



# Last year in the Linux Kernel

Greg Kroah-Hartman

44,600 files  
17,730,000 lines

# 3,061 developers

# 433 companies

8,600 lines added  
3,900 lines removed  
2,000 lines modified

8,600 lines added

3,900 lines removed

2,000 lines modified

Every Day

# 7.59 changes per hour

# 9.02 changes per hour

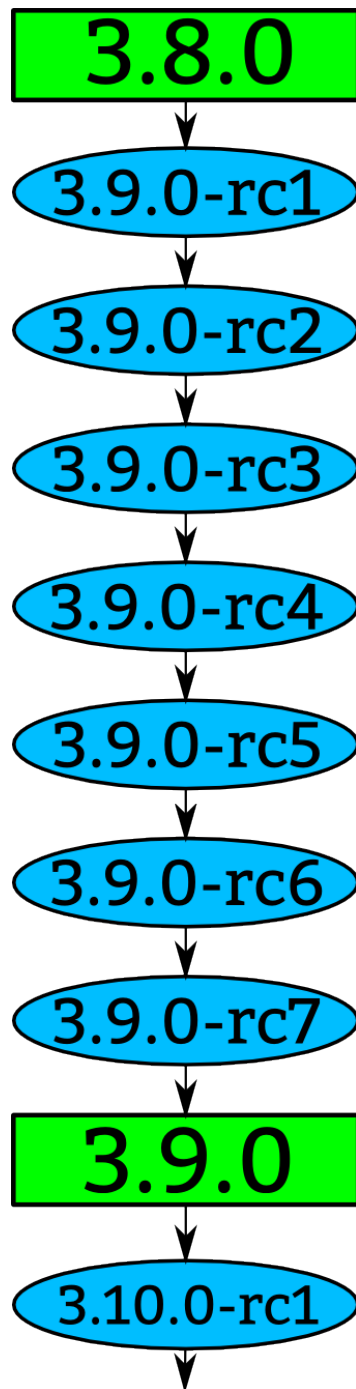
## 3.10.0 release

# How we stay sane

## Time based releases

## Incremental changes







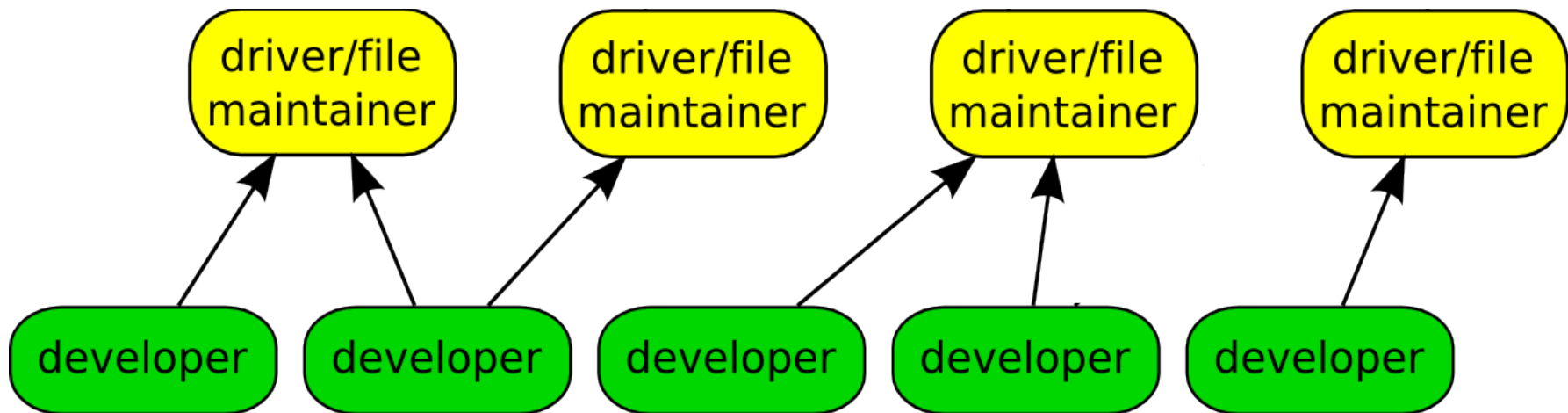
# “Longterm kernels”

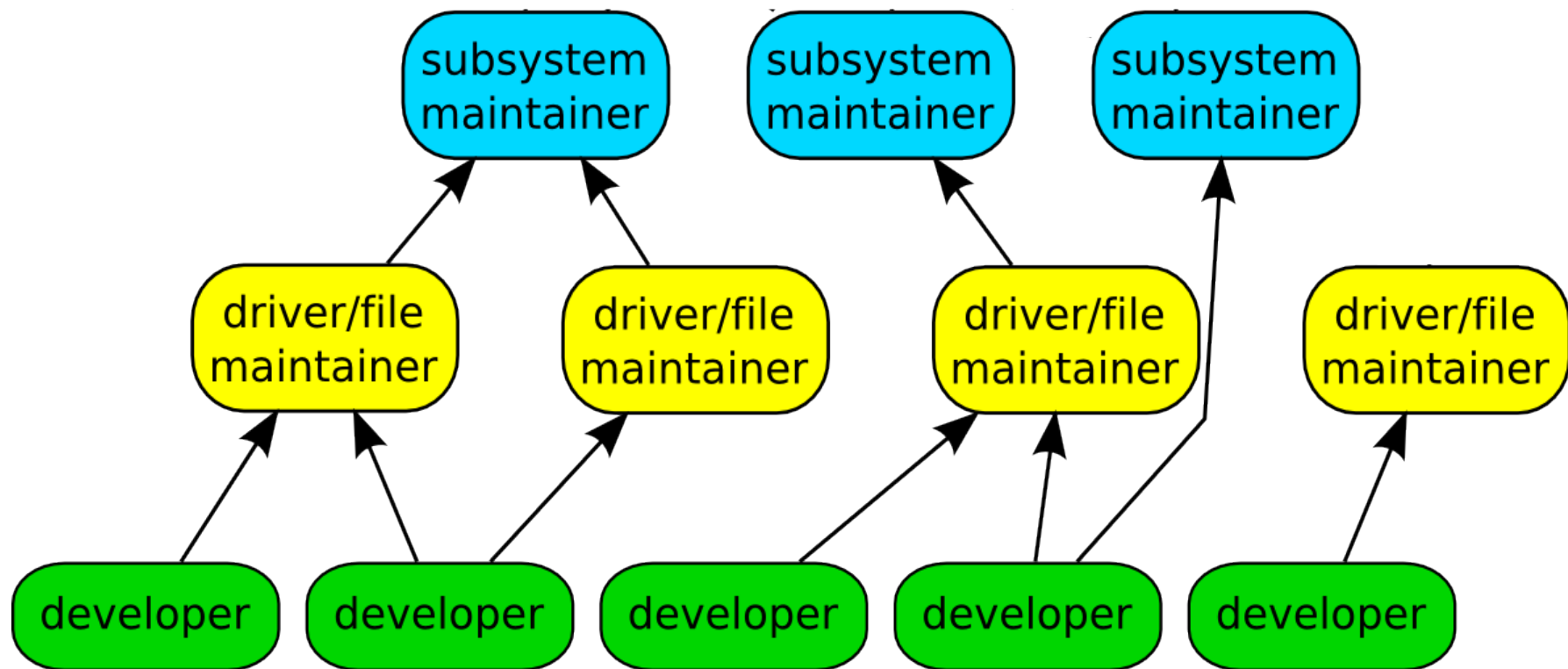
One picked per year

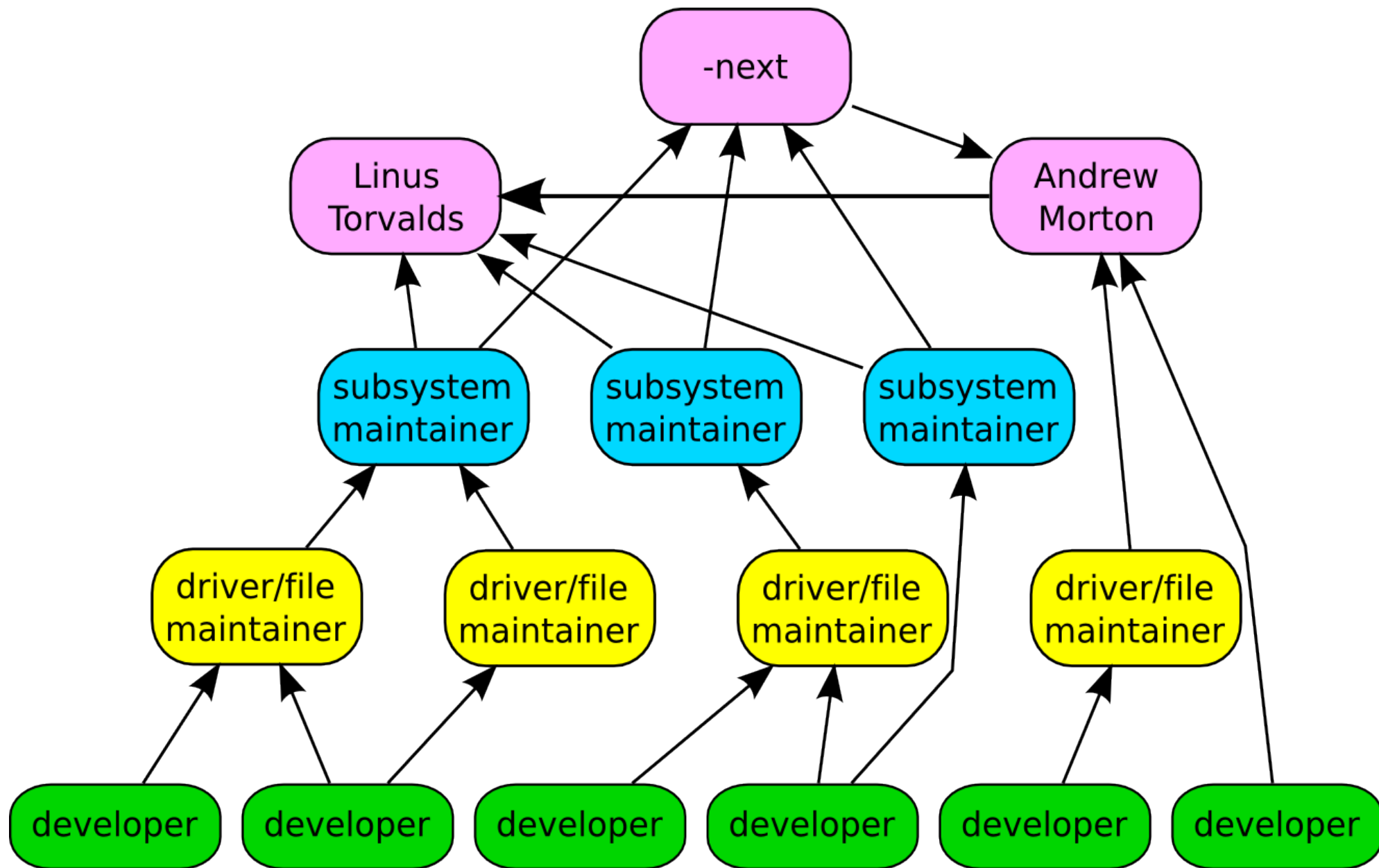
Maintained for two years

3.4 3.10

developer developer developer developer developer







# 3.8 release

## F2FS



# 3.8 release

## User Namespaces

# 3.8 release

## Zero page for huge pages

# 3.8 release

## i386 removed

# 3.9 release

**CONFIG\_EXPERIMENTAL removed**

# 3.9 release

## suspend-freeze

# 3.9 release

# ChromeOS laptop support

# 3.9 release

## PCIE nontransparent bridge

# 3.9 release

## KVM for ARM



# 3.10 release

## Nearly tickless support

# 3.10 release

## bcache

# 3.10 release

## mutex & rwsem speedup

# 3.10 release

## ARM big.LITTLE

# 3.10 release

## KVM for MIPS

# 3.11 release

## O\_TMPFILE

# 3.11 release

## Lustre client

# 3.11 release

## NFS 4.2 & SELinux tags



# 3.11 release

## ARM huge pages

# 3.11 release

## zswap

# 3.11 release

## sync(2) speedups

# 3.12 release

## Really tickless

# 3.12 release

## vfs locking improvements

# 3.12 release

## OOM improvements

# 3.12 release

## RAID5 multithreading

# 3.12 release

## some tty locks removed



# 3.12 release

## Major ipc speedups

# Who is funding this work?

1. “Amateurs”	11.6%
2. Intel	9.3%
3. Red Hat	8.7%
4. Linaro	5.9%
5. Samsung	4.0%
6. Texas Instruments	3.7%
7. Unknown Individuals	3.6%
8. IBM	3.1%
9. SuSE	3.1%
10. Vision Engraving	2.7%

# Who is funding this work?

11. Google	2.4%
12. Renesas	1.9%
13. Freescale	1.4%
14. Broadcom	1.3%
15. Oracle	1.3%
16. Consultants	1.3%
17. NVidia	1.2%
18. AMD	1.2%
19. LINBIT	1.1%
20. Free Electrons	1.1%

