

# I don't want your code

Linux Kernel Maintainers,  
why are they so grumpy?

Greg Kroah-Hartman  
[gregkh@linuxfoundation.org](mailto:gregkh@linuxfoundation.org)

69,970 files  
29,460,000 lines

4,645 developers  
450+ companies

8,900 lines added

2,700 lines removed

2,100 lines modified

8,900 lines added

2,700 lines removed

2,100 lines modified

Every day

Kernel releases 5.3.0 – 5.8.0  
September 2019 – August 2020

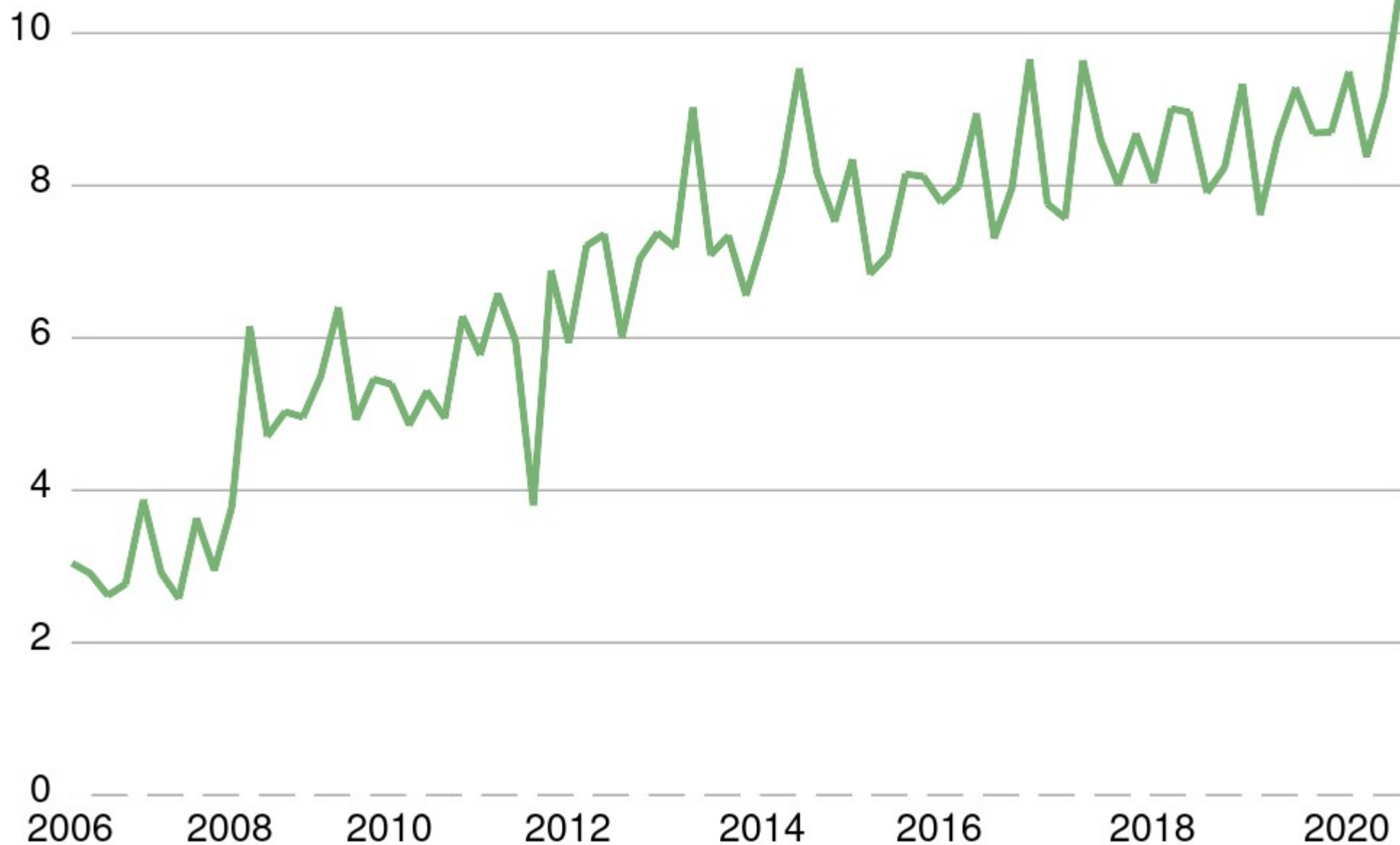
# 9.2 changes per hour

Kernel releases 5.3.0 – 5.8.0  
September 2019 – August 2020

10.8 changes per hour

5.8 release

# Patches merged per hour





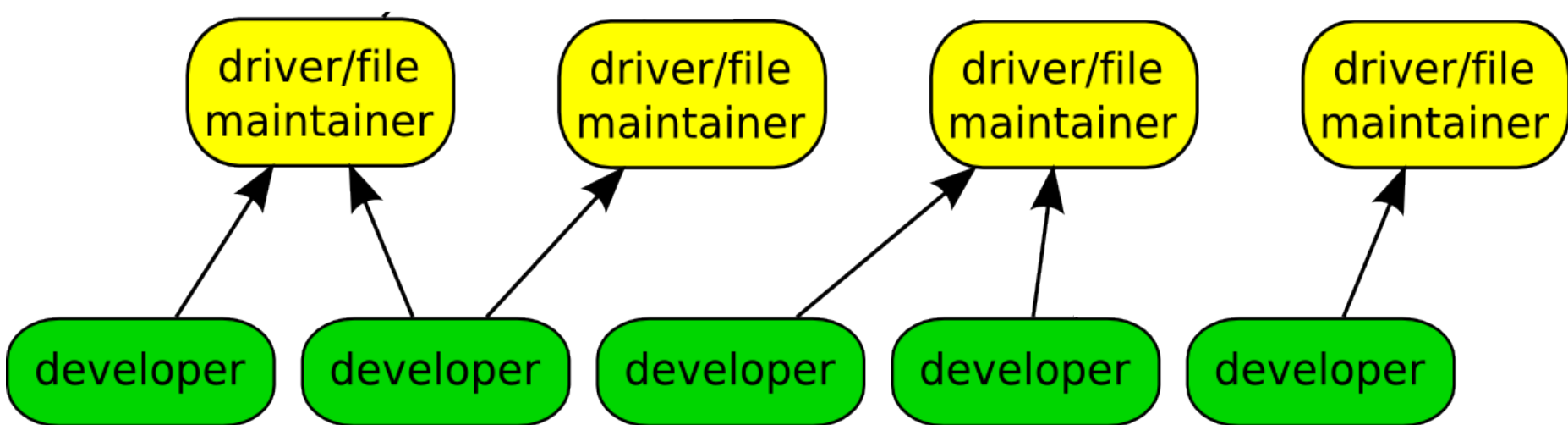
developer

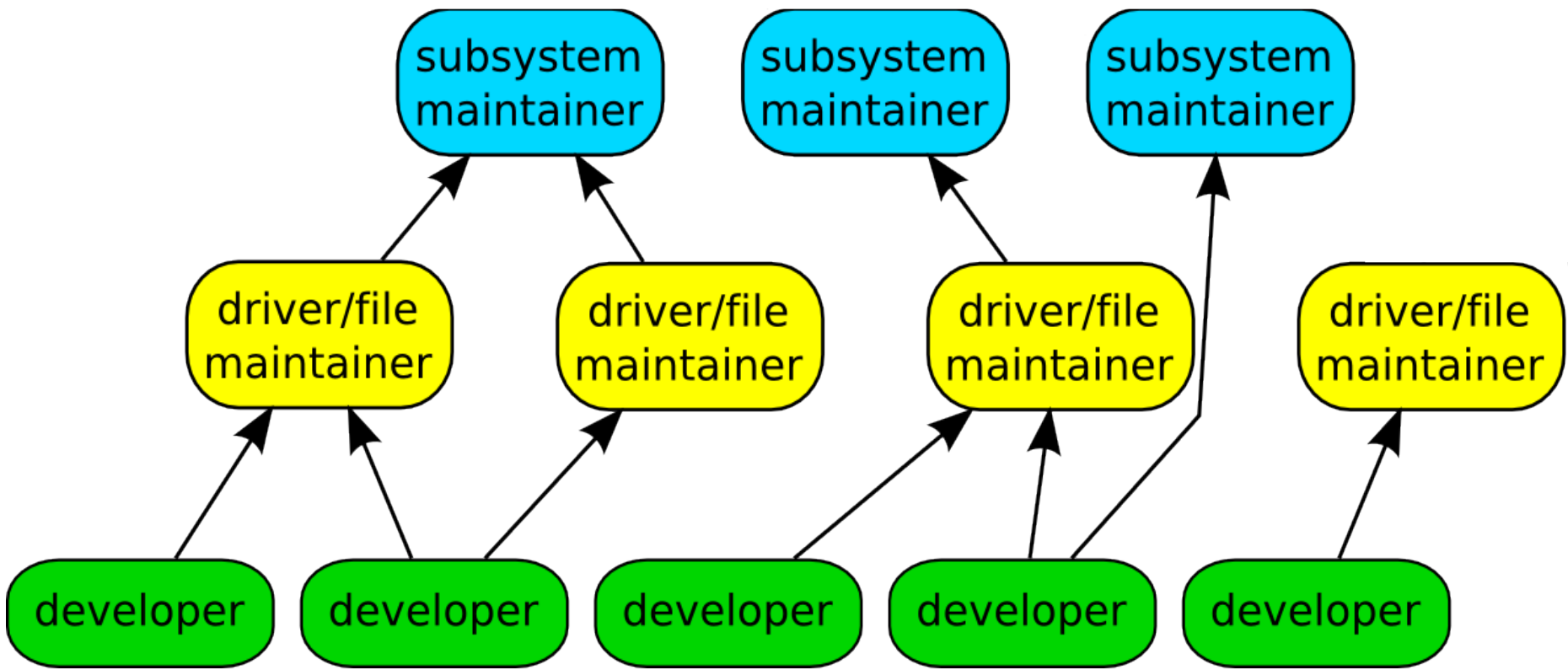
developer

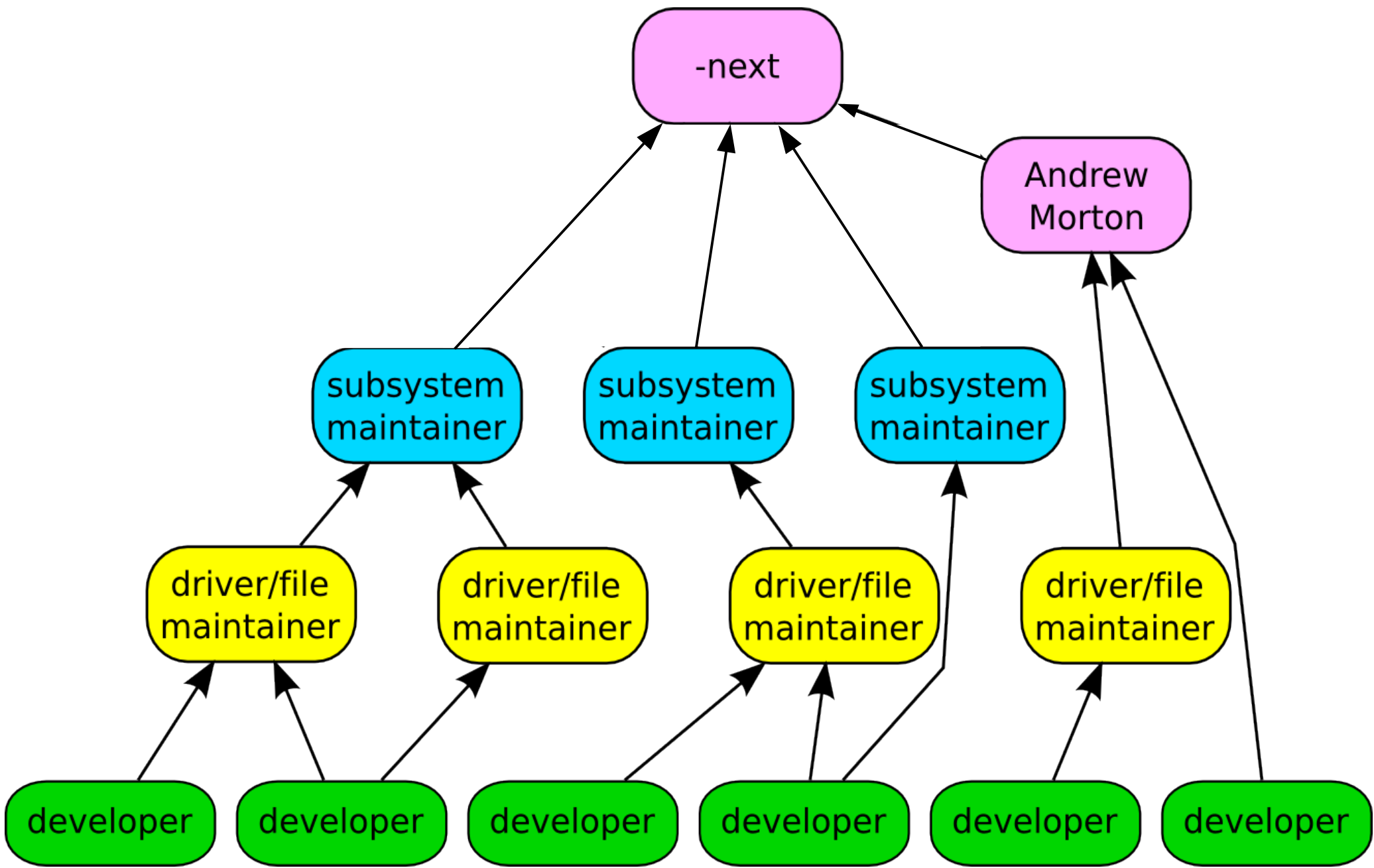
developer

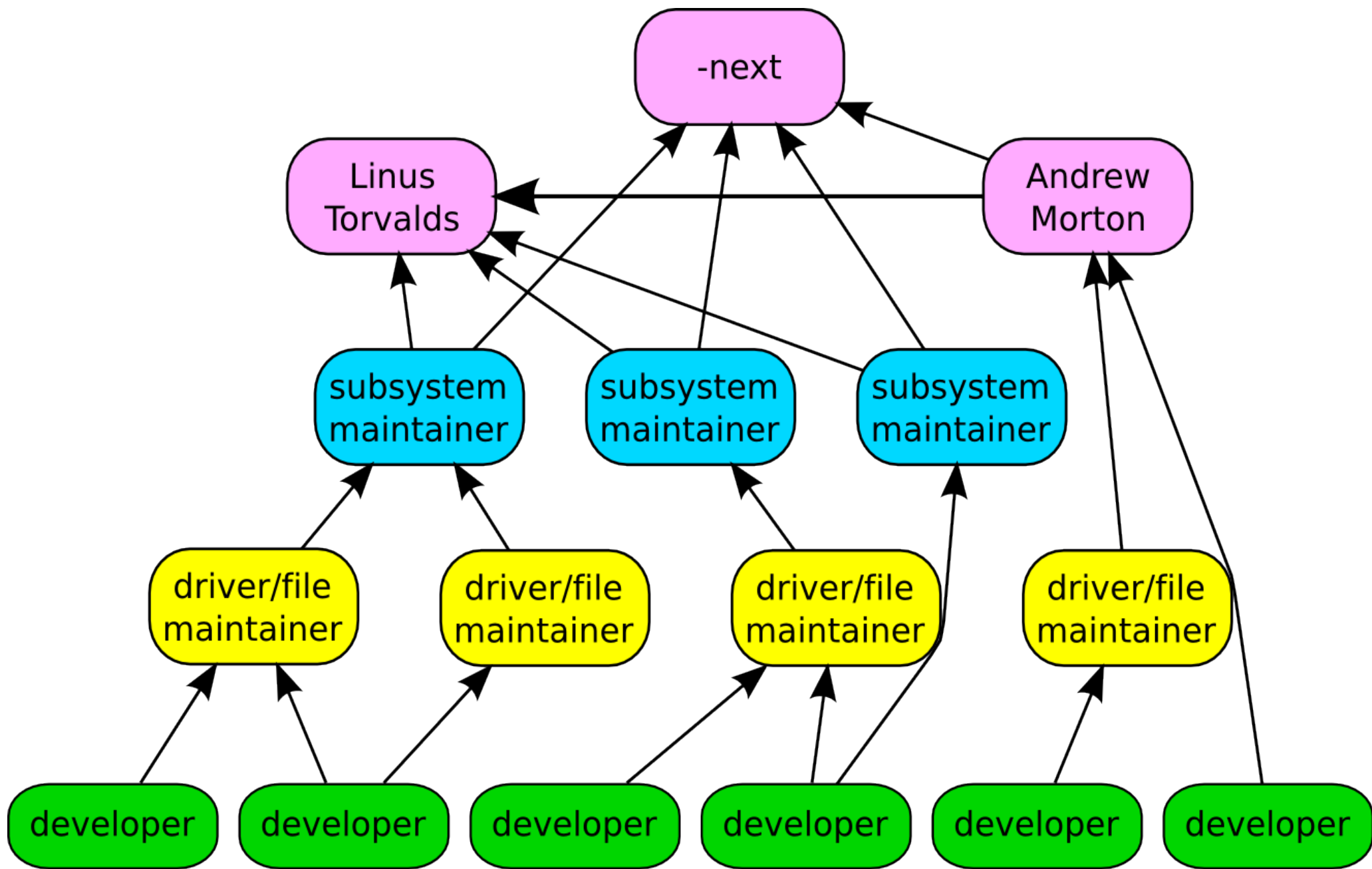
developer

developer









q:Quit d:Del u:Undel s:Save m:Mail r:Reply g:Group ?:Help			
1	N	May 30 Jay Cliburn (1.5K) Re: Problem with atl and msi in kernel 2.6.22-rc3	
2	N	May 30 Robert P. J. Day (1.4K) Shouldn't _soc_ lead to try _shortcircuit_ semantics?	
3	N	May 30 Alexey Kopylov (2.9K) [PATCH] Merge _log_ and _sem_	
4	N	May 30 Thomas Klein (1.3K) [PATCH 2.6.22-rc3] ehea: fixed multi queue RX bug	
5	N	May 30 Geller Sandor (1.2K) HPT374 IDE problem with 2.6.21.* kernels	
6	N	May 30 Hagen Paul Pfei (3.5K) [PATCH] INTERNODE_CACHE_SHIFT redefinition for hot spot structure	
7	N	May 30 Zoltan Boszormenyi (8.5K) [PATCH] Kernel 2.6.21.3 does not work with 8Gb of RAM on Intel 965WH	1377
8	N	May 30 Juergen E. Schaefer (1.8K) [PATCH] drivers/net: fix comparison of unsigned < 0	
9	Ns	May 30 Martin Steigerwald (2.6K) Re: [ck] Mainline plans	
10	N	May 30 Michael S. Tsiruk (2.4K) [PATCH] drivers/block/ub.c: use list_for_each_entry()	1195
11	N	May 30 Matthias Kasper (2.4K) [PATCH] drivers/net: fix comparison of unsigned < 0	
12	N	May 30 Rankle_ (3.1K) [PATCH] merge dst_discard in & out into one, removed a duplicate	
13	N	May 30 Zoltan Boszormenyi (8.5K) MCP55 NIO problem	
14	N	May 30 Bill Nottingham (4.0K) [PATCH] drivers/net: fix comparison of unsigned < 0	832
15	N	May 30 Seokmann Ju (1.4K) [PATCH] drivers/net: fix comparison of unsigned < 0	
16	N	May 30 Bill Nottingham (4.5K) [PATCH] drivers/infiniband: fix comparsion between unsigned and n	
17	N	May 30 Bill Nottingham (5.1K) [PATCH] drivers/video: Fix comparisons between negative and unsig	740
18	N	May 30 Bill Nottingham (5.4K) [PATCH] drivers/net: fix comparisons of unsigned < 0	
19	N	May 30 Bill Nottingham (5.8K) [PATCH] net: fix comparisons of unsigned < 0	
20	N	May 30 Bill Nottingham (1.9K) [PATCH] net: fix comparisons against unsigned < 0	739
21	N	May 30 Bill Nottingham (3.4K) [PATCH] net: fix comparison of unsigned < 0	
22	N	May 30 Takashi Iwai (3.6K) [PATCH] net: fix comparison of unsigned < 0	
23	N	May 30 Jiri Slaby (1.4K) [PATCH] net: fix comparison of unsigned < 0	
24	N	May 30 Stefan Richter (1.7K) [PATCH 2.6.21.3] ieee1394: eth1394: bring back apparent device	692
25	N	May 30 Oleg V. Verichev (1.1K) Re: diffies wraparound is not treated in the schedstats	
26	N	May 29 Robert Hancock (4.0K) [PATCH -mm] 2/2: PCI: disable decode of IO/memory during BAR size	
27	N	May 29 Robert Hancock (4.5K) [PATCH -mm] 1/2: MMCONFIG: validate against CPU motherboard reso	671
28	N	May 29 Linda C. Carvalho (3.2K) [PATCH] PCI: validate against CPU motherboard reso	
29	N	May 30 Matt Keenan (1.6K) [PATCH] PCI: validate against CPU motherboard reso	
30	N	May 29 Robert Hancock (1.9K) [PATCH -mm] 0/2: PCI: MMCONFIG-related updates	590
31	N	May 29 Yinghai Lu (1.4K) [PATCH 5/5] serial: set DTR in uart for kernel serial console	
32	N	May 29 Andrew Morton (2.5K) [PATCH 4/5] serial: convert early_uart to early_console for 8250	
33	N	May 30 Sanyun, Mark (3.4K) [PATCH 3/5] x86: initial fixmap support	523
34	N	May 29 Yinghai Lu (1.4K) [PATCH 5/5] serial: set DTR in uart for kernel serial console	
35	N	May 29 Yinghai Lu (2.3K) [PATCH 3/5] x86: initial fixmap support	
36	N	May 29 Yinghai Lu (2.3K) [PATCH 3/5] x86: initial fixmap support	
37	N	May 29 Yinghai Lu (2.3K) [PATCH 3/5] x86: initial fixmap support	567
38	N	May 29 Yinghai Lu (2.2K) [PATCH 3/5] x86: initial fixmap support	
39	N	May 30 Wang Zhenyu (12K) [resend] [AGPGART] intel_agp: use table for device probe	
40	N	May 30 Wang Zhenyu (19K) [resend] [AGPGART] intel_agp: cleanup intel private data	
41	N	May 30 Dave Airlie (2.0K) [git pull] drm fixes for 2.6.22-rc3	
42	N	May 29 Matt Helsley (8.2K) [RFC][PATCH] Replacing the /proc/<pid/self>/exe symlink code	
---Mutt: =linux-kernel [Msgs:7969 New:7550 Inc:8 48M]---(threads/reverse-c)			
Kernel releases 5.4.0 - 5.9.0			

# Top Signed-off-by:

David S. Miller	8446
Greg Kroah-Hartman	5028
Alex Deucher	4323
Mark Brown	3565
Mauro Carvalho Chehab	2596
Linus Torvalds	2446
Andrew Morton	2218
Chris Wilson	1884
Jens Axboe	1787
Martin Petersen	1639

# Who is funding this work?

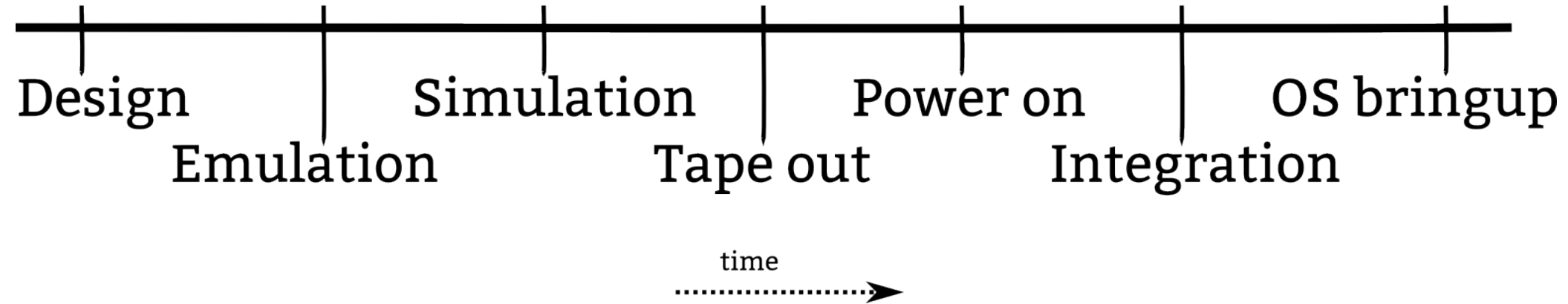
1. “Amateurs”	13.5%
2. Intel	11.6%
3. Red Hat	6.6%
4. AMD	4.9%
5. Huawei	4.8%
6. Google	4.7%
7. Linaro	3.8%
8. SUSE	3.6%
9. IBM	3.1%
10. “Consultants”	2.7%



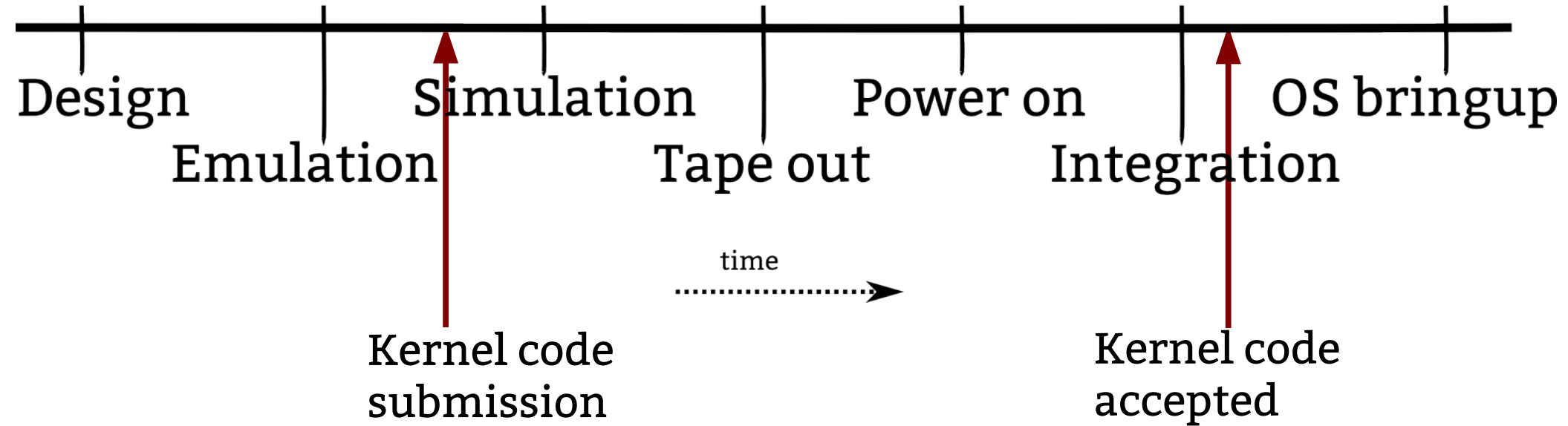
# Who is funding this work?

11. Mellanox	2.5%
12. NXP Semiconductors	2.2%
13. Renesas Electronics	2.2%
14. Facebook	2.0%
15. ARM	1.8%
16. Oracle	1.3%
17. Texas Instruments	1.2%
18. Code Aurora (Qualcomm)	1.2%
19. Linux Foundation	1.2%
20. Canonical	1.1%

# Development Process



# Development Process



# “Working upstream saves time and money”

Dan Frye – VP Open Systems, IBM

Dirk Hohndel – Chief Technologist, Intel

Maintainers are like editors in  
the publishing industry.

– David Miller

Patches I received in a 2 week period

Patches I received in a 2 week period

1487

Subject: [PATCH 48/48] ...



15 patch series, no order given

Patches 1, 3-10

**“Signed-off-by:” in signature**

Signature saying email was confidential

**Tabs were converted to spaces**

Leading spaces removed

diff in non-unified format

Patch created in driver directory



Patch created in /usr/src/linux-2.6.32

Made against different tree

# Wrong coding style

Wrong coding style,  
and acknowledged it

Would not compile

Broke the build on patch 3/6

Broke the build on patch 3/6  
and fixed it on 6/6

Broke the build on patch 5/8



# Broke the build on patch 5/8

Contained note that fix would be sent later

Patches that had nothing to do with me

1 patch, 450kb big (4500 lines added)

Obviously wrong kerneldoc

This was a calm two weeks

# How to do it right

[Documentation/process/submitting-patches.rst](#)  
[Documentation/process/submitting-drivers.rst](#)  
[Documentation/process/submit-checklist.rst](#)

It is in my self-interest  
to ignore your patch

Give me no excuse  
to reject your patch



What I will do for you:

**Review your patch within 1-2 weeks**

**Offer semi-constructive criticism**

Let you know the status of your patch

“Publicly making fun of people is half the fun of open source programming.

In fact the main reason to eschew programming in closed environments is that you can't embarrass people in public.”

– Linus Torvalds

<zx2c4> i think the reason it works is not neccessarily because  
<zx2c4> the responses are so terrific  
<zx2c4> but because  
<zx2c4> they are TERRIFYING  
<zx2c4> so i'm forced to do my best possible work



[github.com/gregkh/presentation-maintainer](https://github.com/gregkh/presentation-maintainer)

