

[PATCH] 2.4.24-pre3 obmouse driver for HP OB600 C/CT laptop

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2004-01/0904.html>

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Date: 01/05/04

Date: Sun, 4 Jan 2004 22:20:59 -0700
To: Alessandro Rubini <rubini@ipvvis.unipv.it>

Hi Alessandro, et al,

Over Christmas break I got obmouse driver working with XF86 4.2.x and properly integrated into the linux-2.4 kernel tree.

HP Omnibook 600C/CT laptops are small, slow, fairly old (predate Cardbus but have custom PCMCIA controller), very cute laptops. The "pop-up" mouse is driven by HP proprietary silicon.

Original obmouse driver was written by Olivier Florent in 1999.
(None of his original code remains.)

Kudos to Alan Cox for writing Documentation/DocBook/mousedrivers.tmpl. Made the conversion pretty simple (< 1 days work). Previous obmouse versions only worked with XF86 3.x and emulated a "microsoft" mouse. Converting to BusMouse protocol cut a few more hundred lines out of the driver.

A minor number needs to be officially assigned/blessed and entered into Documentation/devices.txt. I tested with minor number 16 and bumped up NR_MICE in busmouse.c to 17. Obmouse driver could share a minor number with another "non-serial" mouse driver since the Pop-Up mouse is a built-in device and will never conflict with say an amigamouse or atarimouse. Obmouse could conflict a parallel port, serial, or ISA-bus mouse. I was guessing the busmouse subsystem maintainer (Alessandro Rubini) would determine what is right.

Also, one "unfixable" bug is the lack of a probe routine. Without documentation, I have no clue if it's possible to probe for a pop-up mouse or not. Maybe it will be obvious to someone else based on the 4 defined registers.

XF86Config-4 file and prebuilt 2.4.24-preX kernel bits suitable for OB600CT (486, 75Mhz, 24MB RAM) are available from:
<ftp://gsyprf10.external.hp.com/kernels/ob600/>

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(prerelease versions of ob600_ss.c PCMCIA driver are also available there.

Michael Teske got it working on his OB600C with a 2.2 kernel; I'm not able to reproduce his success on the OB600CT I've got.)

diffstat says:

```
Documentation/Configure.help | 9 +
drivers/char/Config.in | 1
drivers/char/Makefile | 1
drivers/char/busmouse.c | 2
drivers/char/obmouse.c | 354 +++++
5 files changed, 366 insertions(+), 1 deletion(-)
```

thanks,
grant

```
diff -Nur --exclude=RCS --exclude=CVS --exclude=SCCS --exclude=BitKeeper --exclude=ChangeSet
linux-2.4/Doc
```