

# The X11 graphical environment

We will configure the X Window System from X.org, which is available in the base FreeBSD distribution at system installation time.

## 1. Create `/etc/X11/xorg.conf`

There is a utility which will probe your hardware and automatically generate a suitable configuration file. With a modern monitor it will also be able to work out your monitor capabilities.

```
# Xorg -configure
# mv /root/xorg.conf.new /etc/X11/xorg.conf
```

It is possible to change `xorg.conf` if you do not like the resolution at which your graphics are displayed, or if no suitable graphics modes can be found for your monitor.

## 2. Initial test

You should get into the habit of starting X as a *non-root* user. Otherwise all the work you do within X will be as root, which (as you know) is a risk if you accidentally mistype something.

So start a non-root shell, and then type

```
$ startx
```

Unless you have installed a fancier desktop, at this stage you will get an old, ugly and rather unfriendly window environment, with a few shells open. You can control it by various combinations of control- and shift-clicking the left, right or middle button on the desktop.

If you can't find the option to exit the system, then there is an emergency exit from X you can use: press Ctrl-Alt-Backspace (*not* Ctrl-Alt-Delete!)

## 3. Install KDE

The KDE environment is a lot more friendly, although a lot bigger. Insert FreeBSD disc 1 into your cdrom drive, mount it, and then install the package 'kde-lite':

```
# mount /cdrom
# pkg_add /cdrom/packages/All/kde-lite-3.3.0.tbz
```

This is actually a small dummy package which causes a number of other KDE components to be installed as dependencies. It takes a while, even from CD-ROM; don't attempt to do this over the network!

Remember to unmount the cdrom so you can eject it:

```
# cd /
# umount /cdrom
```

## 4. Start KDE

Now you need to go back to your non-root account, and configure it to use the new desktop. This is configured in the file `.xinitrc` in your home directory.

```
$ cd
$ vi .xinitrc
exec startkde
```

Save and quit as usual (`:wq`). Now enter X again:

```
$ startx
```

If all is well, you will be taken through the KDE setup wizard. You will then be in the K Desktop Environment, complete with its web browser Konqueror. If you want mozilla, it's on the CD too.

## 5. A few X hints and tips

- Emergency exit from X is Ctrl-Alt-Backspace. However this immediately kills the X server and won't allow KDE to save your preferences. Use the 'logout' option from the KDE menu instead.

- I find KDE's shell application 'Konsole' to have very ugly fonts and to waste screen space. Try an xterm instead:

```
$ xterm &
```

If you prefer the look of this, then create a new menu item for it:

```
K -> Settings -> Menu Editor
Click 'Internet'
File -> New Item...
Name your item 'xterm'
Click in 'Command' and type:
    xterm -sb -sl 500 -ls
(this gives you an xterm with 500 lines of scrollbar buffer)
Click on the blank document icon to choose a new icon
File -> Save
```

You can fit four of these xterms on a standard 1024x768 display.

- If you are using ssh key pairs to login to systems, then you can make ssh-agent the parent of the entire window session; that is, instead of startx, run

```
$ ssh-agent startx
```

This allows you to type 'ssh-add' in one window, but all your windows will be able to ssh without prompting for your passphrase.

- If you find the terminal beep annoying, you can disable it with `$ xset b off`
- A good instant-messenger client can be built from `/usr/ports/net/gaim` although it will take a while to build
- You are advised not to try Games - Tactics & Strategy - KSokoban, as you can find yourself wasting large amounts of time!