

GNUstep OpenBSD ports

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Agenda

- ⇒ Why GNUstep on OpenBSD?
- ⇒ What's new
- ⇒ Problems encountered over last year
- ⇒ Outlook

Why GNUstep on OpenBSD

- ⇒ OpenBSD is a nice development platform
 - Well documented system
 - Easy to setup and maintain
 - Supports a lot of platforms (far more than where GNUstep runs on)
 - Lots of built-in security features enabled by default
- ⇒ Its easy to leverage the ports framework to manage your applications, patches and packages

Create a new GNUstep port

- ⇒ `cd /usr/ports/x11/gnustep`
- ⇒ `mkdir <portsdir> && cd <portsdir>`
- ⇒ Create Makefile
- ⇒ Create DESCR file
- ⇒ `make fetch && make makesum`
- ⇒ `make && make fake`
- ⇒ `make update-plist`
- ⇒ `make port-lib-depends-check`
- ⇒ (maybe) update Makefile for dependencies
- ⇒ `make package && make install`

gnustep.port.mk

- ⇒ Takes care about most of the configuration needed usually in a ports Makefile
 - Defines platforms where GNUstep is supposed to work
 - SHARED_ONLY = Yes
 - CATEGORIES = x11/gnustep
 - USE_GMAKE = Yes
 - MAKE_FILE = GNUmakefile
 - Common BUILD_/RUN_/LIB_ depends
 - Common environment is set
 - MASTER_SITE_GNUSTEP
 - Eases creation of debug versions of GNUstep ports
- ⇒ Will be included via MODULES = x11/gnustep in the ports Makefile

GNUstep ports Makefile

- ⇒ # \$OpenBSD\$
- ⇒ COMMENT = precision raster image convolution engine
- ⇒ DISTNAME = PRICE-1.1.0
- ⇒ CATEGORIES = graphics
- ⇒ HOMEPAGE = <http://price.sourceforge.net/>
- ⇒ MASTER_SITES = \$
 {MASTER_SITE_SOURCEFORGE:=price/}
- ⇒ MODULES = x11/gnustep
- ⇒ WANTLIB = c m pthread
- ⇒ .include <bsd.port.mk>

Trouble? Help yourself!

- ⇒ Usually packages are built without debug symbols and are stripped
- ⇒ Installing everything with debug symbols and non stripped is as easy as:
 - `echo "DEBUG=-g" > /etc/mk.conf`
 - `cd /usr/ports/x11/gnustep`
 - `make install`
- ⇒ Now you have all the sources around, non stripped binaries, with debug symbols
- ⇒ Fire up gdb, fix the problem → make update-patches and send them upstream ;)

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General News

- ⇒ New Platform
 - Amd64, i386, **macppc**
- ⇒ Meta Package
 - `pkg_add -i gnustep-desktop`
- ⇒ Many new and updated packages
 - More on that on the next slides

Existing and updated ports

⇒ Updated ports

- Base, gui, back, make, FisicaLab, Gemas, Gworkspace, HighlighterKit, PDFKit, SimpleAgenda, SOPE, SOGo

⇒ Not updated ports

- Addresses, examples, FTP, GNUMail, Gorm, Graphos, Gshisen, GSPdf, ImageViewer, LaternaMagica, Pantomime, Price, ProjectCenter, RemoteDesk, SystemPreferences, Terminal, TimeMon, OO Lite

New ports

⇒ AClock, Affiche, Batmon, CDPlayer, DataBasin, DBUSKit, EdenMath, GMasterMind, GMines, Gomoku, Grr, JigSaw, LapisPuzzle, MathArray, MPDCon, NetClasses, Performance, Renaissance, RSSKit, SQLClient, Sudoku, WebServer, WebServices, Zipper

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LLVM/Clang

- ⇒ LLVM/Clang 3.0 now in ports
 - Lots of testing the release candidates
 - Found a couple of bugs, which got fixed with the help of David
- ⇒ Works well to compile GNUstep on i386/amd64 as long as optimization -Ox (x<=1) when compiling -gui
- ⇒ It doesn't emit position-independent code on macppc
- ⇒ It doesn't build on sparc (uses too much memory), not yet tested on sparc64

libobjc2

- ⇒ Many tests before the 1.6.0 release, revealed a couple of bugs that David got fixed
- ⇒ But not all applications still compile with it
 - i.e. Gorm needs a new release, svn compiles
- ⇒ Non-fragile-abi: not all ports can handle that yet
 - i.e. matharray, needs a new release Adam fixed it already

What's up with SPARC(64)?

- ⇒ Libffi is fine on sparc and sparc64
 - All regression tests are passing
- ⇒ SPARC got upgraded from gcc-2.95 to gcc-4.2.1
 - Python package doesn't build with this gcc on sparc
- ⇒ No atomic operations for SPARC, no libobjc2
- ⇒ LLVM/Clang doesn't build on sparc
- ⇒ Lots of weird crashers in applications on SPARC64

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Outlook

- ⇒ Get libobjc2 in, and use it on platforms where it works
- ⇒ Use LLVM/Clang where it works
 - Fix the weird behavior of the GUI apps
- ⇒ More platforms
 - SPARC/SPARC64/ARM...
- ⇒ Keep existing ports up-to-date
- ⇒ There is still room for new GNUstep ports...

Thanks

- ⇒ Thanks to all folks hanging around on `gnustep-discuss@` answering my questions
- ⇒ Special thanks to David Chisnall for not getting tired of all my bugging regarding `llvm/clang` and `libobjc2`

