

Keeping Up-to-date

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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 fetch
```

```
# 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
- lots 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 announcements are made. For FreeBSD freebsd-announce@freebsd.org



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`

