Keeping Up-to-date

AfNOG X Cairo, Egypt



Recap on FreeBSD design

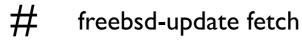
- Distribution includes kernel, and some user-land binaries (bind, shells, network tools, etc)
- Third party applications installed from three main ways:
 - from source
 - from the binary package
 - from the port
- What does this mean for means of upgrading?

FreeBSD system upgrade

• Binary upgrade with freebsd-update.

http://www.freebsd.org/doc/en/books/handbook/updating-upgrading-freebsdupdate.html

What disadvantages does this have? What advantages?



- # freebsd-update install
- What are the equivalents on the linux world?



Source Update

- recall: we can build FreeBSD base system from sources
- to upgrade we just need a new set of source code from which we can do make
- Iots of ways to get the new source code
 - cvsup (most popular)

cvsup -h cvsup7.FreeBSD.org -g -L 2 /usr/share/examples/cvsup/stable-supfile

• CTM (for low bandwidth situations)

http://www.freebsd.org/doc/en/books/handbook/ctm.html



Third Party software:

- recall: freebsd binary packages are pre-compiled ports.
- manual upgrade process:
 - download new binary
 - pkg_delete old binary (may need -f to ignore dependencies)
 - pkg_add new package.
- automated using portupgrade



updating the ports tree

- Enter portsnap!
 - # portsnap fetch
 - # portsnap install (for the first time you run it)
 - # portsnap update (for other times you run it)
 - # portsnap fetch update
- We shall NOT run this in class. Why?
- Once that is done we can use portupgrade
 - # portupgrade -arR



When to upgrade

- new features you (or your clients) are going to use.
- security updates
- mailing lists have a -announce equivalent where low volume annoucements are made. For FreeBSD <u>freebsd-announce@freebsd.org</u>



portaudit

- Downloads database of security ports nightly and sends email warning of problems.
- Run in cron sends emails on potential security threats.



Exercises

- install portaudit and run it against currently running software to see what it says:
 - # portinstall -PP portaudit
 - # /usr/local/sbin/portaudit -Fda



Extra exercise

 build freebsd from source following the instructions in /usr/src/Makefile and /usr/ src/UPDATING

