

Creating & Updating FreeBSD Ports

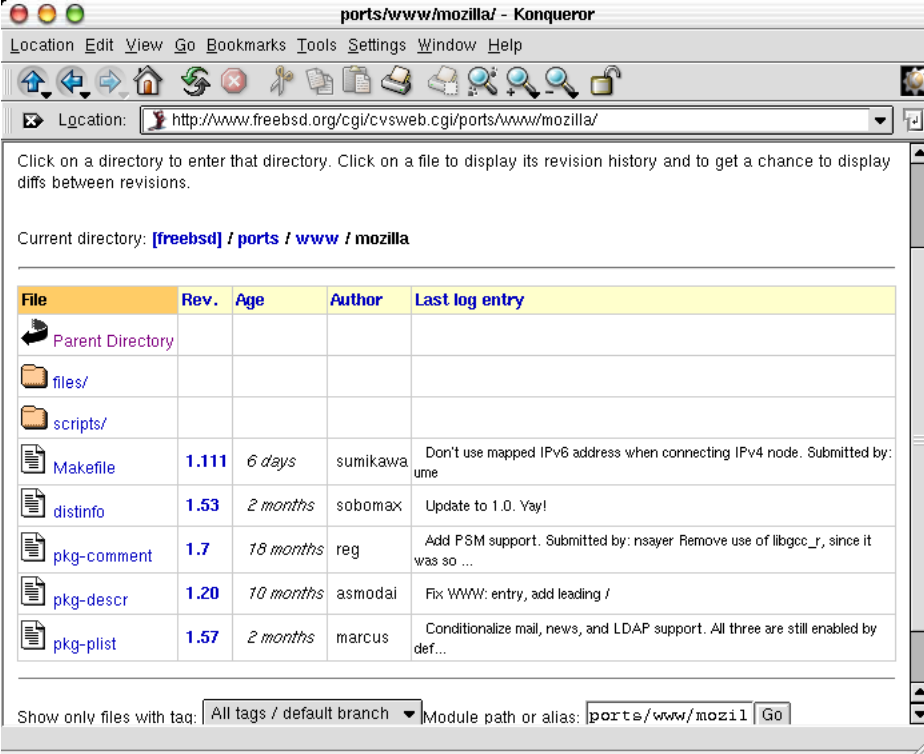
Tom Hukins

Who Does What

- MAINTAINER: Responsible for the port
- Committers: Able to modify the ports collection
- portmgr: Look after the ports/packages infrastructure
- Everyone: Submits feedback, including problem reports, bug fixes and upgrades

Useful Resources: CVSWeb

- Visual interface to cvs(1)
- <http://cvsweb.FreeBSD.org/>



The screenshot shows a Konqueror web browser window with the title "ports/www/mozilla/ - Konqueror". The address bar contains the URL "http://www.freebsd.org/cgi/cvsweb.cgi/ports/www/mozilla/". Below the address bar, there is a navigation menu with options: Location, Edit, View, Go, Bookmarks, Tools, Settings, Window, Help. A toolbar with various icons is visible below the menu. The main content area displays instructions: "Click on a directory to enter that directory. Click on a file to display its revision history and to get a chance to display diffs between revisions." Below this, the current directory is shown as "[freebsd] / ports / www / mozilla". A table lists files and directories with columns for File, Rev., Age, Author, and Last log entry. The table includes entries for "Parent Directory", "files/", "scripts/", "Makefile", "distinfo", "pkg-comment", "pkg-descr", and "pkg-plist". At the bottom, there is a search bar with the text "Show only files with tag:" and a dropdown menu set to "All tags / default branch", followed by a text input field containing "ports/www/mozil" and a "Go" button.

Click on a directory to enter that directory. Click on a file to display its revision history and to get a chance to display diffs between revisions.

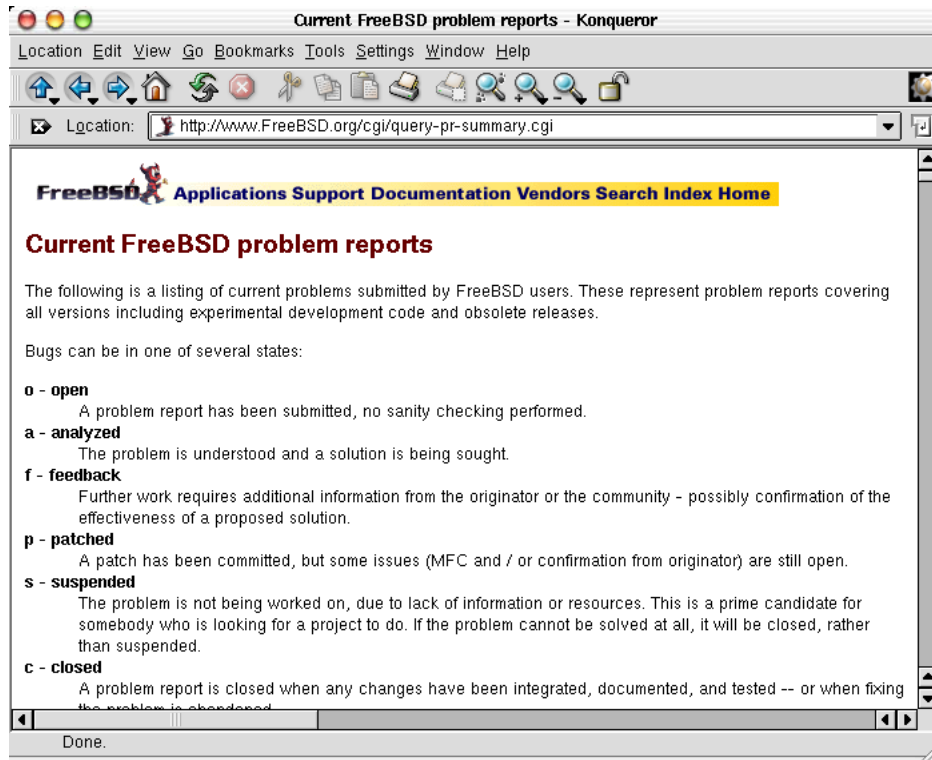
Current directory: [\[freebsd\]](#) / [ports](#) / [www](#) / [mozilla](#)

File	Rev.	Age	Author	Last log entry
Parent Directory				
files/				
scripts/				
Makefile	1.111	<i>6 days</i>	sumikawa	Don't use mapped IPv6 address when connecting IPv4 node. Submitted by: ume
distinfo	1.53	<i>2 months</i>	sobomax	Update to 1.0. Yay!
pkg-comment	1.7	<i>18 months</i>	reg	Add PSM support. Submitted by: nsayer Remove use of libgcc_r, since it was so ...
pkg-descr	1.20	<i>10 months</i>	asmodai	Fix WWW: entry, add leading /
pkg-plist	1.57	<i>2 months</i>	marcus	Conditionalize mail, news, and LDAP support. All three are still enabled by def...

Show only files with tag: Module path or alias:

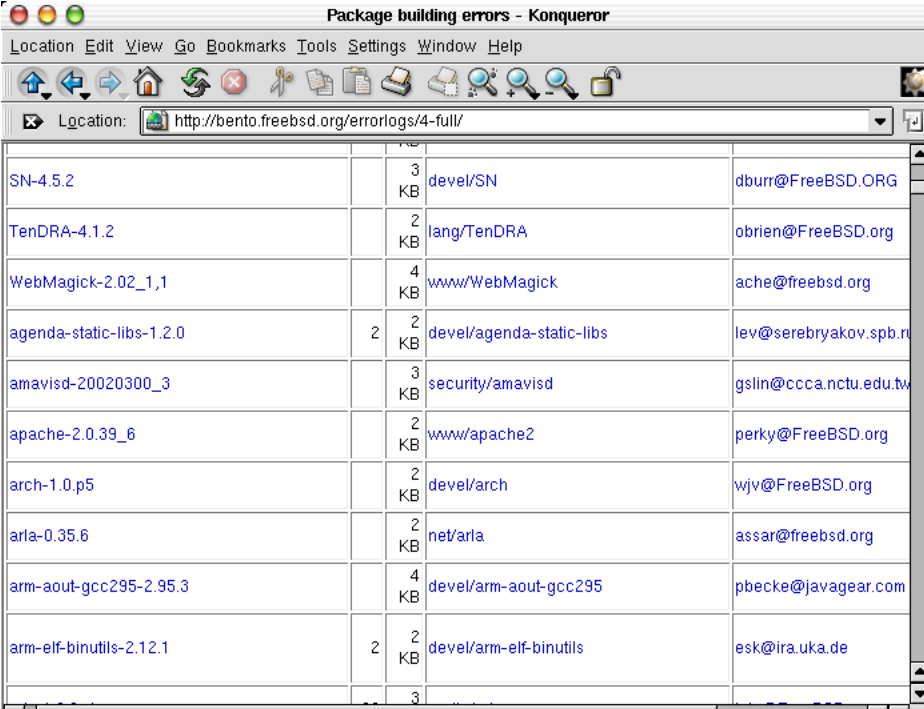
Useful Resources: GNATS Problem Report Database

- Contains new/updated ports waiting to be committed
- <http://www.freebsd.org/support.html#gnats>



Useful Resources: Bento Package Building Errors

- Lists ports that the package building cluster is having trouble with
- <http://bento.FreeBSD.org/errorlogs/>

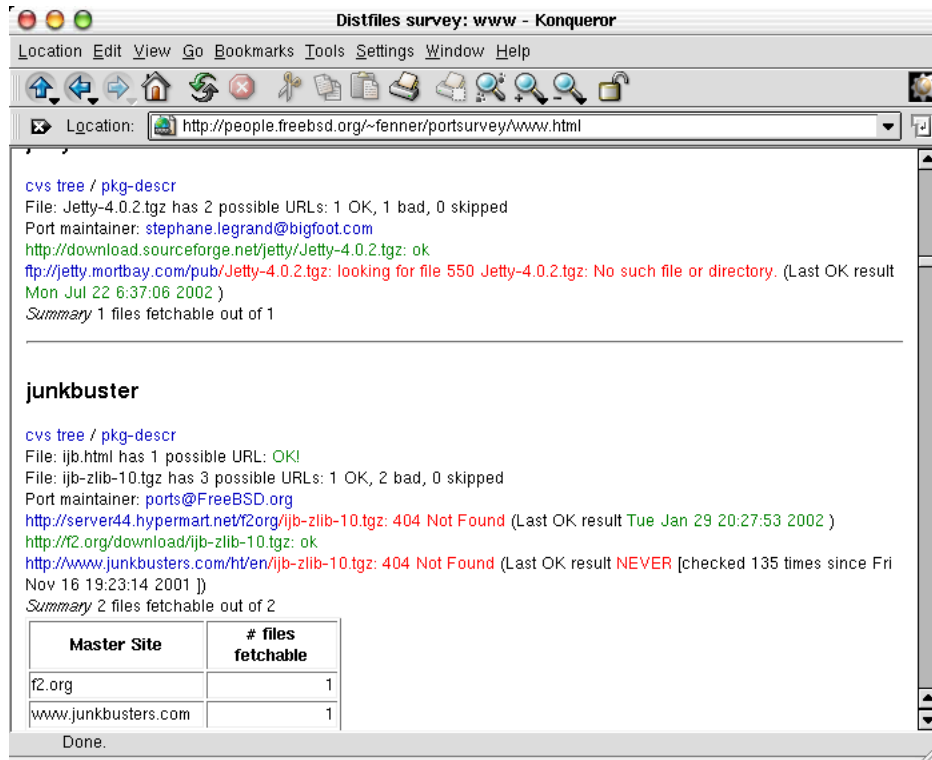


The screenshot shows a Konqueror browser window titled "Package building errors - Konqueror". The address bar displays "http://bento.freebsd.org/errorlogs/4-full/". The main content area contains a table with the following data:

Package Name	Count	Size	Category	Contact
SN-4.5.2	3	KB	devel/SN	dburn@FreeBSD.ORG
TenDRA-4.1.2	2	KB	lang/TenDRA	obrien@FreeBSD.org
WebMagick-2.02_1,1	4	KB	www/WebMagick	ache@freebsd.org
agenda-static-libs-1.2.0	2	2 KB	devel/agenda-static-libs	lev@serebryakov.spb.ru
amavisd-20020300_3	3	KB	security/amavisd	gslin@ccca.nctu.edu.tw
apache-2.0.39_6	2	2 KB	www/apache2	perky@FreeBSD.org
arch-1.0.p5	2	2 KB	devel/arch	wjv@FreeBSD.org
arla-0.35.6	2	2 KB	net/arla	assar@freebsd.org
arm-aout-gcc295-2.95.3	4	4 KB	devel/arm-aout-gcc295	pbecke@javagear.com
arm-elf-binutils-2.12.1	2	2 KB	devel/arm-elf-binutils	esk@ira.uka.de
	3			

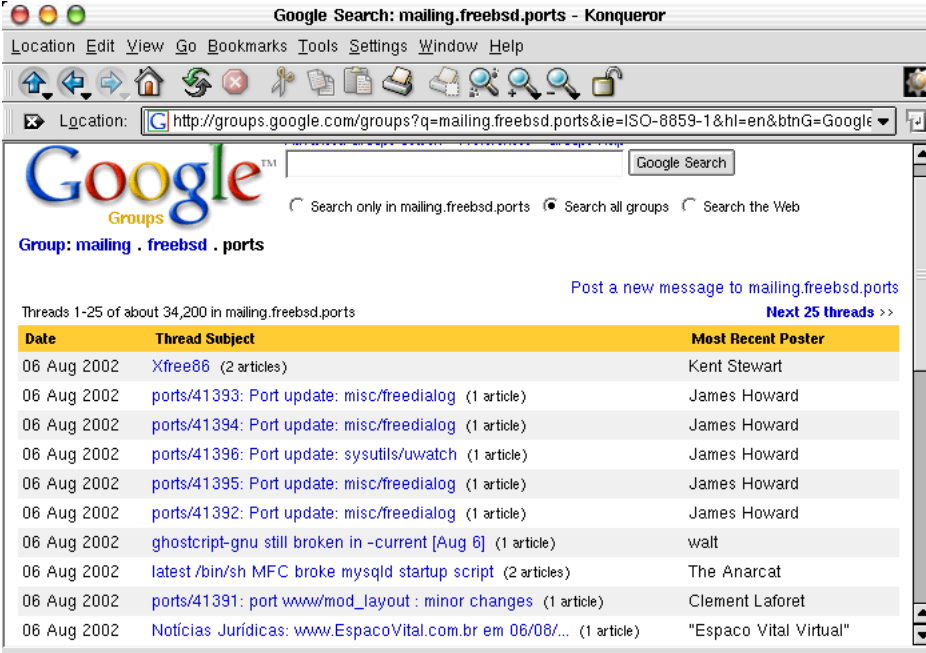
Useful Resources: Ports distfiles Survey

- Lists distfiles that can't be retrieved
- <http://people.FreeBSD.org/~fenner/portsurvey/>



Useful Resources: freebsd-ports Mailing List

- List contains port submissions and discussion related to the ports collection
- Archived at <http://docs.FreeBSD.org/mail/> and mailing.freebsd.ports at <http://groups.google.com/>



The screenshot shows a web browser window titled "Google Search: mailing.freebsd.ports - Konqueror". The address bar contains the URL <http://groups.google.com/groups?q=mailing.freebsd.ports&ie=ISO-8859-1&hl=en&btnG=Google>. The page displays the Google Groups search results for the "mailing.freebsd.ports" group. It includes a search bar, a "Google Search" button, and a link to "Post a new message to mailing.freebsd.ports". Below this, it indicates "Threads 1-25 of about 34,200 in mailing.freebsd.ports" and provides a link for "Next 25 threads >>". A table lists the most recent threads with columns for Date, Thread Subject, and Most Recent Poster.

Date	Thread Subject	Most Recent Poster
06 Aug 2002	Xfree86 (2 articles)	Kent Stewart
06 Aug 2002	ports/41393: Port update: misc/freedialog (1 article)	James Howard
06 Aug 2002	ports/41394: Port update: misc/freedialog (1 article)	James Howard
06 Aug 2002	ports/41396: Port update: sysutils/uwatch (1 article)	James Howard
06 Aug 2002	ports/41395: Port update: misc/freedialog (1 article)	James Howard
06 Aug 2002	ports/41392: Port update: misc/freedialog (1 article)	James Howard
06 Aug 2002	ghostscript-gnu still broken in -current [Aug 6] (1 article)	walt
06 Aug 2002	latest /bin/sh MFC broke mysqld startup script (2 articles)	The Anarc4t
06 Aug 2002	ports/41391: port www/mod_layout : minor changes (1 article)	Clement Laforet
06 Aug 2002	Noticias Jurídicas: www.EspacoVital.com.br em 06/08/... (1 article)	"Espaco Vital Virtual"

Useful Resources: bsd.port.mk

- Ports infrastructure in /usr/ports/Mk
- Think of it as a huge Makefile that individual ports can reuse

```
CHOWN?=      /usr/sbin/chown
CP?=        /bin/cp
CUT?=       /usr/bin/cut
```

```
.if defined(USE_GMAKE)
BUILD_DEPENDS+=      gmake:${PORTSDIR}/devel/gmake
CONFIGURE_ENV+= MAKE=${GMAKE}
.endif
```

do-fetch:

```
  @${MKDIR} ${_DISTDIR}
  @(cd ${_DISTDIR}; \
    ${_MASTER_SITES_ENV} ; \
    for _file in ${DISTFILES}; do \
      file=`echo $$_file | ${SED} -E -e 's/:[^:]+$$//'\` ; \
      select=`echo $$_file#$$${file} | ${SED} -e 's/^:/' -e \
      if [ ! -f $$file -a ! -f `${BASENAME} $$file` ]; then \
        if [ -h $$file -o -h `${BASENAME} $$file` ]; then \
          ${ECHO_MSG} ">> ${_DISTDIR}/$$file is a broken s
          ${ECHO_MSG} ">> Perhaps a filesystem (most like
          ${ECHO_MSG} ">> Please correct this problem and
```


Contents of a Port: Makefile

```
# New ports collection makefile for:      mozilla
# Date created:                          31 Mar 1998
# Whom:                                  eivind/dima/jseger
#
# $FreeBSD: ports/www/mozilla/Makefile,v 1.107 2002/06/06 18:52

PORTNAME=      mozilla
PORTVERSION=   1.0
PORTEPOCH=     1
CATEGORIES=    www
MASTER_SITES=  ${MASTER_SITE_MOZILLA} \
               http://people.FreeBSD.org/~sobomax/:local
MASTER_SITE_SUBDIR=  mozilla/releases/${PORTNAME}${PORTVERSION}
               sobomax/:local
DISTFILES=     ${PORTNAME}-source-${PORTVERSION:S/.rc/rc/}${EXTRACT_SUFX}
               libart_lgpl-${PORTVERSION}${EXTRACT_SUFX}:local

MAINTAINER=    gnome@FreeBSD.org

BUILD_DEPENDS=  zip:${PORTSDIR}/archivers/zip \
               freetype-config:${PORTSDIR}/print/freetype2
LIB_DEPENDS=   ORBit.2:${PORTSDIR}/devel/ORBit \
               png.5:${PORTSDIR}/graphics/png \
               freetype.9:${PORTSDIR}/print/freetype2

.include <bsd.port.mk>
```

Contents of a Port: distinfo

- distfile MD5 checksums

MD5 (mozilla-source-1.0.tar.bz2) = 033da936e48336aa2c5d8bf0aa039

MD5 (libart_lgpl-1.0.tar.bz2) = f332c3c026adc1c2c0ceb3ac5847d5f5

Contents of a Port: pkg-comment

- One line comment about the port

The open source, standards compliant web browser

Contents of a Port: pkg-descr

- Longer description of the port

This is the open source web browser, which forms the basis for Netscape Navigator 6. It should be fully compliant with all W3C standards, including HTML, CSS, XML, XSL, JavaScript, MathML, SVG and RDF. This version also supports SSL encryption, but does not yet support Java.

While the code is officially still in pre-release, the browser is mostly stable, and does a good job displaying most pages on the web. Mail and News also work, and provide some interesting features, such as the ability to check multiple POP3 servers.

Testers are most welcome, but should submit bug reports about the browser itself to mozilla.org (<http://bugzilla.mozilla.org/>) rather than via FreeBSD.

WWW: <http://www.mozilla.org/>

Contents of a Port: pkg-plist

- Lists most of the files installed by the port

```
bin/mozilla
lib/mozilla/DocStream
lib/mozilla/HelloWorld
lib/mozilla/INSTALL.xmlterm
lib/mozilla/TestGtkEmbed
lib/mozilla/TestGtkEmbedChild
lib/mozilla/bloaurls.txt
lib/mozilla/chrome/US.jar
%%CHATZILLA%%lib/mozilla/chrome/chatzilla.jar
lib/mozilla/chrome/chrome.rdf
lib/mozilla/chrome/chromelist.txt
lib/mozilla/chrome/classic.jar
lib/mozilla/chrome/comm.jar
lib/mozilla/chrome/content-packs.jar
lib/mozilla/chrome/embed-sample.jar
lib/mozilla/chrome/en-US.jar
@unexec rm -f %D/lib/mozilla/chrome/chrome.rdf || true
@unexec rm -f %D/lib/mozilla/component.reg || true
@dirrm lib/mozilla/res/throbber
@dirrm lib/mozilla/res/rdf
@dirrm lib/mozilla/res
```

Contents of a Port: Other Files

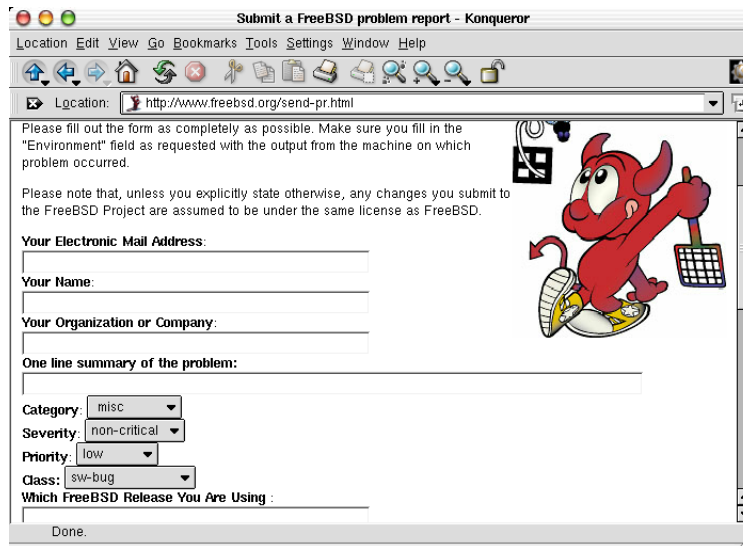
- pkg-message: Display additional information after installing
- Patches applied after extracting distfiles into the work directory
- Scripts used to build the port that aren't part of any distfile
- Small files installed with the port (e.g. custom wrapper scripts)
- Anything else that's required

Porting Tools

- portlint(1) (/usr/ports/devel/portlint)
- portcheckout(1) (/usr/ports/devel/portcheckout)
- make package & pkg_add(1)
- /usr/ports/Tools/scripts: some are for committers only, but some are of use to anyone creating or updating a port

Submitting Your Work

- Before submitting:
 - ◆ Check the port using the *Porting Tools* just mentioned
 - ◆ Check the port against *DO's and DON'Ts* in the Porter's Handbook
- Use send-pr or contact the MAINTAINER
 - ◆ send-pr(1) or <http://www.FreeBSD.org/send-pr.html>
 - ◆ The MAINTAINER's email address is in the port's Makefile



The screenshot shows a web browser window titled "Submit a FreeBSD problem report - Konqueror". The address bar shows the URL "http://www.freebsd.org/send-pr.html". The page content includes instructions for filling out the form, a warning about licensing, and several input fields for user information and problem details. A cartoon devil character is also present on the right side of the form.

Please fill out the form as completely as possible. Make sure you fill in the "Environment" field as requested with the output from the machine on which problem occurred.

Please note that, unless you explicitly state otherwise, any changes you submit to the FreeBSD Project are assumed to be under the same license as FreeBSD.

Your Electronic Mail Address:

Your Name:

Your Organization or Company:

One line summary of the problem:

Category:

Severity:

Priority:

Class:

Which FreeBSD Release You Are Using:

Done.

Further Information

- FreeBSD Porter's Handbook
- These slides will be available from <http://people.FreeBSD.org/~tom/>

