

## Software installation -- exercises

### 1. Things you need to check:

-> is your ports collection installed:

```
# ls -l /usr/ports
```

-> do you have the Perl language interpreter installed?

```
# ls -l /usr/bin/perl
```

### 2. Finding a port

Go to the /usr/ports/directory (cd /usr/ports), and use following commands to search for port names or keywords, for example:

```
# make search name=apache | more
```

```
# make search key=music | more
```

-> Find where the 'mysql-server' and 'bash' ports are (hint: look for 'Path:' in the output of make search)

### 3. Listing packages

To find installed packages on a system use the pkg\_info command:

```
# pkg_info | more
```

To find which package a file belongs to, use the "pkg\_info -W" command, for example:

```
# pkg_info -W /usr/local/bin/twm
/usr/local/bin/twm was installed by package twm-1.0.4
```

-> Find which package the file '/usr/local/bin/cvt' belongs to.

### 4. Installing from ports

-> Find where the port 'textmaze' is located

-> Go to the directory for textmaze, and build it:

```
# make
```

-> What do you notice ?

-> Install the port:

```
# make install
```

-> What do you notice ? Did the port install right away or did something else happen ?

The port 'textmaze' is now installed... Try it out!

```
# /usr/local/bin/textmaze
```

-> Look at the contents of the directory /var/db/pkg -- you should see the new package that has been registered:

```
# ls -l /var/db/pkg
...
```

```
drwxr-xr-x  2 root  wheel      512 Apr 23 01:22 textmaze-1.2
...
```

-> Look at the contents of the /var/db/pkg/textmaze-1.2 directory -- which files are there ?

## 5. Installing from package

Installing from package is easy.

There are two ways:

- over the network:

```
# pkg_add -r <package name>
```

we shall now add a few packages - to make the URLs shorter let us do

```
# set
```

```
FTP_ROOT=ftp://ftp.freebsd.org/pub/FreeBSD/releases/i386/8.0-RELEASE/packages/
All
```

```
# pkg_add $FTP_ROOT/mtr-0.75_1.tbz
# pkg_add $FTP_ROOT/portupgrade-2.4.6_3,2.tbz
```

- locally from the filesystem

```
# pkg_add /path/to/<package name>
```

-> Once again, look at /var/db/pkg/ and find the directory for the lynx package.

You will notice that the lynx package, which you installed from the cdrom, and the textmaze port, which you installed via the ports system, are both registered as packages in /var/db/pkg -- but you cannot tell which one was a port, and which one was a package.

## 6. Installing with portupgrade

-> Make sure that portupgrade/portinstall is installed:

```
# portinstall
```

You should get the help screen from portinstall

-> Install the 'sl' port

```
# portinstall sl
```

-> Test that sl works

```
# sl
```