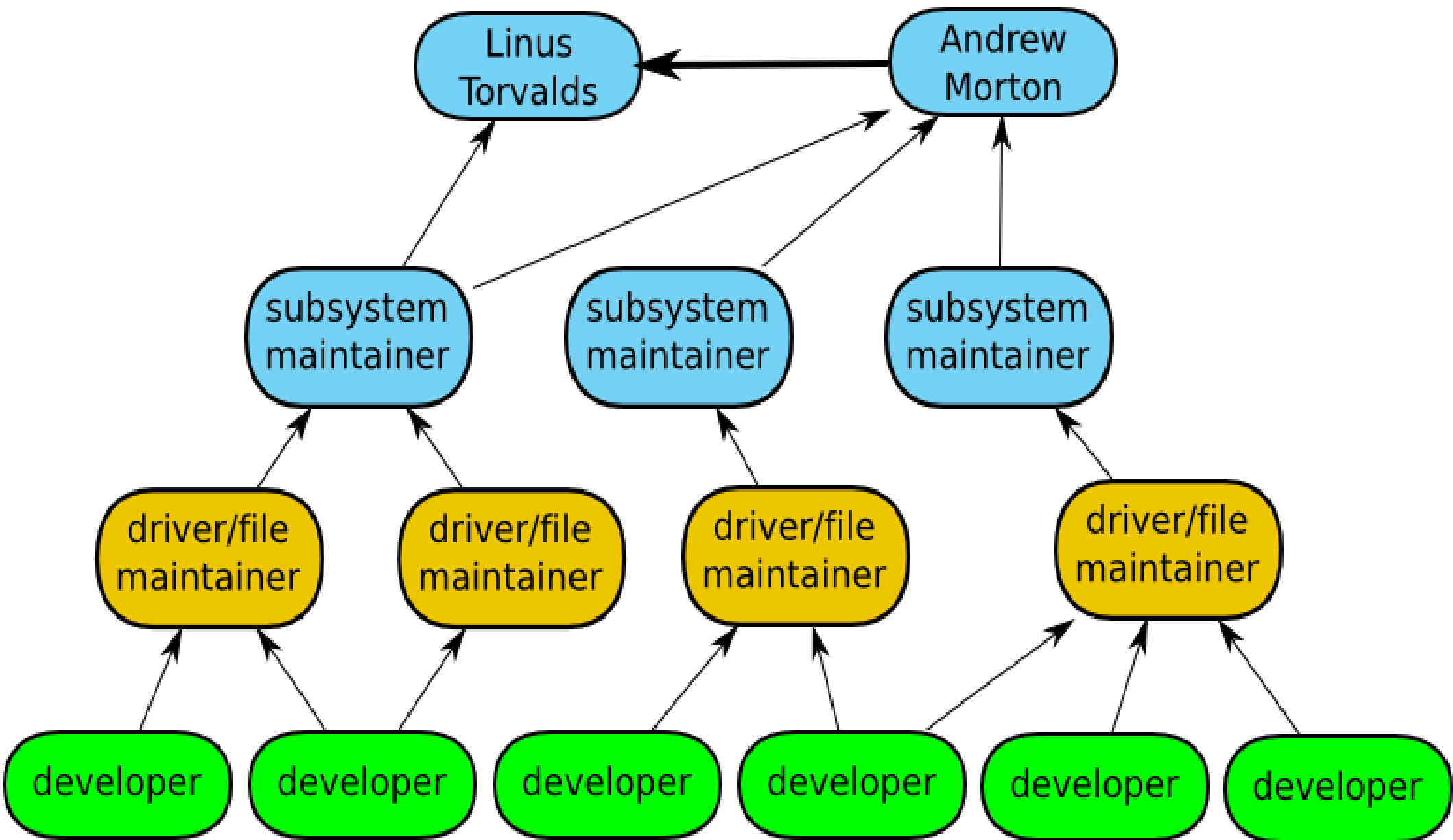


The Linux Kernel Community

How it works, why it matters,
and how to get involved

Greg Kroah-Hartman
SuSE Labs / Novell



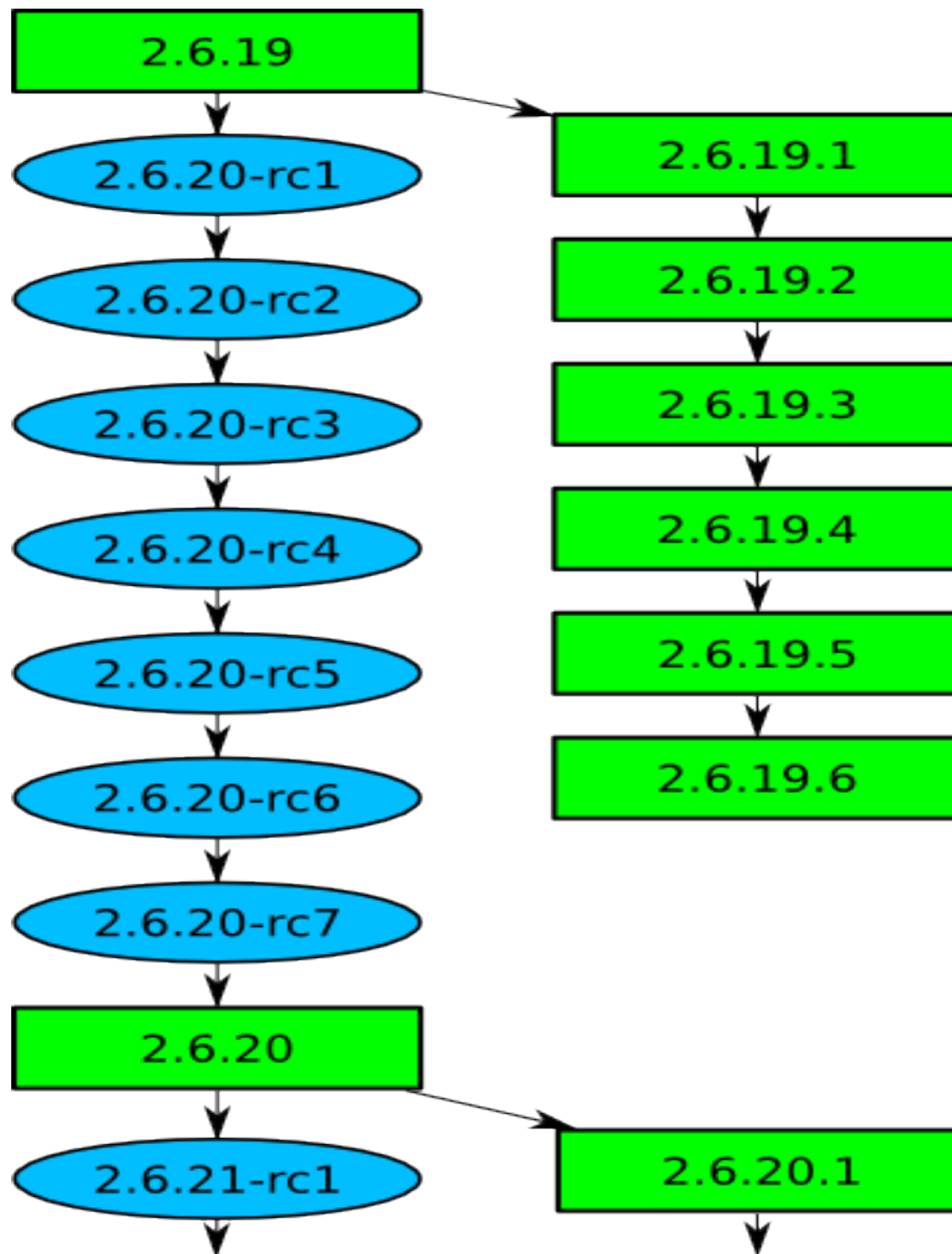
Development or Stable tree?



Development or Stable tree?

Everything is “stable”







**New release every
2½ months**

```

- * Return -EEXIST if there is already a sysfs element with the same name for
- * the same parent.
+ * LOCKING:
+ * mutex_lock(&parent->i_mutex);
- * Called with parent->inode->i_mutex held
+ * RETURNS:
+ * Pointer to sysfs_dirent if found, NULL if not.
+ */

```

3.31 changes per hour

```

- int sysfs_dirent_exist(struct sysfs_dirent *parent_sd,
-                       const unsigned char *new)
+ struct sysfs_dirent *sysfs_find_dirent(struct sysfs_dirent *parent_sd,
+                                         const unsigned char *name)
+ {
-     struct sysfs_dirent * sd;
+     struct sysfs_dirent *sd;
-
-     for (sd = parent_sd->s_children; sd; sd = sd->s_sibling) {
-         if (sysfs_type(sd)) {
-             if (strcmp(sd->s_name, new))
-                 continue;
-             else
-                 return -EEXIST;
-         }
-     }
+     for (sd = parent_sd->s_children; sd; sd = sd->s_sibling)
+         if (sysfs_type(sd) && !strcmp(sd->s_name, name))
+             return sd;
+     return NULL;
+ }
-
-     return 0;
+ /**

```

8.5 million lines

```
if (error)
    goto Error;

/* first, register with generic layer */
kobj_set_dev(&dev->kobj, dev->bus_id);
error = kobj_add_attrs(&dev->kobj, &dev->attrs);
if (error)
    goto Error;

/* notify platform of device entry */
if (platform_notify)
    platform_notify(dev);

/* notify clients of device entry (new way) */
if (dev->bus)
    blocking_notifier_call_chain(&dev->bus->bus_notifier,
                                BUS_NOTIFY_ADD_DEVICE, dev);

error = device_create_file(dev, &uevent_attr);
if (error)
    goto attrError;

if (MAJOR(dev->devt)) {
    error = device_create_file(dev, &devt_attr);
    if (error)
        goto ueventattrError;
}

if (dev->class) {
    sysfs_create_link(&dev->kobj, &dev->class->subsys.kobj,
                    "subsystem");
    /* If this is not a "fake" compatible device, then create the
     * symlink from the class to the device. */
    if (dev->kobj.parent != &dev->class->subsys.kobj)
```

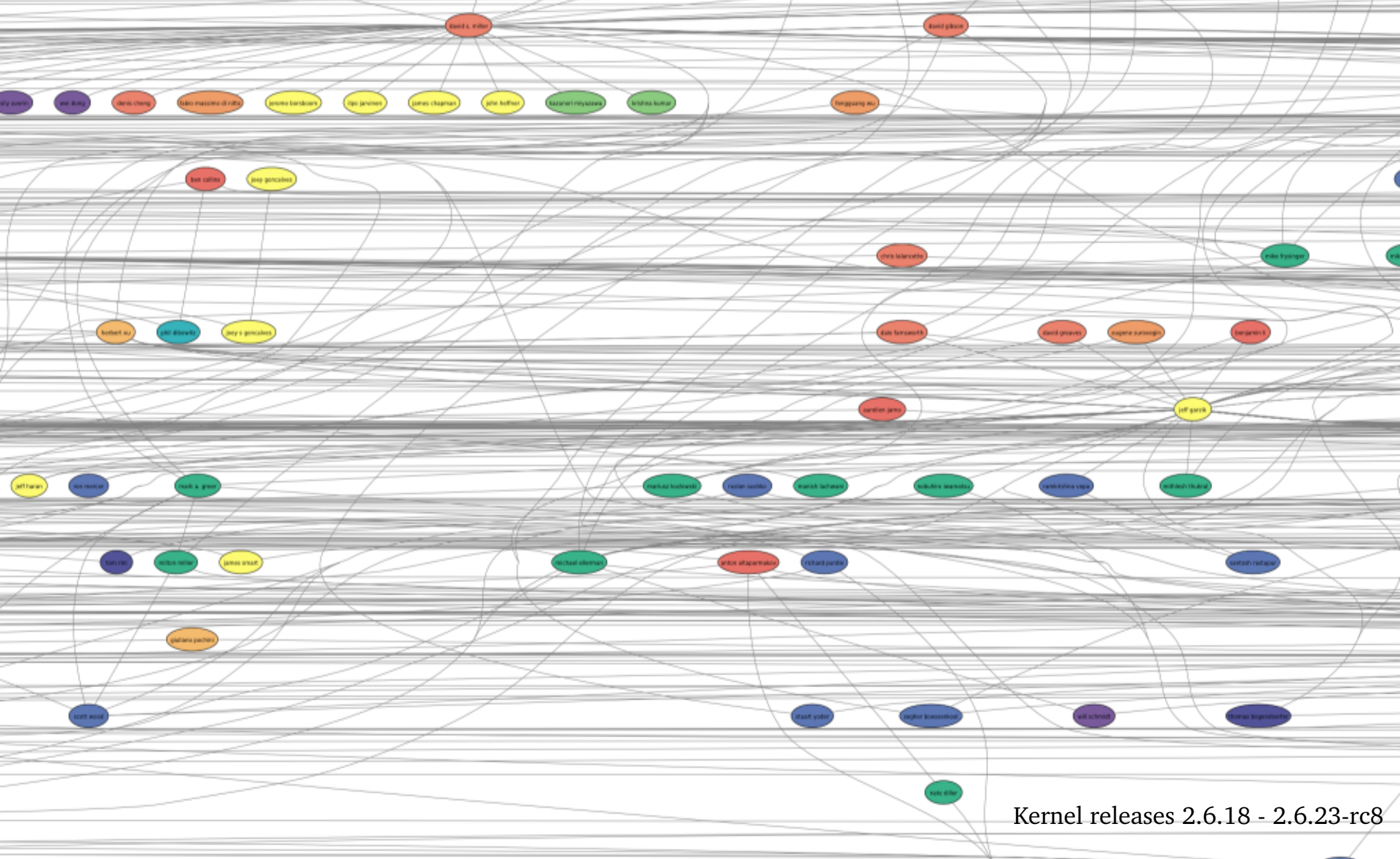
as of the 2.6.22 release

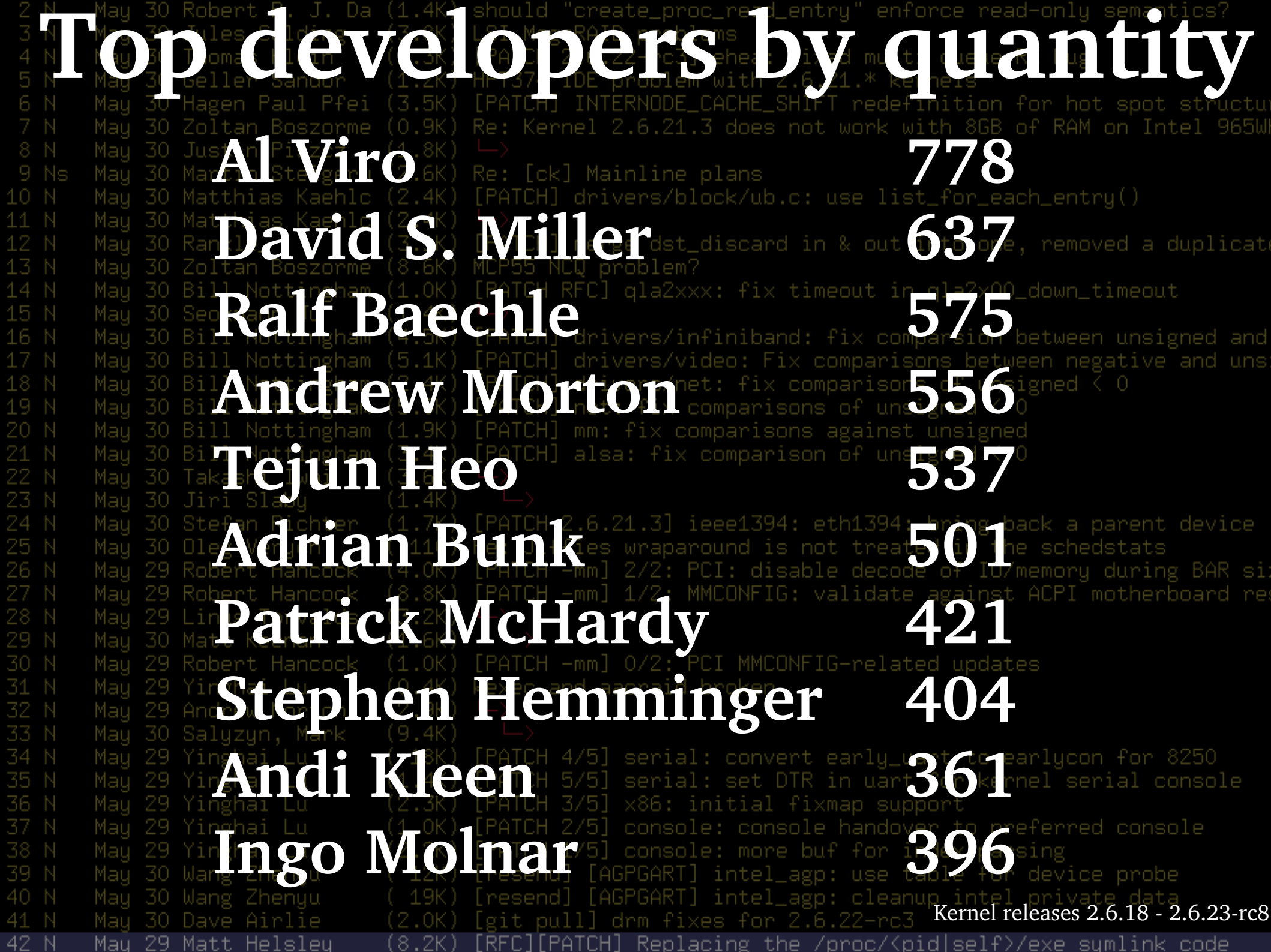
2330 lines added every day
2800 lines modified every day
24 hours a day
7 days a week

```
2007-05-23 07:23 Timur Tabi * | [POWERPC] QE: fix Kconfig 'select' warning with UCC_FAST
2007-05-21 08:56 Domen Puncer * | [POWERPC] 52xx: unbreak lite5200 dts (_pic vs. -pic)
2007-05-17 07:52 Kumar Gala * | [PPC] Remove duplicate export of __div64_32.
2007-05-14 13:22 Kumar Gala * | [PPC] Fix CRMON symbol warnings
2007-05-21 13:59 Linus Torvalds * | [SCSI] aacraid: update linux.kernel.org/pub/scm/linux/kernel.org/scsi-
2007-05-21 02:17 Sumant Patro * | [SCSI] megaraide: in_interrupt timeout and handle io
2007-05-21 20:59 Dave Jones * | [SCSI] fusion: Fix I/O confusion
2007-05-16 14:01 Darrick J. Wong * | [SCSI] aic94xx: asd_clear_nexus should fail if the cleared
2007-05-16 00:00 James Bottomley * | [SCSI] aic94xx: fix aicasm build failure with gcc-3.4.6
2007-05-15 11:01 Salyzyn, Mark * | [SCSI] aacraid: add pci command reset_dev_reset
2007-05-15 01:35 Alan Stern * | [SCSI] lib: fix regression in suspend/resume because you
2007-05-16 10:06 James Bottomley * | [SCSI] aacraid: fix panic on short Inquiry
2007-05-15 09:14 Salyzyn, Mark * | [SCSI] aacraid: Correct sa platform support. (Was: [Bug 846
2007-05-13 22:48 Christoph Hellwig * | [SCSI] NCR53C9x: correct spelling mistake in deprecation no
2007-05-11 19:10 FUJITA Tomonori * | [SCSI] tgt: fix a rdma indirect transfer error bug
2007-05-10 07:22 Sumant Patro * | [SCSI] MegaRAID: Update MAINTAINERS email-id
2007-05-09 20:50 Ed Lin * | [SCSI] stex: minor cleanup and version update
2007-05-09 20:50 Ed Lin * | [SCSI] stex: fix reset recovery for console device
2007-05-09 20:50 Ed Lin * | [SCSI] stex: extend hard reset wait time
2007-05-09 20:50 Ed Lin * | [SCSI] Fix ioc3000 suspend/resume
2007-05-09 15:36 Brian J. Wilson * | [SCSI] pr: proper return codes for dev_reset for SATA d
2007-05-09 11:01 Michael S. Tsirkin * | [SCSI] zfcp: avoid clutter in erp_dbf
2007-05-09 11:01 Martin Peschke * | [SCSI] zfcp: avoid clutter in erp_dbf
2007-05-29 16:34 Alan Stern * | USB: replace flush_workqueue with cancel_sync_work
2007-05-25 19:55 Linus Torvalds * | // [v2.6.22-rc3] Linux 2.6.22-rc3
2007-05-26 00:39 Hugh L. Wu * | fix compat console uniman regression
2007-05-25 15:49 Linus Torvalds * | Merge branch 'for-linus' of linux.kernel.org:/pub/scm/linux
2007-05-24 18:32 Michael S. Tsirkin * | IPB/cm: join cleanup pub_cleanup()
2007-05-24 14:02 Michael S. Tsirkin * | IPB/cm: fix timeout check in ipb_cm_dev_stop()
2007-05-24 16:51 Stefan Roscher * | IB/ehca: Fix number of send WRs reported for new QP
2007-05-24 16:05 Eli Cohen * | IB/mlx4: Initialize send queue entry ownership bits
2007-05-23 15:16 Roland Dreier * | IB/mlx4: Don't allocate RQ doorbell if using SRQ
2007-05-25 15:48 Linus Torvalds M \ \ \ Merge branch 'upstream-linus' of master.kernel.org:/pub/sc
2007-05-25 20:48 Alan Cox * | pata_hpt37x: Further improvements based on the IDE update
2007-05-25 20:39 Alan Cox * | pata: Trivia
2007-05-25 05:02 Jeff Garzik * | [libata] sata_via, pata_via: Add PCI IDs.
2007-05-25 04:39 Jeff Garzik * | [libata] Fix decoding of 6-byte commands
2007-05-25 09:48 Uwe Koziol * | libata: sata_sis fixes
2007-05-23 14:26 Tony Breeds * | Fix build failure for drivers/ata/pata_scc.c
2007-05-24 23:40 Jeff Garzik * | [libata] sata_mv: add TODO list
2007-05-24 23:35 Jeff Garzik * | [libata] sata Promise: fix flags typo
2007-05-18 13:12 Christoph Hellwig * | [PATCH] ocfs2: use generic_segment_checks
2007-05-09 17:34 Mark Fasheh * | ocfs2: fix inode leak
[main] 90c615bc42886f23a6112733a949d0f6f6be343b6 - commit 51 of 57091 (0%)
```

2.6.18 to 2.6.22

2383 Developers





Top Signed-off-by:

Andrew Morton 9130

Linus Torvalds 8291

David S. Miller 3526

Jeff Garzik 2328

Greg Kroah-Hartman 2087

Paul Mackerras 1515

Mauro Carvalho Chehab 1433

Russell King 1175

James Bottomley 1139

Andi Kleen 1125

Who is funding this work?

- 1.
- 2.
3. Red Hat 12.6%
4. IBM 8.5%
5. Novell 7.2%
6. Linux Foundation 6.8%
7. Intel 4.1%
8. SGI 1.6%
9. MIPS 1.5%
10. Consultants 1.5%

Who is funding this work?



1. Unknown Individuals	18.1%
2. “Amateurs”	13.3%
3. Red Hat	12.6%
4. IBM	8.5%
5. Novell	7.2%
6. Linux Foundation	6.8%
7. Intel	4.1%
8. SGI	1.6%
9. MIPS	1.5%
10. Consultants	1.5%

Who is funding this work?

...

139. Motorola

0.0%

Who is funding this work?

...

15. MontaVista	1.1%
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...

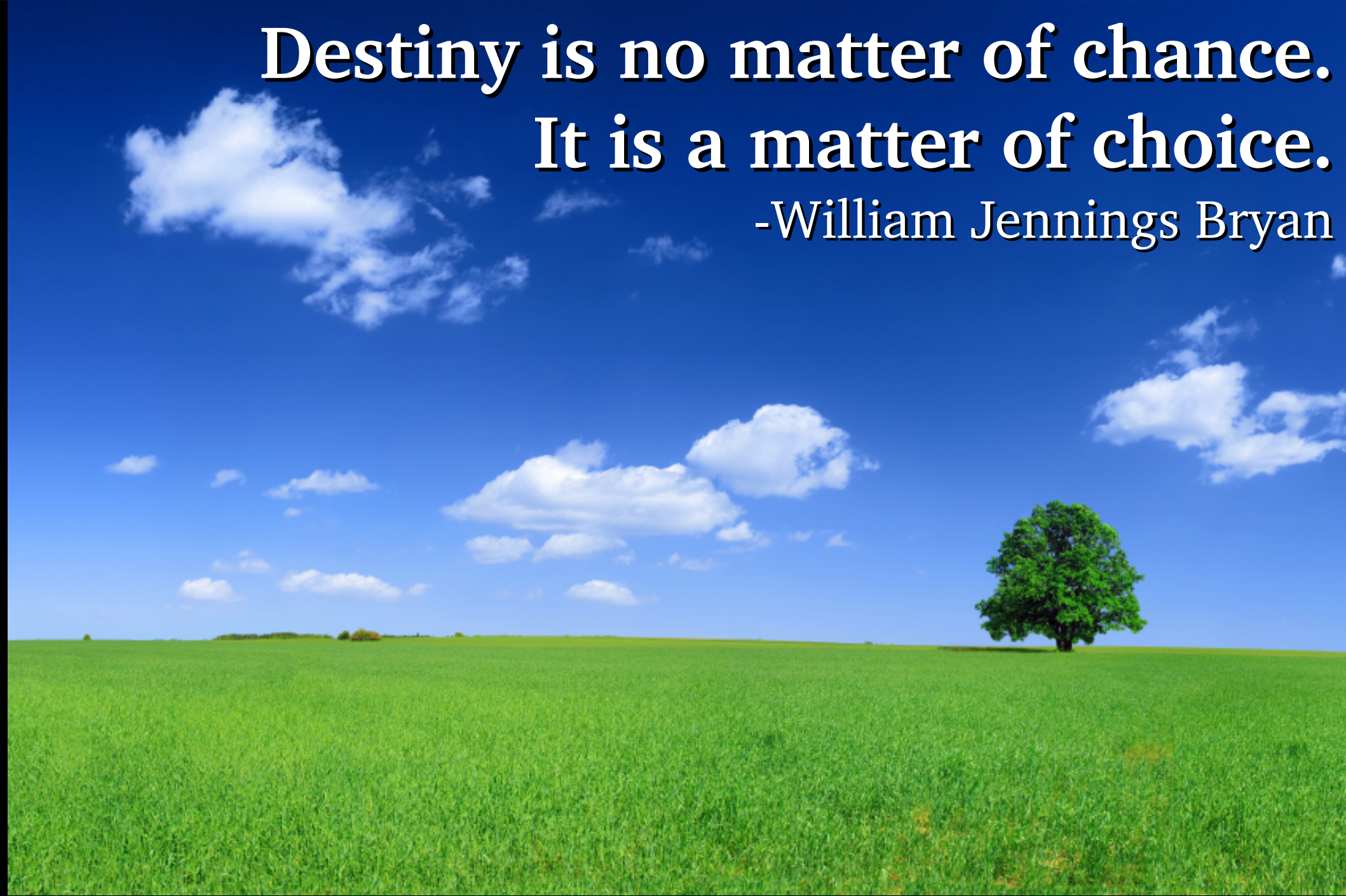
139. Motorola	0.0%
---------------	------

Linux will comprise over 60% of our mobile portfolio in the near future.

- Christy Wyatt



**Destiny is no matter of chance.
It is a matter of choice.**
-William Jennings Bryan



Documentation/HowTo

Kernel Newbies



Kernel Janitors



The Linux Driver Project is focused on creating and maintaining [OpenSource](#) Linux kernel drivers for all types of devices.

About us

We are a group of Linux kernel developers (over 80 strong), and project managers (over 10) that develop and maintain Linux kernel drivers. We work with the manufacturers of the specific device to specify, develop, submit to the main kernel, and maintain the kernel drivers. We are willing and able to sign NDAs with companies if they wish to keep their specifications closed, as long as we are able to create a proper GPLv2 Linux kernel driver as an end result.

Joining

If you are a company that wishes to have a Linux kernel driver written and maintained by this group, please go to the [Company Page](#).

www.linuxdriverproject.org

Frequently Asked Questions

We have quite a long list of [Frequently Asked Questions](#) that you might wish to peruse before asking them to the developers or on the [Mailing Lists](#).

Mailing Lists

We currently have two main mailing lists, one for [Project Managers](#), and one for [Developers](#). Please see the [Mailing Lists](#) page for more details.

History

This project was started with an announcement to the Linux Kernel mailing list by [GregKH](#), and has enabled many different manufacturers to achieve full Linux support for their devices.

Questions?

If you still have questions, or do not see the answer for what you are looking for, please feel free to contact [GregKH](#).

