

Sailfish OS built on Sony Open Devices

Andrew Branson

Jolla Oy

droidcon Berlin 2017



SAILFISH OS

What is Sailfish OS?

- Glibc-based mobile Linux distribution for ARM & x86 architectures.
- More closely aligned with desktop Linux style general purpose computing than other mobile OSes:
 - User root access by rights not hacks.
 - Wayland/Qt5 for UI. Gecko based browser.
 - Libhybris to wrap Bionic Android drivers and services.
 - RPM, libzypp & PackageKit for package management.
 - Common OSS middleware & tools: systemd, ConnMan, D-Bus, dconf, BlueZ, Bash, PulseAudio, GStreamer, Tracker and more

Sailfish Applications

- Native apps Qt/QML based:
 - QML UI framework 'Silica' (not OSS - yet).
 - Customized Qt Creator for simple app development.
 - Official Jolla store on-device.
 - Community repository: openrepos.net
- Supports Android apk apps through 'Alien Dalvik'
 - API 20 – Android 4.4 KitKat
 - Third-party licensed
 - Bridged to core OS services: contacts, notifications, calls etc

Building SailfishOS

- Hardware Adaptation Development Kit:
 - Porting and building guide
 - SDK (chroot) including Scratchbox2 targets and Android build env
 - Libhybris supports BSP up to Marshmallow. Nougat support nearly complete
- 50+ community adaptations so far since Sailfish launch
 - #sailfishos-porters on Freenode
- Builds HAL from hybris patched Android source (AOSP/CM)
 - Imaging tool constructs image from HAL and Sailfish repos
- Flash image to device with fastboot, and run!

Sailfish OS for Xperia X

- Sailfish port based on Marshmallow ODP AOSP almost complete for f5121 (Xperia X).
 - Support for other ODP devices will follow
 - Move to Nougat base and full 64bit.
- Image and flashing tool will be sold to consumers
 - Sales 27th September
 - Downloads and Store access launch 11th October
 - Includes access to Store for OTA updates and access to licensed components (Alien Dalvik, MS Exchange sync, XT9...)
- Anyone free to build their own image from public sources...

Building Sailfish OS for Xperia X

- Repo manifest available at:
 - <https://github.com/mer-hybris/android>
 - Branch: hybris-sony-aosp-6.0.1_r80
 - Will support additional Xperia devices as ports become stable
- Guide:
 - <https://sailfishos.org/develop/hadk/>
- Official Sailfish release version target for binary image is 2.1.3.
- Current build target is 2.1.1 but mostly HW adaptation bugs remain...
 - Bluetooth, better big.LITTLE handling, fingerprint sensor, NFC and more

End

Contact: andrew.branson@jollamobile.com

- abranson on Freenode
 - #sailfishos-porters

<http://jolla.com/jobs>

