

Zack's Kernel News

■ Developers Removing Their Code From The Kernel?

A strange controversy has arisen, surrounding the disposition of the PWC driver, and its support of certain Philips web cams. For years, the driver has been split into one open and one closed-source portion, with the open source code providing a hook to allow the binary-only code to link easily into the kernel. The split was deemed necessary by the maintainer in order to support cameras that used the chips relying on the binary-only interface.

However, adding this sort of hook to the kernel is expressly prohibited, and Linus Torvalds has often spoken out against such things as being attempts to get around the requirements of the GPL. In fact, the very ability – even without hooks – of binary modules to link into the kernel, is disputed as potentially a violation of the GPL. Linus made the decision to allow it back in the early days, and probably regrets it now; but it may also be the case, as some have said, that he never had the right to allow such linkage at all. The debate can only really be settled in court, and such a court case has not yet arisen.

Hooks for binary modules allow such modules to link into any kernel version; without the hooks the modules must be recompiled for each kernel they link to. One reason why such hooks are not allowed is to encourage vendors to pro-

duce open source drivers for their hardware, and to make it more difficult for them to profit from their binary-only releases. Greg Kroah-Hartmann, the liaison between the PWC developers and the kernel, finally decided to remove the hook in a recent release by the driver maintainer, Nemosoft Unv. Nemosoft's response was to demand that his driver be removed entirely from the kernel, rather than have it exist in an incomplete form.

There are several issues involved. Technically, Nemosoft's decision to release the code under an open source license makes it impossible for him to legally revoke that right, and so the Linux kernel can legally continue to distribute the code no matter how he feels about it. But as Linus has said, the question of what is the right thing to do goes beyond the mere fact of a license; and he agreed to remove Nemosoft's driver. This decision in turn met with much argument from all sides.

Alan Cox, in particular, has pointed out that if Linus is going to allow developers to pull their own contributions, it becomes feasible for one person to entirely cripple Linux, by removing key contributions. If Alan himself were to leave Linux and take all of his contributions with him, the next kernel release would be much smaller and broken. But Linus feels it is not only a question of a

■ Gamma DRM Driver Going Away

Support for the 3dlabs GMX 2000 graphics card is being removed from the 2.6 kernel. The card is so rare that the maintainers of that driver feel that virtually no one uses it at all. At the same time, continuing to support it makes code for related cards much more complicated and difficult to maintain in turn.

Dave Airlie, a developer on the project, has suggested along with others, that the effort involved in handling all the special cases has begun to outweigh the benefits of supporting a card that will probably never be needed. The decision to mark

the driver as "BROKEN" in the kernel sources will be followed by a general cleaning up of the special-case code that had been kept around only to accommodate the quirks of the GMX 2000, after which it is expected the driver actually will break. Shortly thereafter, barring any major outcry from users previously unknown, the code itself will be removed.

The desire to support obscure hardware has deep roots in the Linux developer community, and in all of geekdom, but this urge has been tempered by

INFO

The Kernel Mailing List comprises the core of Linux development activities. Traffic volumes are immense and keeping up to date with the entire scope of development is a virtually impossible task for one person. One of the few brave souls that take on this impossible task is Zack Brown.



Our regular monthly column keeps you up to date on the latest discussions and decisions, selected and summarized by Zack. Zack has been publishing a weekly digest, the Kernel Traffic Mailing List for several years now, reading just the digest is a time consuming task.

Linux Magazine now provides you with the quintessence of Linux Kernel activities straight from the horse's mouth.

developer's rights, but also of not leaving unmaintained code in the kernel. This concept is much less controversial: if Nemosoft will not maintain the code, and no one else steps up to do so, then the code goes away.

Ultimately, Luc Saillard decided to reverse-engineer the disputed binary module, and release a new version of the pwc driver, without the hook, and with the result of his reverse-engineering effort. The result of this effort was a driver that possessed much of the same functionality as the original driver but without the dubious violation of policy. Whether Nemosoft will continue to maintain the new version, or if he will leave the development effort entirely, remains to be seen. ■

vocal opponents like Linus Torvalds. By proclaiming the beauty of practicality, and its value over abstract 'correctness', Linus has drawn criticism from purists, but has also managed to create a culture of development that moves very quickly. This doesn't mean that obscure hardware is avoided in Linux kernel development. On the contrary, there are many cases of old hardware being actively supported by kernel hackers. But support is weighed against other factors, such as how many users there are for a given bit of hardware. ■