Android

A case study of an Embedded Linux Project

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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.
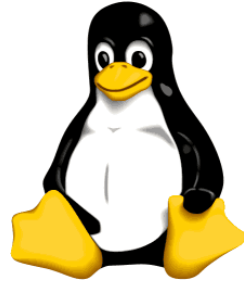# Who cares about userspace?

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

Reinvented the wheel

Thought they were special

android.git.kernel.org

android.git.kernel.org

6 different full kernel trees

android.git.kernel.org

33 different kernel branches

android.git.kernel.org

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

android.git.kernel.org

2 known stand-alone drivers

`android.git.kernel.org`

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

Hide the source in pub

tsamedien

You are special and unique, just like everyone else.

Image courtesy of snowcrystals.com