Android

A case study of an Embedded Linux Project

Greg Kroah-Hartman greg@kroah.com

http://github.com/gregkh/android-presentation



Disclaimer

Everything I say here is my opinion alone and not the opinion of my employer Novell. Heck, they don't even realize I'm here giving this talk.

Everything said here is from the viewpoint of an experienced member of the Linux kernel community, who also happens to have a lot of experience in the embedded arena as well.

If you have any questions / concerns / flames, you know where to find me.

Focus on the kernel only. Who cares about userspace?



DESIGNED BY: ALEXMON

Everything I complain about, can be fixed tomorrow with no changes to any Android userspace program.

Almost all of these changes can only be done if Google developers allow them, as they will require changes to the Android libraries due to the user/kernel interfaces involved.

Things Google did right

Linux



android.git.kernel.org

Followed the license of the kernel

Things Google did wrong

android.git.kernel.org

Ignored the community

Thought they were special

Thought they were alone

android.git.kernel.org 6 different full kernel trees

android.git.kernel.org 33 different kernel branches

33 different kernel branches

- 2.6.25 4 branches
- 2.6.27 3 branches
- 2.6.29 9 branches
- 2.6.30 1 branch
- 2.6.32 7 branches
- 2.6.33 6 branches
- 2.6.34 3 branches

android.git.kernel.org 1 old stale Linus tree

2 known stand-alone drivers

2 known stand-alone drivers

One has 13 different branches

2.6.34-rc2 based branch

283 files changed 47,715 lines added 363 lines removed

2.6.34-rc2 based branch

50% drivers
30% filesystem
15% architecture
5% core

commit b0a0ccfad85b3657fe999805df65f5cfe634ab8a
Author: Greg Kroah-Hartman <gregkh@suse.de>

AuthorDate: Mon Oct 5 16:29:29 2009 -0700

Commit: Greg Kroah-Hartman <gregkh@suse.de>

CommitDate: Fri Dec 11 12:23:21 2009 -0800

Staging: android: delete android drivers

These drivers are no longer being developed and the original authors seem to have abandonded them and hence, do not want them in the mainline kernel tree.

So sad : (

Cc: Brian Swetland <swetland@google.com>
Signed-off-by: Greg Kroah-Hartman <gregkh@suse.de>

You are special and unique, just like everyone else.





It's just a fork, no big deal.



open handset alliance

