Slow Porting
Moin
bofh@freebsd.org

whoami

- bofh (B***** Operator from Hell)
- ports/doc Committer
- Professional Paranoid
- Lifelong Student
- Avid Technical Trainer
- Site Reliability Engineer in Profession

Agenda

- What is ports?
- Demystifying a port
- Tools of Trade
- Contributing to ports
- Live demo of upgrading a port

Ports

- Not TCP/IP Ports please

- A Collection of Makefiles, patches and description

- Binary packages are generated from ports

- Please do not try to mix and match ports and binary pkgs

Skeleton of a port

- Makefile: contains statements that specify how the application should be compiled and where its components should be installed. This file is a BSD Makefile not GNU Makefile(MANDATORY)

- distinfo: contains the names and checksums of the files that must be downloaded to build the port.(MANDATORY)

- files/: this directory contains any patches needed for the program to compile and install on FreeBSD. This directory may also contain other files used to build the port. (OPTIONAL)

- pkg-descr: provides a more detailed description of the program.(MANDATORY unless for slave ports or FLAVORS)

- pkg-plist: a list of all the files that will be installed by the port. It also tells the ports system which files to remove upon deinstallation.(OPTIONAL)

Additional files

- pkg-message: Display messages based on installation/deinstallation/upgrade

- pkg-install/pkg-pre-install/pkg-post-install: Executes commands on different stages of install

- pkg-deinstall/pkg-pre-deinstall/pkg-post-deinstall: Executes commands on different stages of deinstall

Demystifying a port

- LIVE Demo from terminal

- misc/clex

Tools of trade

- ports-mgmt/poudriere-devel
- ports-mgmt/portlint
- ports-mgmt/portfmt
- Choice of text editor
- Live demo of the usage of these tools

Setup poudriere

- pkg install poudriere git-lite
- Edit /usr/local/etc/poudriere.conf
- poudriere jail -c -j 131 -v 13.1-RELEASE -a amd64
- poudriere ports -c -p jarvis -F

Ports tree

- cd /usr/local/poudriere/ports
- git clone -o freebsd --config remote.freebsd.fetch='+refs/notes/*:refs/notes/*' https://git.freebsd.org/ports.git jarvis
- cd jarvis
- git config --add core.hooksPath .hooks
- git config user.name 'Just A Rather Very Intelligent System'
- git config user.email jarvis@bofh.network

git refresher

- git checkout -b working
- git add/rm .
- git commit
- git format-patch main
- submit patch

Contributing to ports

1. Setup a FreeBSD System

2. Preferably setup a poudriere system

3. Chose a port that is of your interest. Update or Improve the port

4. Prepare git formatted patch

5. Submit for review or bug reporting

Important Links

- Porter's Handbook

- Poudriere

- portlint

- portfmt

- FreBSD Code Review System

- FreeBSD Bug Submision System

- FreeBSD Ports Mailing List

- #bsdports channel at EFnet

Questions

Thank you.