SAILING INTO PORTING WITH SONY OPEN DEVICES

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OUTLINE

Intro

Sony AOSP

Sony AOSP porting compare to X?

Sailfish OS Community ports for Sony Xperia devices

Questions and ressources
Notes: Intro

- Get more people into porting be it mainline or hybris - Hybris porting especially for open devices is an easy entry pointing that can lead to other efforts such as mainline porting later. More on further slides.

- Sony AOSP is a good platform for new comers to delve into
  - Documentation is good, the pr

- I want to give back what I’ve learned over the years, I want to give more people the opportunity to have high quality ports

- If done right ports can work very good - the limitations reach their peak in the quality of the underlying hardware adaptation of the vendor. Qualcomm isn’t good, others are worse

- Get more people into porting be it mainline or hybris

- Sony AOSP is a good platform for new comers to delve into

- I want to give back what I’ve learned over the years, I want to give more people the
About me

- Software engineer at Jolla
- I’m quite flexible, I work in quite many areas all over the place
- Mostly system-engineering, hardware adaptations related task
- Organize community infra, other community work
WHY CHOOSE SONY AOSP

▶ structure
▶ open communication
▶ long life time
CONTRIBUTING TO SONY AOSP

- Easy to start with
- Requires only a device and a Linux computer
- Some programming skills
- Just follow their docs
HOW JOLLA CONTRIBUTES TO SONY AOSP

- Midrange Sony’s as reference port
- Focus on refining our target devices hal
- Frequent general contributions
WHY ANOTHER HYBRIS PORT, WHAT ABOUT MAINLINE?

- Hybris ports are easier to get doing → more things can be reused
- Sony’s hal is good and open
- Short vs. long time goals
- Downstream kernels vs. mainline kernel plus user land driver parts
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- Sony AOSP porting compare to X?

- Why another hybris port, what about mainline?

Notes: Why another hybris port, what about mainline?

- Downstream kernels are harder to maintain in the long run, they are stale unless downstream code is ported to newer versions
MAINLINE PORTING

- Mainline ports are a lot "cleaner" but require more effort
- For mainline an establish port such as PinePhone or SDM845 ports can be a good start
- Another example case would be Sailfish OS on KVM
REUSING EXISTING PROCESSES

- OTA infrastructure as used by Jolla ports
- Repository infrastructure
- Easier to stay up to date
- Other existing structures can be reinvented for community ports
- Can be reused in mainline somewhat
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Reusing existing processes

Notes: Reusing existing processes

- OTA updates already work very similar to Jolla ports, community ports only need to trigger them a little different.
- Changes to device repository often apply to all devices of either all devices of the same
  - Android base
  - vendor
  - device release year
  - camera stack (Qcom CAMX vs. legacy)
- Kernel updates can reused in the same way but sometimes require extra work because of Hardware differences
- Changes can be taken very often as is
  - Device repository layout is already unified but Sony community port can reuse even more
  - Kernel updates are already tested by Jolla for the most part
PROJECT MANAGEMENT

- Issue tracking, take example of Jolla issue tracking
- See how the Sailfish OS docs can be used
- Document things that diverge, if need adjust official documentation

Releasing

- Dnf repodiff generates changelogs from bugtracker
- Manual changelog in addition for each release to make things less complex
- Proper issue tracking, diagnosing and writing diary can save a lot of time
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- Sailfish OS Community ports for Sony Xperia devices

Project management

Notes: Relasing

- Progress tracked through Github issues, changes go to rpm changelogs
- Plan things in the open, split tasks up.
BUILDING DROID-HAL PACKAGES ON THE OBS (ALMOST)

- Sometimes things don’t work exactly on the Community obs
- A few scripts work around that such as when building droid-hal packages
- Easier less potential errors but can take more time
QUESTIONS AND RESOURCES


