

SAILING INTO PORTING WITH SONY OPEN DEVICES

Björn Bidar, Jolla Oy

FOSDEM, 5th February 2023



OUTLINE

Intro

Sony AOSP

Sony AOSP porting compare to X?

Sailfish OS Community ports for Sony Xperia devices

Questions and ressources





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 refrence port
- ► Focus on refining our target devices hal
- Frequent general contributions





WHY ANOTHER HYBRIS PORT, WHAT ABOUT MAINLINE?

- ightharpoonup Hybris ports are easier to get doing ightharpoonup 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





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





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 fron 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





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 RESSOURCES

- "Open devices open devices sony developer world." https://developer.sony.com/develop/open-devices.
- "sonyxperiadev/bug_tracker github." https://github.com/sonyxperiadev/bug_tracker/issues.
- "Supported devices and functionality sony developer world." https://developer.sonv.com/develop/open-devices/get-started/supported-devices-and-functionality/.
- "Contribute open devices sony developer world," https://developer.sony.com/develop/open-devices/more-information/contribute.
- [5] S. L. Jolla & Community, "Sailfish x xperia android 11 build and flash sailfish os documentation." https://docs.sailfishos.org/Develop/HW Adaptation/Sailfish X Xperia Android 11 Build and Flash/.
- D. V. A. D. Adam Pigg(Piggz), "Sailfish os dont be evil," https://github.com/sailfish-on-dontbeevil,
- D. Caleb Connolly, Joel Selvarai, "Qualcomm snapdragon 845." https://wiki.postmarketos.org/wiki/Qualcomm_Snapdragon_845_(SDM845). I list Postmarketos as reference here, no Sailfish OS port exists right now.
- [8] "build - sfos community ports for sony xperia devices." https://github.com/SailfishOS-SonyXperia/bugs/issues/70.
- [9] "bugs - sailfish os community ports for sony xperia devices." https://github.com/SailfishOS-SonyXperia/bugs/.
- "Dnf-plugins-core: repodiff: Improve changelog output." https://github.com/rpm-software-management/dnf-plugins-core/pull/456.
- "droid-priconf-sync build sfos community ports for sony xperia devices." https://github.com/sailfishOS-SonyXperia/build#droid-priconf-sync.
- [12] "build sfos community ports for sony xperia devices." https://github.com/SailfishOS-SonyXperia/build/blob/master/README.org.



