

The Stable Linux Kernel Tree

Delivering a Stable Platform
on a Constantly Moving Base

Greg Kroah-Hartman
SuSE Labs / Novell
gregkh@suse.de

33,315 files
13,470,000 lines

2,478 developers
342 companies

11,600 lines added

5,000 lines removed

2,300 lines modified

11,600 lines added
5,000 lines removed
2,300 lines modified

per day for all of 2009

5.51 changes per hour

15 years ago...

Linux 2.0.0

4 months later:

Linux 2.1.0

Linux branches

Even number stable

Odd number development

848 days and 141 releases later...

Linux 2.2.0

4 months later:

Linux 2.3.0

604 days and 58 releases later...

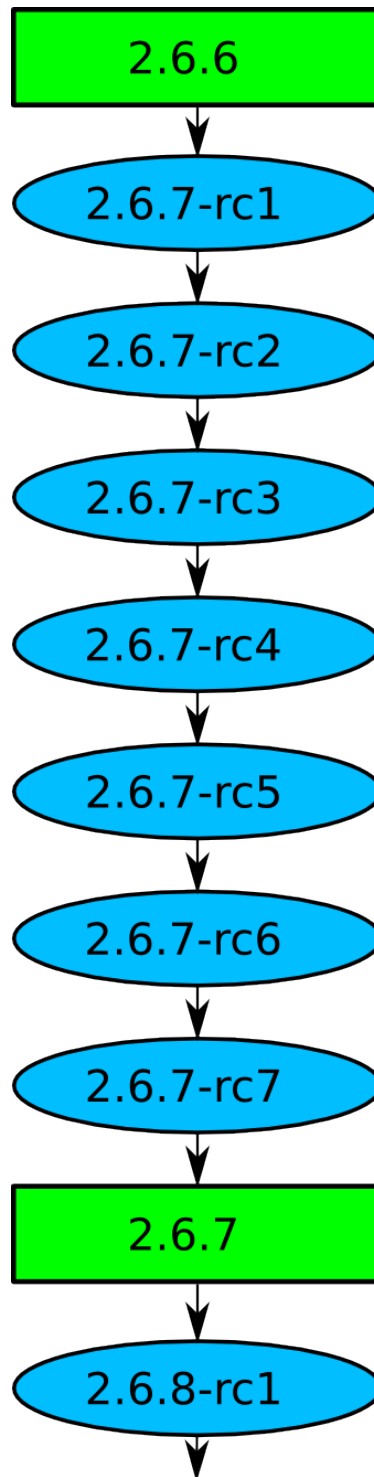
Linux 2.4.0

10 months later:

Linux 2.5.0

1057 days and 86 releases later...

Linux 2.6.0





**New release every
 $2\frac{3}{4}$ months**

developer

developer

developer

developer

developer

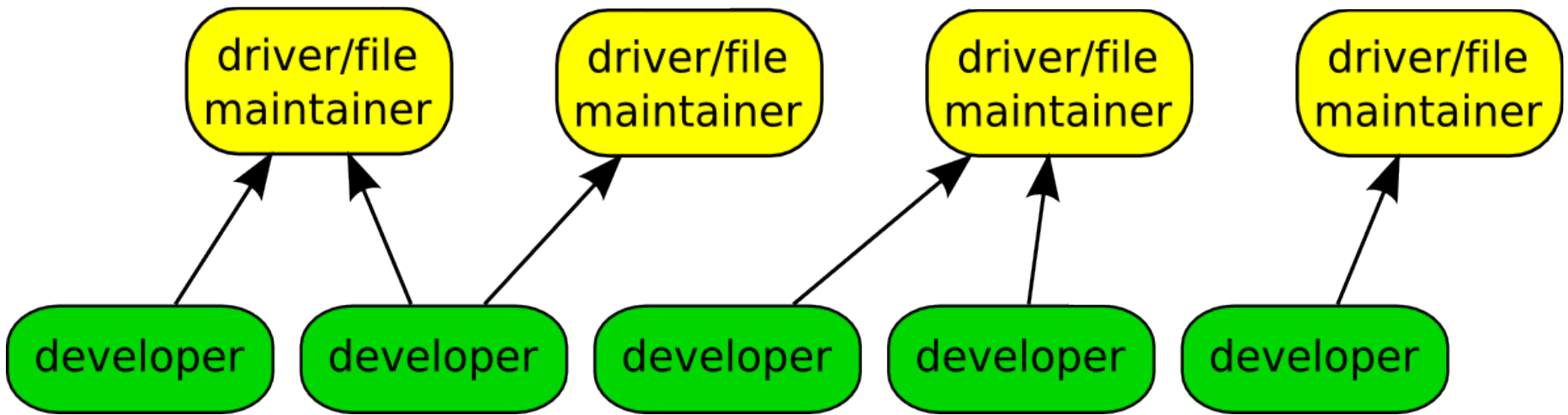
commit ecf85e481a716cfe07406439fdc7ba9526bbfaeb
Author: Robert Jarzmik <robert.jarzmik@free.fr>
AuthorDate: Tue Apr 21 20:33:10 2009 -0700
Commit: Greg Kroah-Hartman <gregkh@suse.de>
CommitDate: Thu Apr 23 14:15:31 2009 -0700

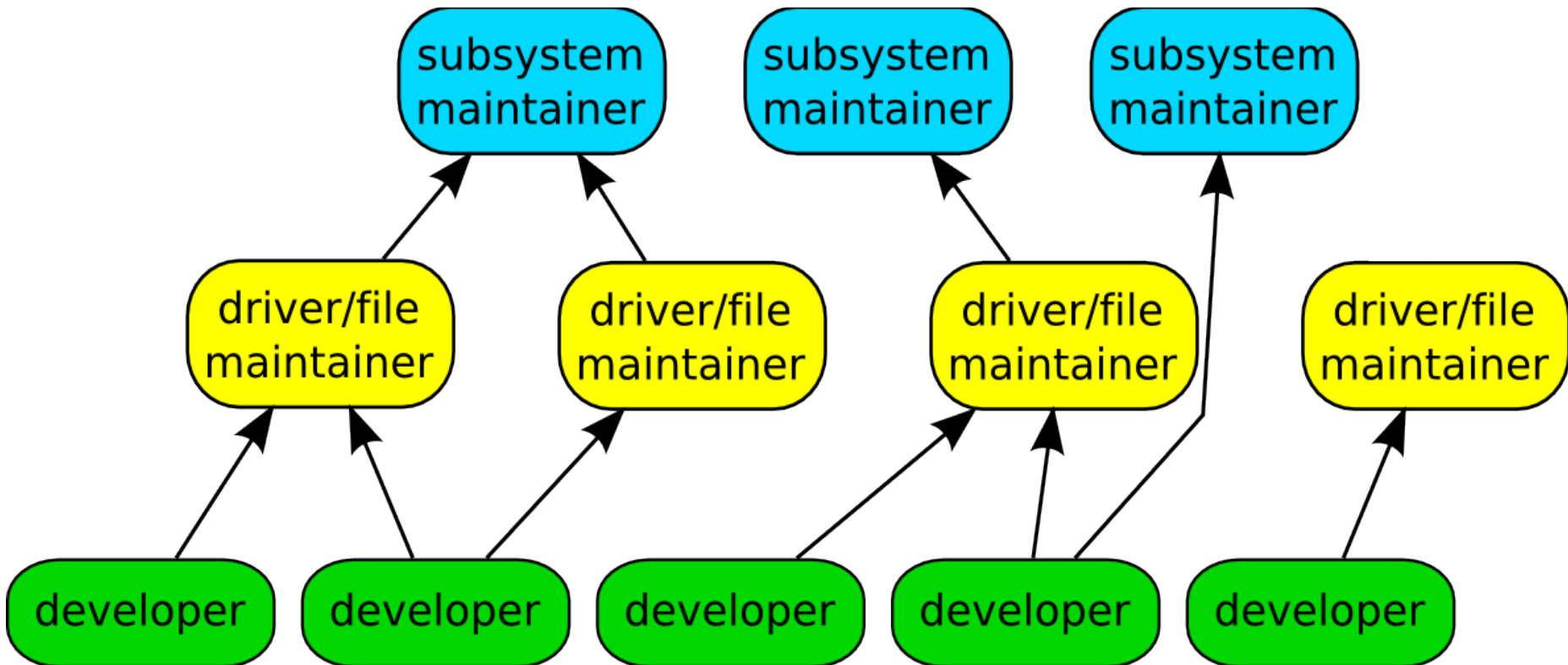
USB: otg: Fix bug on remove path without transceiver

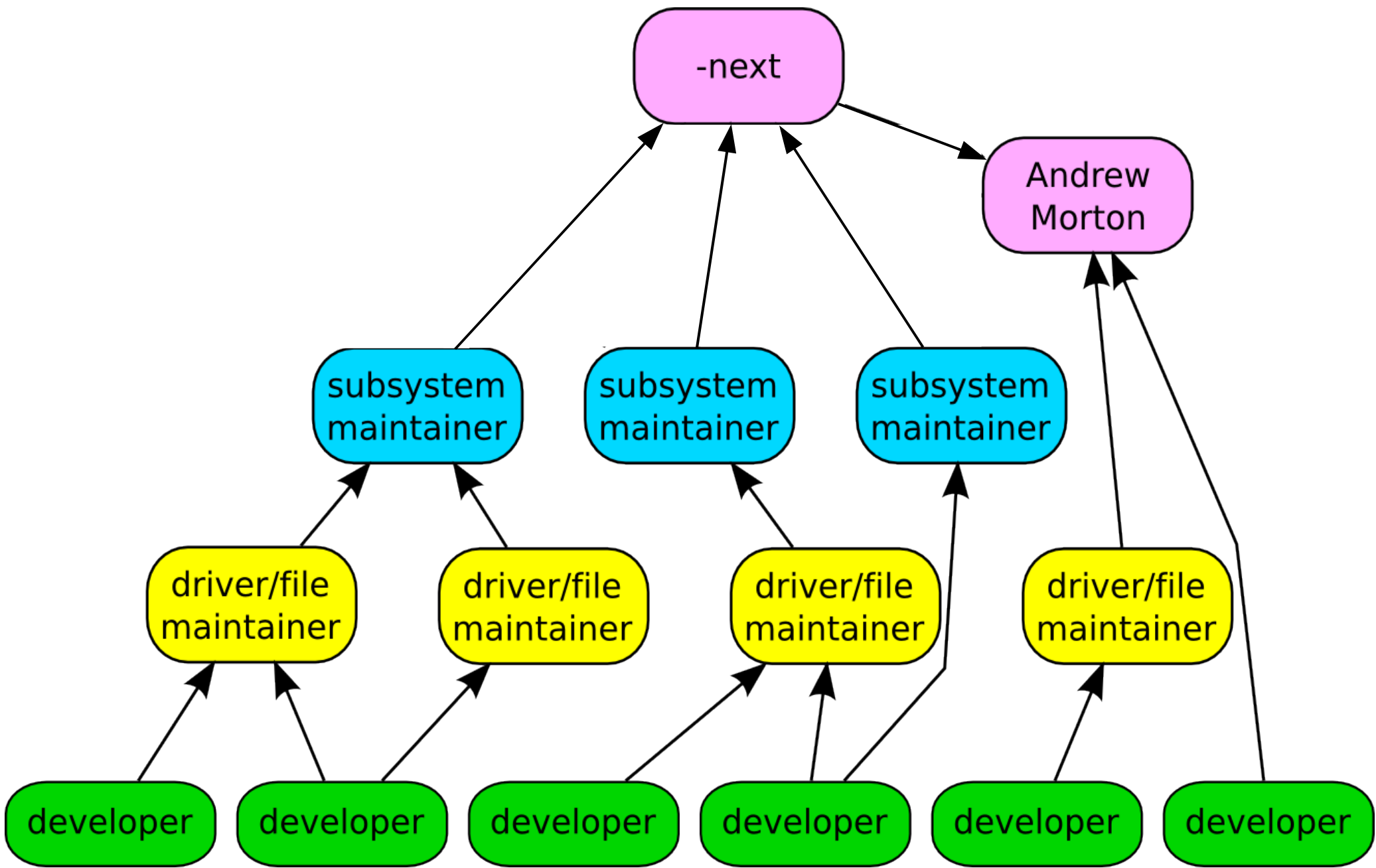
In the case where a gadget driver is removed while no transceiver was found at probe time, a bug in otg_put_transceiver() will trigger.

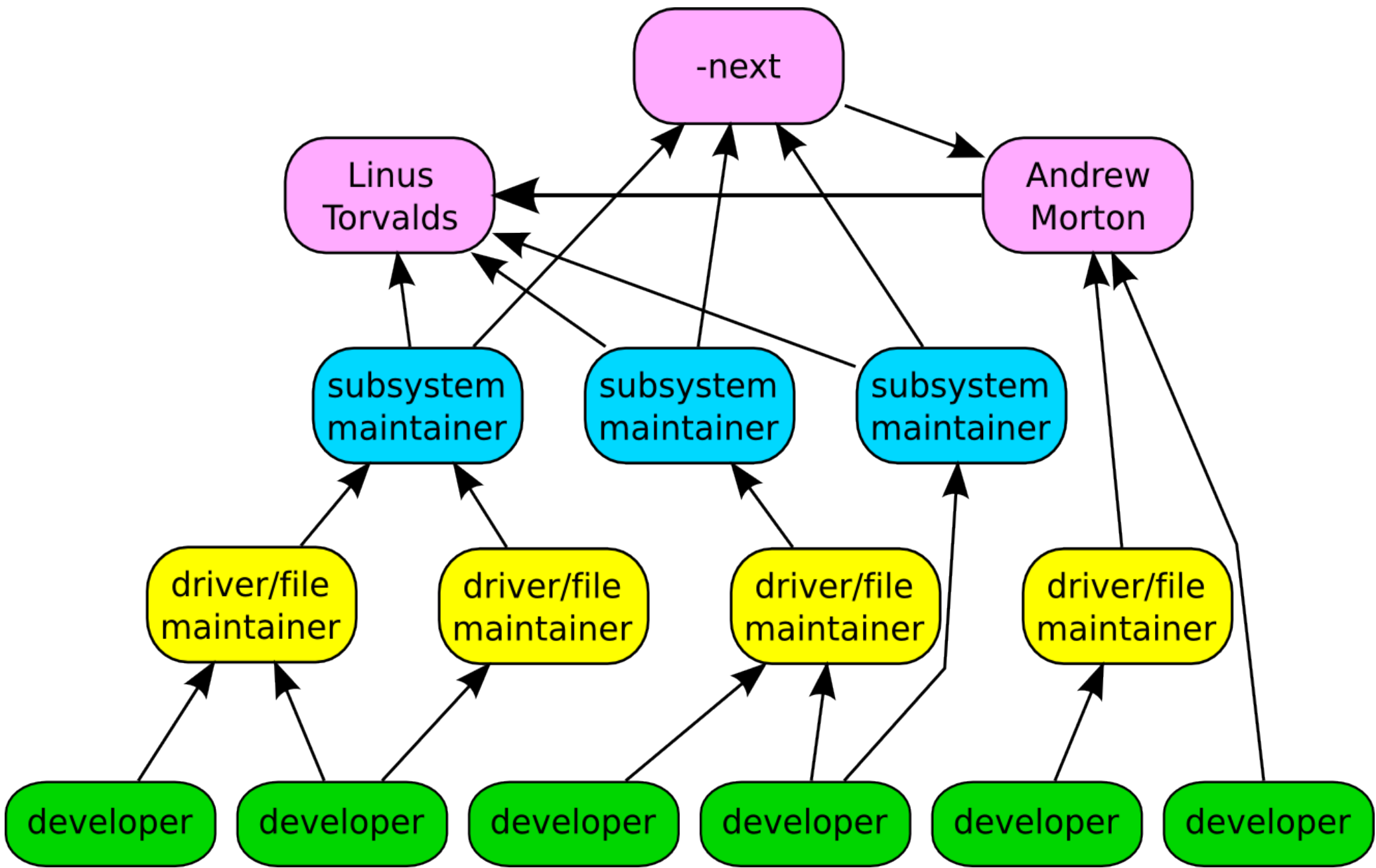
Signed-off-by: Robert Jarzmik <robert.jarzmik@free.fr>
Acked-by: David Brownell <dbrownell@users.sourceforge.net>
Signed-off-by: Greg Kroah-Hartman <gregkh@suse.de>

```
--- a/drivers/usb/otg/otg.c
+++ b/drivers/usb/otg/otg.c
@@ -43,7 +43,8 @@ EXPORT_SYMBOL(otg_get_transceiver);
 void otg_put_transceiver(struct otg_transceiver *x)
 {
-    put_device(x->dev);
+    if (x)
+        put_device(x->dev);
 }
```









From: Linus Torvalds <torvalds@osdl.org>
Subject: Re: RFD: Kernel release numbering
Date: 2005-03-03 16:23:39 UTC

I'll tell you what the problem is: I don't think you'll find anybody to do the parallel "only trivial patches" tree. They'll go crazy in a couple of weeks. Why? Because it's a damn hard problem. Where do you draw the line? What's an acceptable patch? And if you get it wrong, people will complain very loudly, since by now you've "promised" them a kernel that is better than the mainline. In other words: there's almost zero glory, there are no interesting problems, and there will absolutely be people who claim that you're a dick-head and worse, probably on a weekly basis.

Anybody?

From: Greg KH <greg@kroah.com>
Subject: Re: RFD: Kernel release numbering
Date: 2005-03-03 16:43:53 GMT

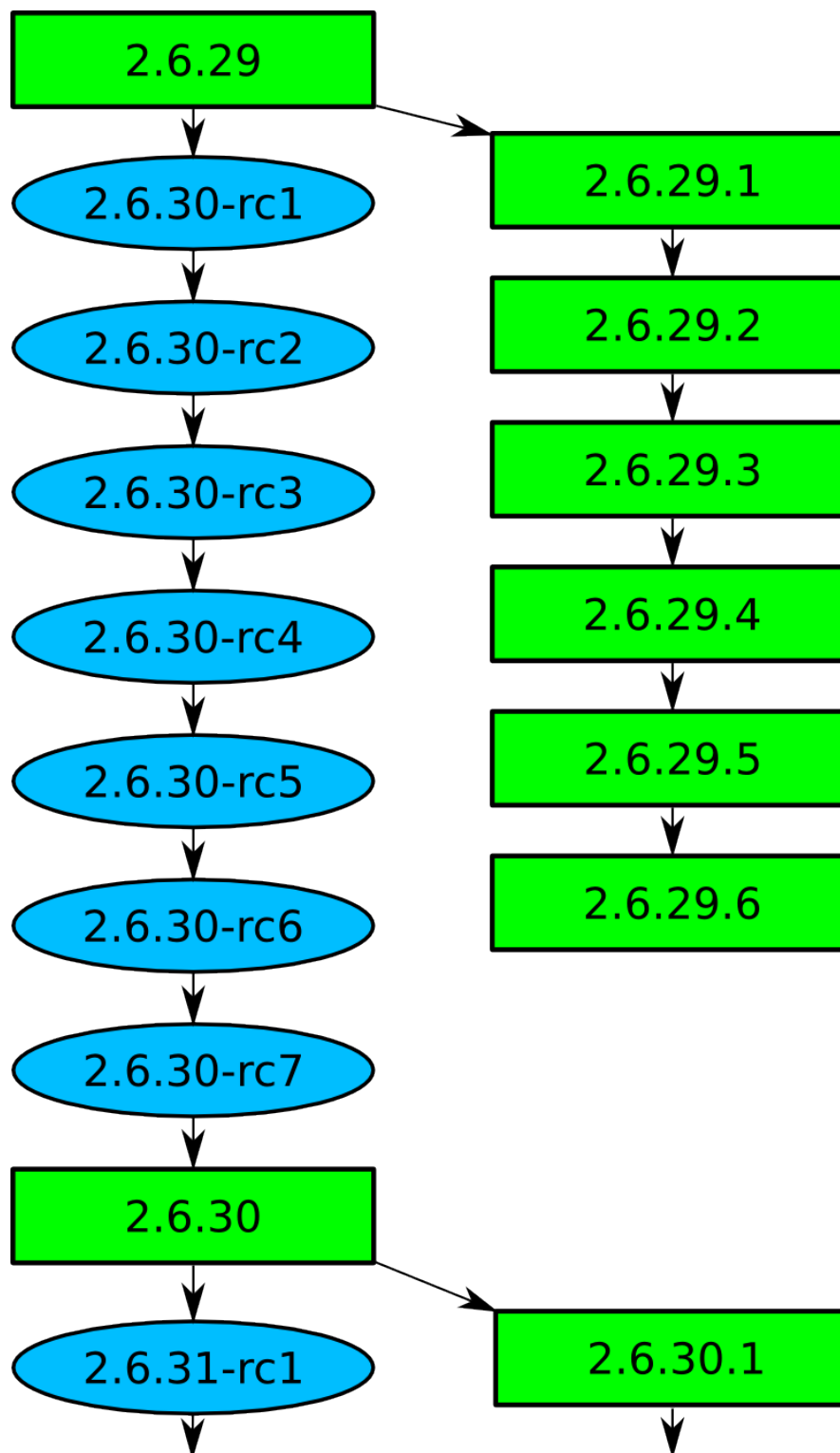
> Anybody?

Well, I'm one person who has said that this would be a very tough problem to solve. And hey, I like tough problems, so I'll volunteer to start this. If I burn out, I'll take the responsibility of finding someone else to take it over.

From: Chris Wright <chrisw@osdl.org>
Subject: Re: RFD: Kernel release numbering
Date: 2005-03-03 16:55:33 GMT

> Anybody?

Andres Salomon (-as patches) and I have been talking about that at least regarding security fixes. It's worth trying in a more complete and formalized way. Guess I can be branded a sucker :)



stable_kernel_rules.txt

- obviously correct and tested**
- not bigger than 100 lines**
- must fix only one thing**
- must fix a real bug**
- must fix a real problem**
- new device ids and quirks**
- must be in Linus's tree already**

version	# releases	# patches
2.6.11	12	79
2.6.12	6	53
2.6.13	5	44
2.6.14	7	96
2.6.15	7	110
2.6.16	62	1053
2.6.17	14	191
2.6.18	8	240
2.6.19	7	189
2.6.20	21	447

version	# releases	# patches
2.6.21	7	321
2.6.22	19	1584
2.6.23	16	613
2.6.24	7	383
2.6.25	20	419
2.6.26	8	321
2.6.27	54	1584
2.6.28	10	613
2.6.29	6	383
2.6.30	10	419

version	# releases	# patches
2.6.31	14	826
2.6.32	23	2003
2.6.33	7	883
2.6.34	7	601
2.6.35	6	442

`stable_kernel_rules.txt`

- "Cc: <stable@kernel.org>" to the Signed-off-by: area of the patch
- send git commit id to stable@kernel.org

Review cycle

- patches are sent to maintainers and authors
- 48-72 hour review
- new release happens

Get Involved

- tag your patches!
- send commit ids to `stable@kernel.org`
- `stable-commits@vger.kernel.org`
- `stable-review@kernel.org`



Developer's Certificate of Origin

- (a) I created this change; or
- (b) Based this on a previous work with a compatible license; or
- (c) Provided to me by (a), (b), or (c) and not modified
- (d) This contribution is public.

