

# X in squeeze

Julien Cristau

Debian X Strike Force

DebConf10

August 3rd, 2010



# The Debian X Strike Force

## Who?

About 3 people, plus a few more on specific packages (hi, sean!)

## What?

- ▶ 1200+ open bugs
- ▶ 360+ packages
- ▶ various upstream mailing lists: xorg-devel, mesa-dev, dri-devel, intel-gfx, xorg-driver-ati

# Lenny

## xorg.conf

Almost empty, just tells X what keyboard layout to start up with.

## RandR

RandR 1.2 support in the major drivers (intel, radeon, nv)

## 2D acceleration

Gradual move from XAA to EXA

# Squeeze

## Input

everything is hotplugged

## 2D accel

intel moved to UXA, radeon to EXA

## nVidia

xf86-video-nv deprecated, replaced by the reverse-engineered nouveau

## KMS

Mode setting is done by the kernel for intel, radeon, nouveau

## World domination

debian-installer is now using X

# Input

## Hotplug

devices enumerated/hotplugged through libudev

## Configuration

Instead of static InputDevice sections, new InputClass section can match hotplugged devices based on various attributes

```
Section "InputClass"
```

```
    Identifier "my crazy touchpad config"
```

```
    MatchIsTouchpad "on"
```

```
    Option "TapButton1" "1"
```

```
    Option "HorizEdgeScroll" "1"
```

```
EndSection
```

Most of this can also be set at runtime (gnome-mouse-properties, synclient, xinput)

# Kernel mode setting

Mode setting code moved from userspace X drivers to kernel drivers, with a userspace interface similar to RandR 1.2

- ▶ Native mode framebuffer
- ▶ Display drivers decoupled from X, so you can play with other stuff (wayland?)
- ▶ Comes with HDMI audio, DisplayPort

# Why is the stuff in squeeze so out of date?

- ▶ kernel 2.6.32.x
- ▶ xserver 1.7.x
- ▶ mesa 7.7.x
- ▶ intel 2.9.x
- ▶ radeon 6.13.x

# Why is the stuff in squeeze so out of date?

- ▶ kernel 2.6.32.x (actually 2.6.33.y for the graphics stack)
- ▶ xserver 1.7.x
- ▶ mesa 7.7.x
- ▶ intel 2.9.x (will probably move to 2.12 soon)
- ▶ radeon 6.13.x (latest release)

# A “fun” upgrade path

## Kernel interaction

Kernel mode setting requires a new kernel

udev requires a new kernel

⇒ if you upgrade X, don't restart it before rebooting on the shiny new kernel

## Package dependencies

apt-get dist-upgrade should probably not remove all of X (hopefully fixed as of last week, although aptitude still does silly things)

# What about other drivers?

## VIA

xf86-video-openchrome needs a maintainer

## Others

Your bug is not likely to be fixed if it doesn't come with a patch

# How can I help?

## File good bugs

- ▶ use reportbug!
- ▶ try the latest code
- ▶ file your bug upstream as well
- ▶ be as specific as possible (screenshot, reproduction steps, ...)

## Help write documentation

The Debian and X.Org wikis could use it

# How can I help?

## Triage bugs

- ▶ Make sure reports are as complete as possible
- ▶ Ask submitters to try the latest code and forward their bug upstream
- ▶ Write patches

## Low hanging fruit

Not all the bugs are hard:

- ▶ user error
- ▶ existing patch needs to be applied
- ▶ packaging bug

Once we've fixed all of those, [bugs.freedesktop.org](https://bugs.freedesktop.org) has plenty more to choose from!

# Questions?

# Questions?

One question for you: who wants to be the next X maintainer?

**Help me Obiwan**



**You're my only hope..**

ICANHASCHEEZBURGER.COM 🍪 🍪