



# Android patches in Staging

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# Recent Progress

148 patches to drivers/staging/android/ since plumbers last year  
41 files changed, 1212 insertions(+), 2984 deletions(-)

Android Sync has been de-staged! (Thanks to Gustavo Padovan)

Timed output/Timed GPIO removed! (Thanks to Rob Herring)

Lots of work on ION driver (Laura Abbott being top contributor there)

Nothing new added this year

# Remaining drivers

## Ashmem

- Upstreaming efforts stalled
- Memfd closely matches basic usage
- Still need memory unpinning feature

## Ion

- [See Laura's session later today]

## Lowmemorykiller

- Mempresure notifiers upstream, supported in AOSP via ulmkd
- Unfortunately per-process memory usage (ie: who to kill) is hard to calculate efficiently in userspace, causing ulmkd performance to not match in-kernel lmk
- Transition has stalled

# Questions to think about

What to do about ashmem?

- Add shrinker based memory unpinning IOCTL to tmpfs?
- Just merge it as is, ala binder?

Should we push Google Android developers to continue using staging?

- Sdcardfs
- Uid-cputime
- memory\_state\_time



Thanks!

Questions?

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