 2, 2014 Brussels, Belgium

<https://fosdem.org/2014/>  
FOSDEM 2014 will take place February 1 & 2 at ULB Campus Solbosch. This annual event is free to attend and features a BSD developer room devoted to BSD presentations. The event will also host the BSDA certification exam.

### NYCBSDCon ● Feb. 8, 2014 New York City, NY

<http://www.nycbsdcon.org>  
The NYC BSD Users Group (NYCBUG) will once again hold a one day conference in NYC. The location will be at Suspenders Bar and Restaurant at 111 Broadway. The theme of this year's conference is “The BSDs in Production Environments.” As with past NYCBSDCons, the cost will ensure the event is accessible and filled with an array of meetings and discussions reflecting the living, breathing world of the BSDs.

### SCALE 12x ● Feb. 21–23, 2014 Los Angeles, CA

<http://www.socallinuxexpo.org/scale12x>  
The 12th annual Southern California Linux Expo will take place February 21–23 at the Hilton Los Angeles Airport Hotel. This BSD-friendly event will include presentations on PC-BSD and FreeNAS and there will be a FreeBSD booth in the expo area. The event will also host the BSDA certification exam on February 23. Registration for the conference is \$60.

### AsiaBSDCon ● Mar. 13–16, 2014 Tokyo, Japan

<http://2014.asiabsdcon.org/>  
AsiaBSDCon 2014 will take place March 13–16 at the Tokyo University of Science. This conference provides tutorials and presentations and publishes the conference proceedings. This event also hosts a FreeBSD Developer Summit and a Vendor Summit. The Japanese version of the BSDA certification exam will launch at this year's event.