

Re: [GIT PATCHES] V4L/DVB fixes for 2.6.26

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2008-05/msg06594.html>

- *From:* Adrian Bunk <bunk@xxxxxxxxxx>
 - *Date:* Wed, 14 May 2008 22:38:22 +0300
-

On Wed, May 14, 2008 at 02:55:54PM -0300, Mauro Carvalho Chehab wrote:

On Wed, 14 May 2008 19:54:34 +0300
Adrian Bunk <bunk@xxxxxxxxxx> wrote:

On Wed, May 14, 2008 at 11:49:10AM -0300, Mauro Carvalho Chehab wrote:

...

PS.: There are yet a number of other Kconfig potential breakages at V4L/DVB. I'm currently working on fixing those issues. Basically, what users do is to select I2C, DVB and V4L as module. This works fine, but more complex scenarios where you mix 'M' and 'Y' inside the subsystem generally cause compilation breakage.

Those scenarios are more theoretical, since there's not much practical sense on having a DVB driver foo as module, and V4L driver bar as in-kernel. However, the better is to not allow compilation of the scenarios that don't work.

The main trouble at drivers/media Kbuild is that several rules there assumed that "select" would check the "depends on" dependencies of the selected drivers.

However, this feature doesn't exist at the current Kbuild implementation. Even if implemented, I suspect that this will generate circular dependency errors on some cases.

...

The basic problem is that drivers/media/ does the most fancy kconfig stuff in the kernel since it tries to both have very fine grained

Re: [GIT PATCHES] V4L/DVB fixes for 2.6.26

dependencies and offer a usable kconfig UI to the user, which results in very complicated dependencies.

True.

We are not getting this solved by any changes in the kconfig implementation.

Thinking about reasonable ways to reduce the problem space:

Where could we reduce the complexity without big disadvantages?

Could we e.g. let VIDEO_DEV select I2C which would remove all the fiddling with I2C dependencies (which is a bigger part of recent problems)?

This seems to be reasonable. However, there are quite a few devices that don't need I2C (for example, some legacy ISA radio modules – also, some webcam drivers don't use i2c layer to communicate with their i2c sensor – so – they don't need I2C. The same also applies to some DVB drivers).

So, I'm not sure if this would be a good idea, since it will force I2C even for devices that don't need. This is bad, for example, on embedded devices like set-top-boxes and maybe on cellular phones with non-i2c webcams.

I'm not completely agreeing the space savings you are doing are worth the complicated stuff, but OK.

I can make a patch for it after this pull went into Linus' tree if it is considered an acceptable option.

It would be nice if you could help on fixing those issues.

One dependency that will probably solve is to add "depends on VIDEO_MEDIA && I2C" to all devices that are hybrid (bttv, saa7134, cx88, pvrusb, em28xx).

What about converting all dependencies on I2C to select's?

VIDEO_V4L2_COMMON might perhaps need a small trick, but otherwise that would be a straightforward solution to solve these problems.

Any problem I miss or should I bake a patch?

Re: [GIT PATCHES] V4L/DVB fixes for 2.6.26

Re: [GIT PATCHES] V4L/DVB fixes for 2.6.26

Cheers,
Mauro

cu
Adrian

--

"Is there not promise of rain?" Ling Tan asked suddenly out
of the darkness. There had been need of rain for many days.
"Only a promise," Lao Er said.
Pearl S. Buck – Dragon Seed

--

To unsubscribe from this list: send the line "unsubscribe linux-kernel" in
the body of a message to majordomo@xxxxxxxxxxxxxxxxx
More majordomo info at <http://vger.kernel.org/majordomo-info.html>
Please read the FAQ at <http://www.tux.org/lkml/>