

# The Stable Linux Kernel Tree

Delivering a Stable Platform  
on a Constantly Moving Base

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**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

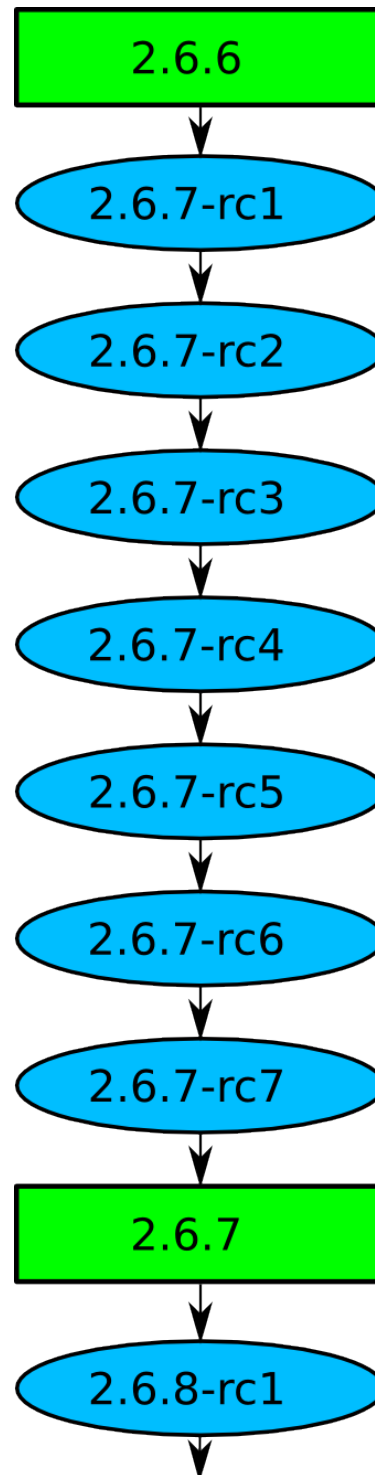
**10 months later:**

**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

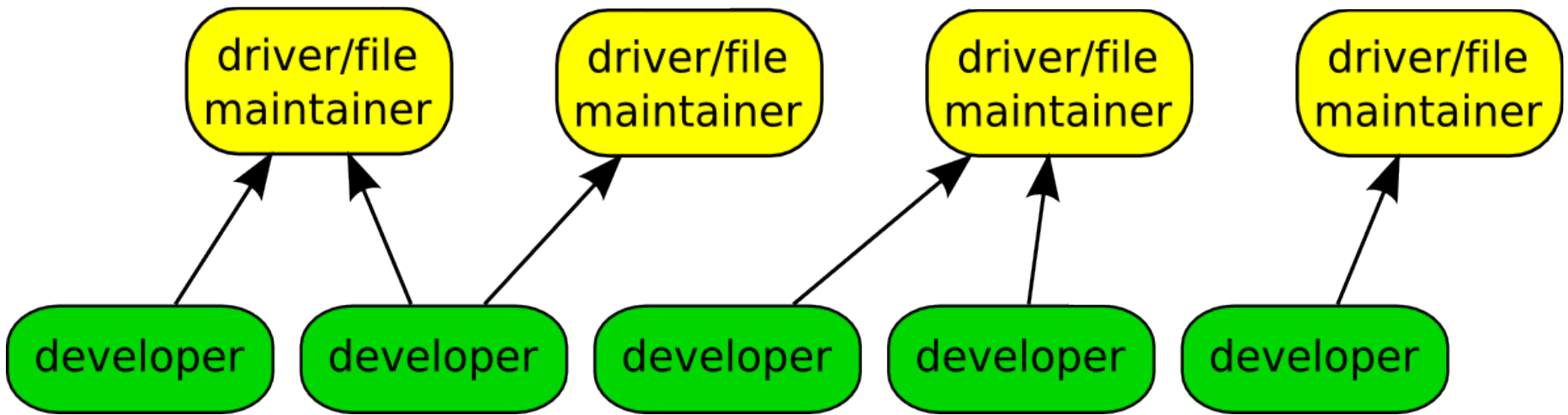
commit ecf85e481a716cfe07406439fdc7ba9526bbfaeb  
Author: Robert Jarzmik <robert.jarzmik@free.fr>  
AuthorDate: Tue Apr 21 20:33:10 2009 -0700  
Commit: Greg Kroah-Hartman <gregkh@suse.de>  
CommitDate: Thu Apr 23 14:15:31 2009 -0700

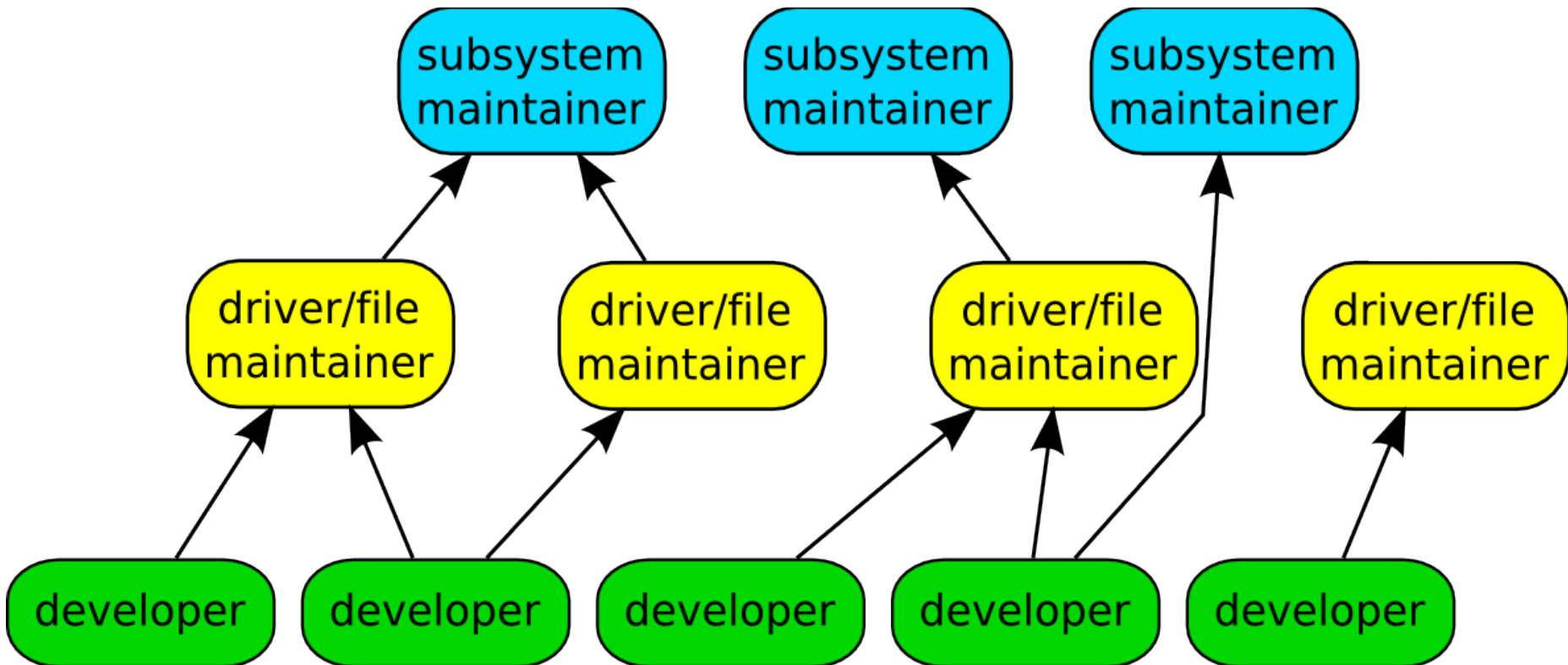
USB: otg: Fix bug on remove path without transceiver

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.

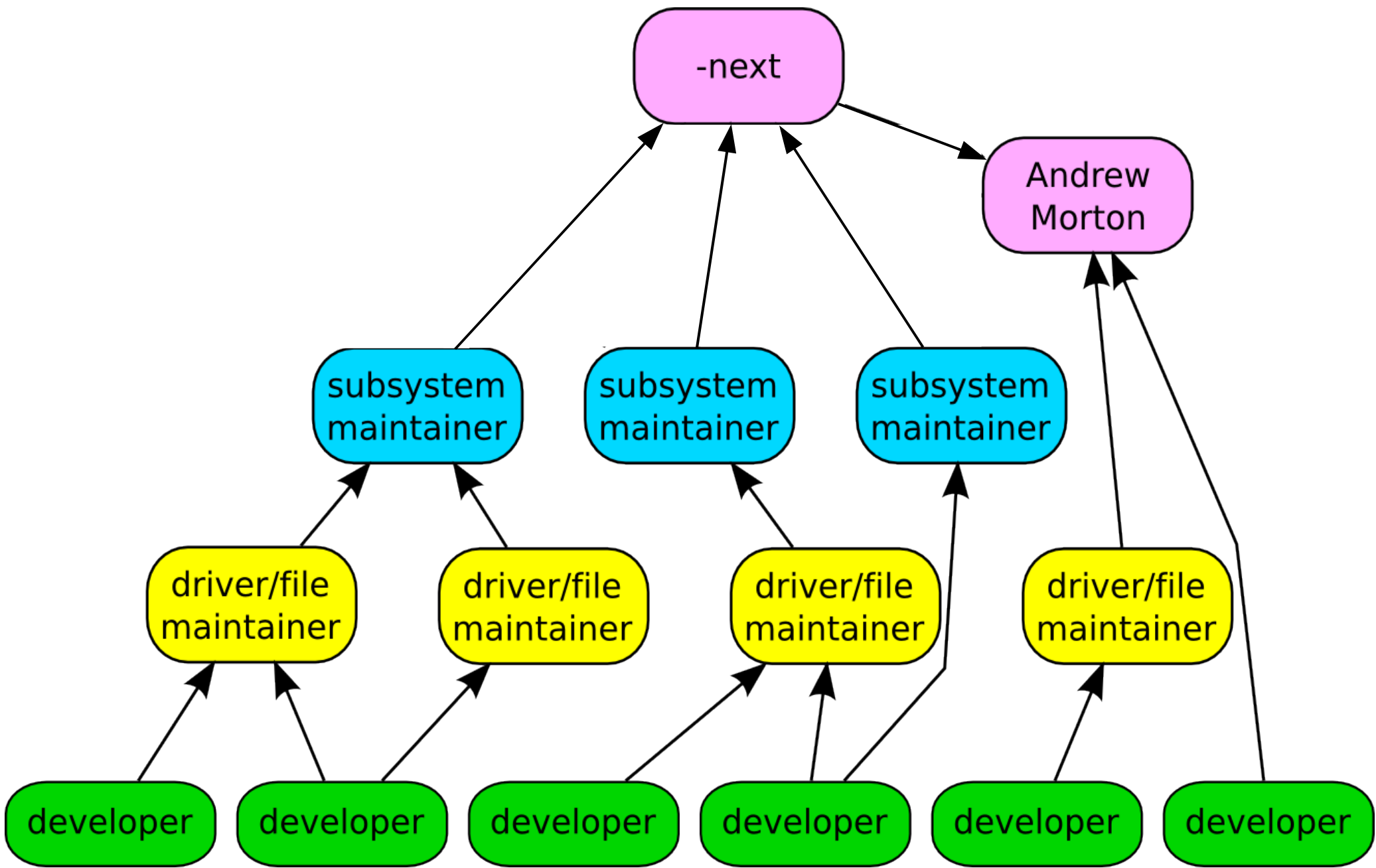
Signed-off-by: Robert Jarzmik <robert.jarzmik@free.fr>  
Acked-by: David Brownell <dbrownell@users.sourceforge.net>  
Signed-off-by: Greg Kroah-Hartman <gregkh@suse.de>

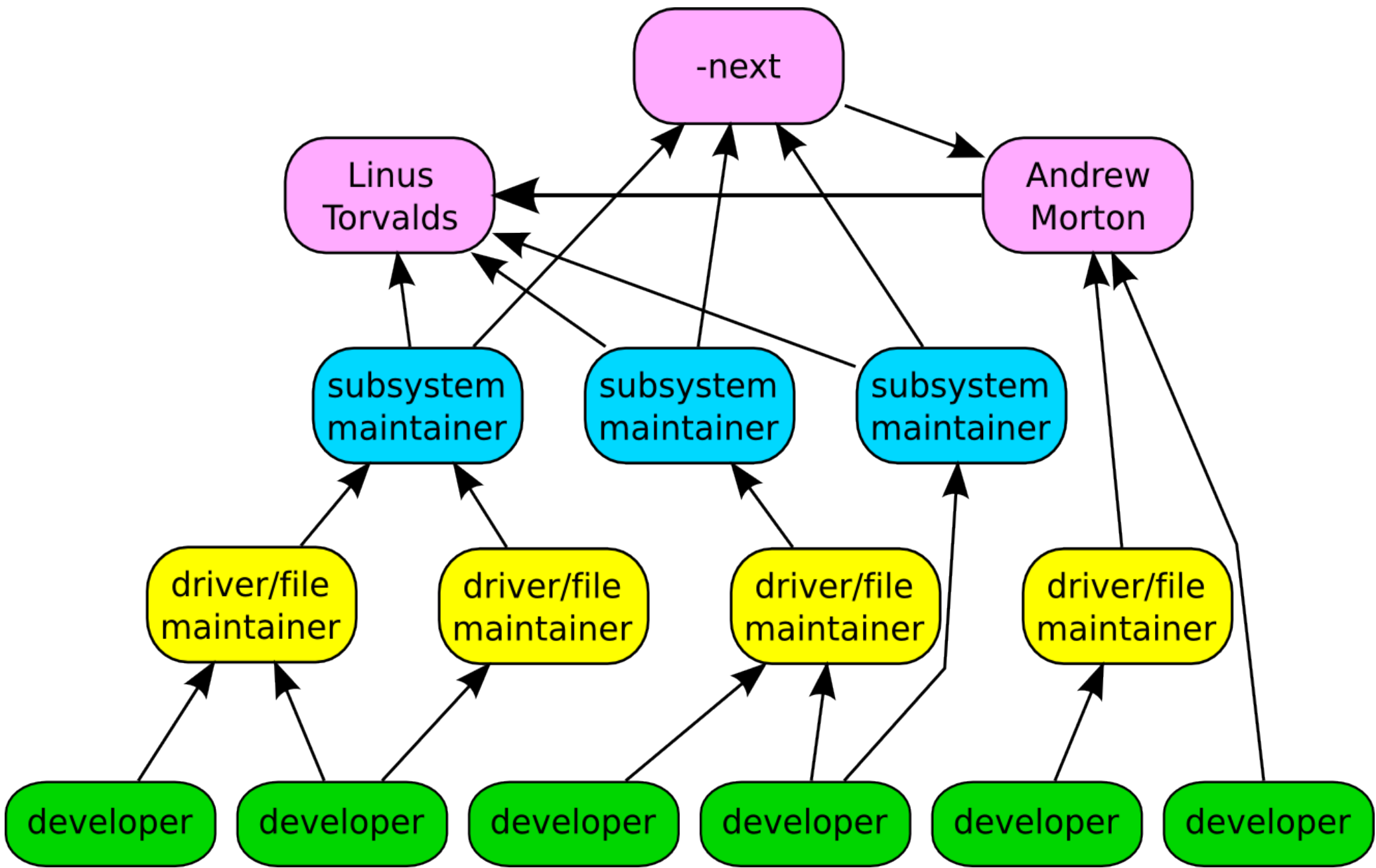
```
--- a/drivers/usb/otg/otg.c
+++ b/drivers/usb/otg/otg.c
@@ -43,7 +43,8 @@ EXPORT_SYMBOL(otg_get_transceiver);
 void otg_put_transceiver(struct otg_transceiver *x)
 {
-    put_device(x->dev);
+    if (x)
+        put_device(x->dev);
 }
```











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

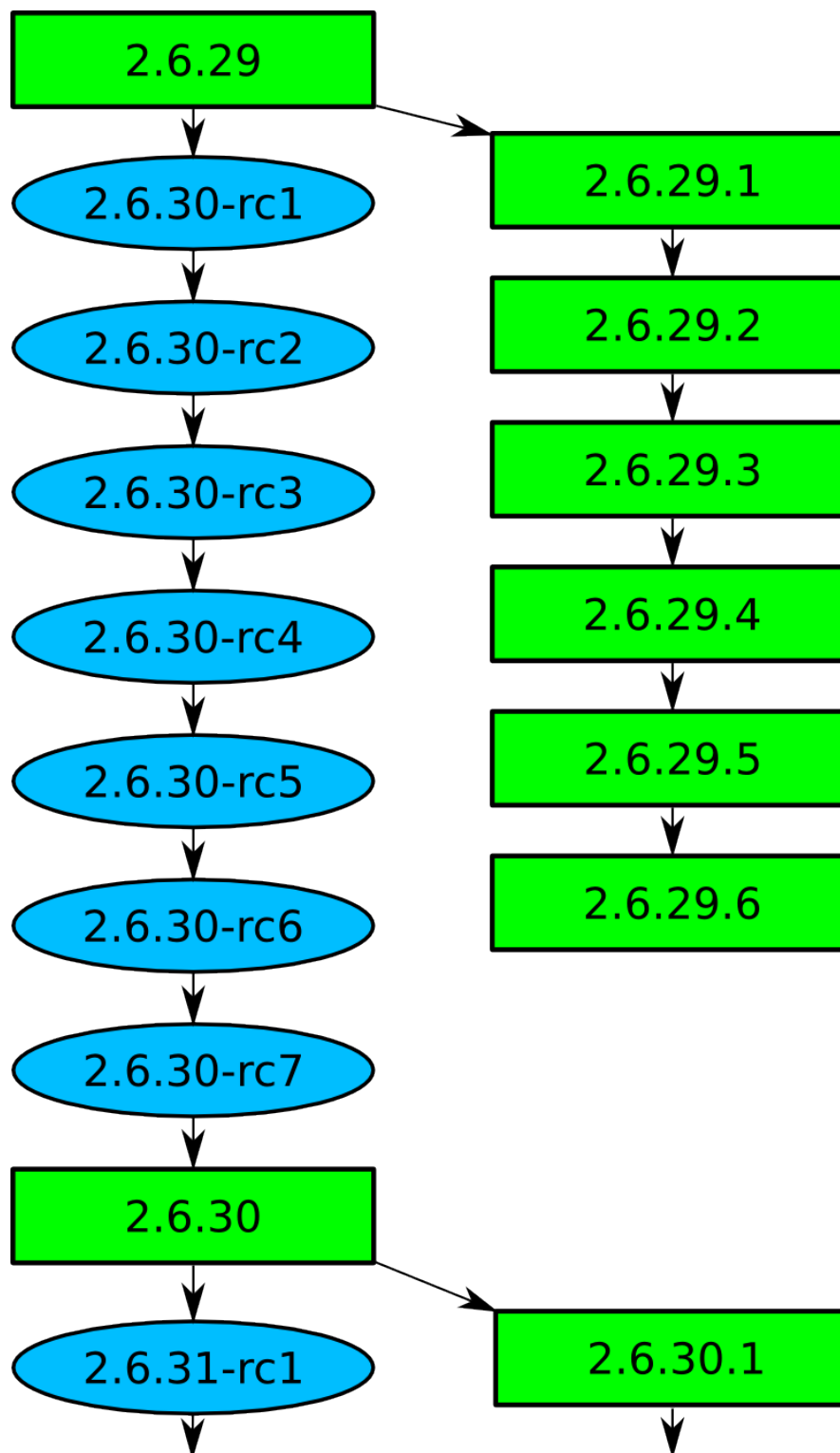
> Anybody?

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

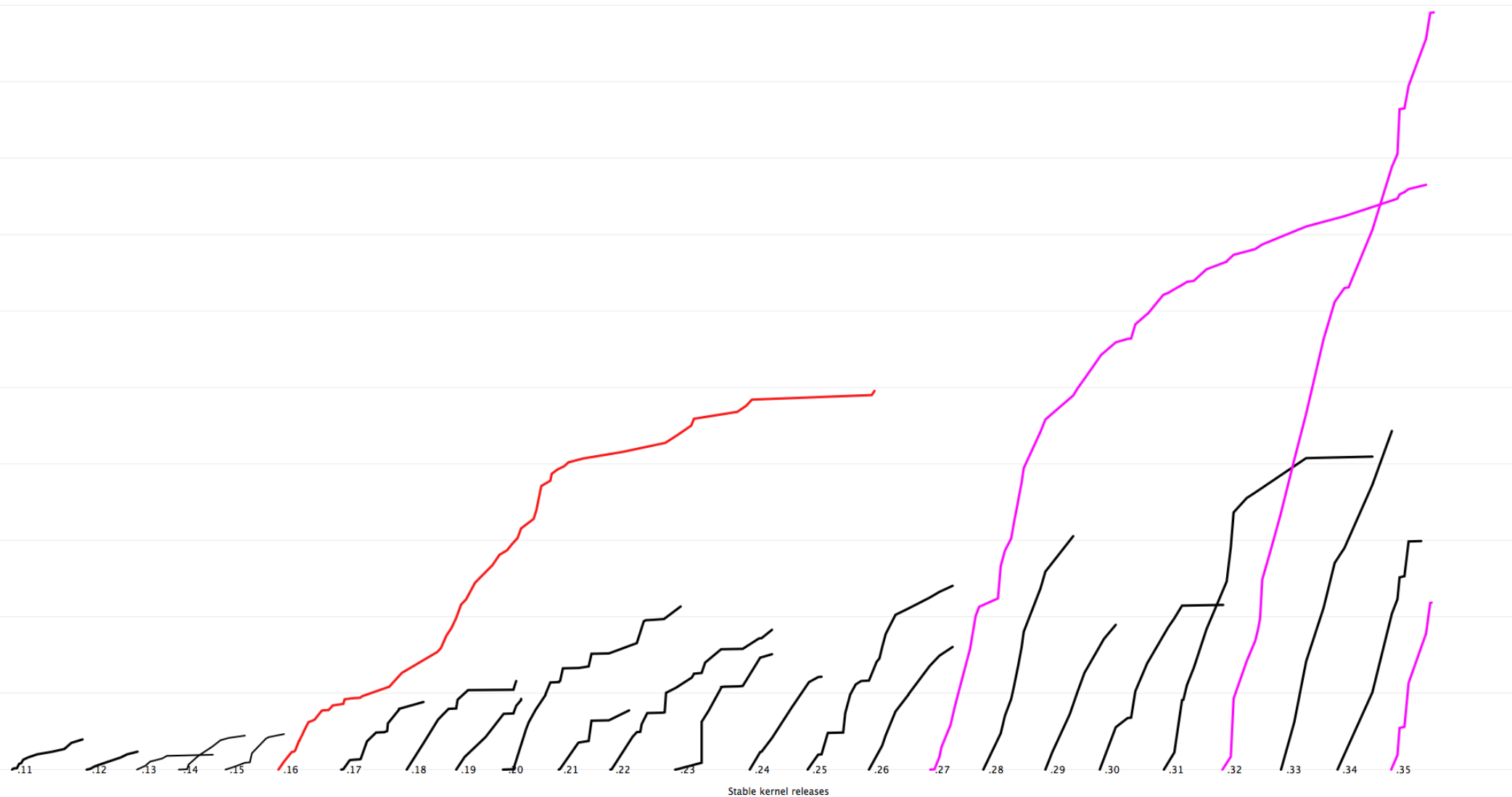
> Anybody?

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**





# `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.



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



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

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