

Replicant for GTA04

OpenPhoenix
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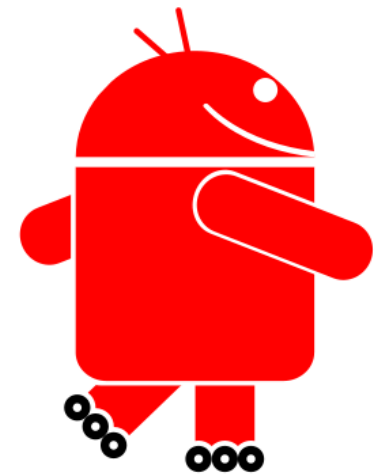
Agenda

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- Porting Status
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 - Kernel Status
- Replicant Development
 - Toolchain & Device Access

About Replicant

„Replicant is a **fully free** Android distribution running on several devices, [...] putting the emphasis on freedom and **privacy**.“ – Replicant.us

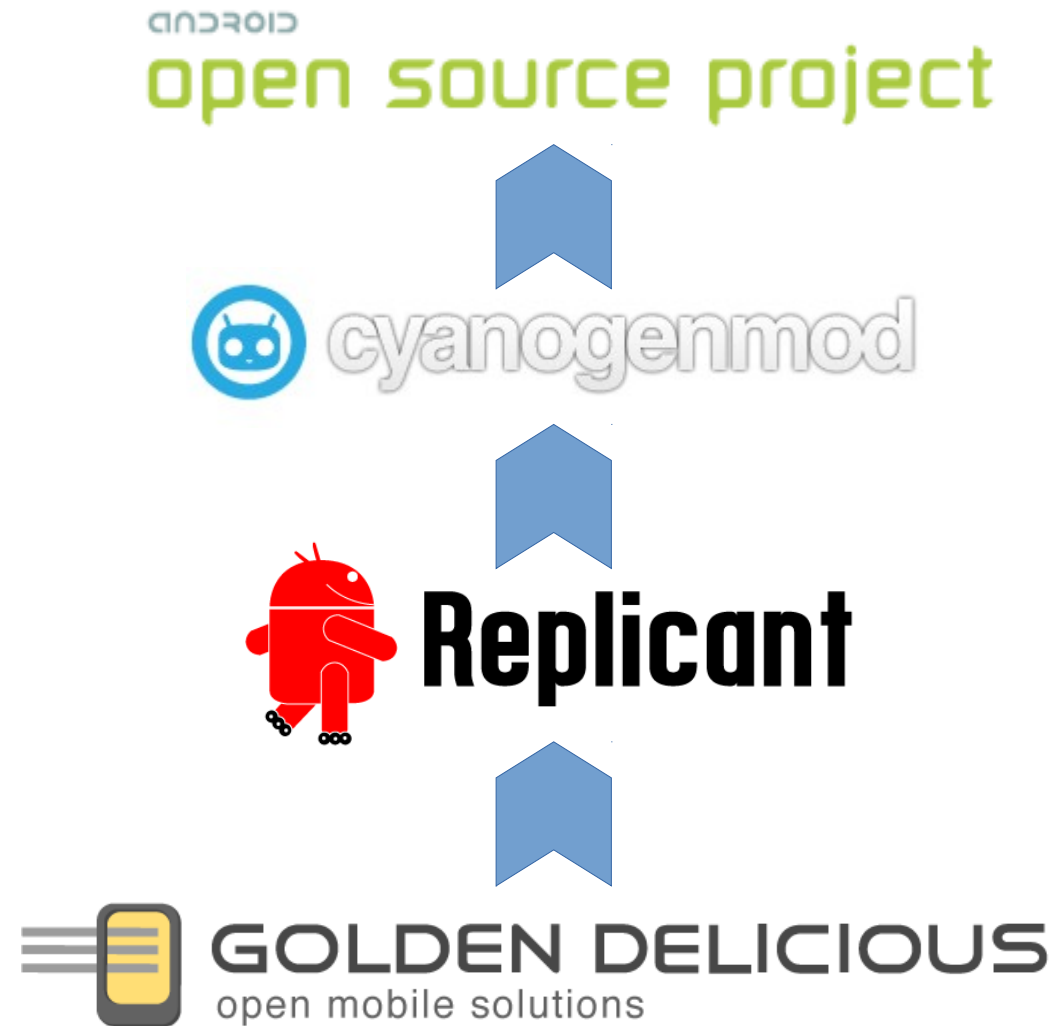
- FOSS App Store: F-Droid
- Non-free blobs removed
- Anti-vendor ports
- GTA04 support



Replicant

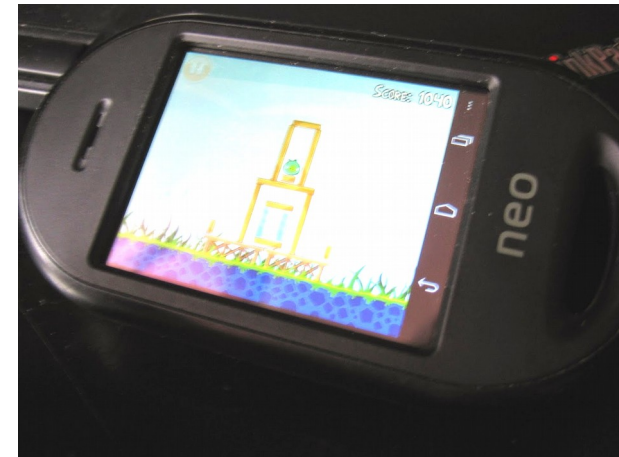


Android Inheritance



Goldelico Replicant

- Single Partition (no initrd)
- WiFi Firmware (non-free)
- Universal Kernel (v3.12)
 - GTA04 / Letux 2804
 - Letux 7004
 - Letux 3704
 - Future: Neo900, Pyra, ...



Porting Status

- Developer (root) access
- Sensors
 - Accel, Ambient Light
- GPS, WiFi
- Radio Interface Layer
 - SMS, Voice Calls, USSD, 3G Data



TODO: Power-Management, RIL improvements, Bluetooth, more Sensors, HW routing

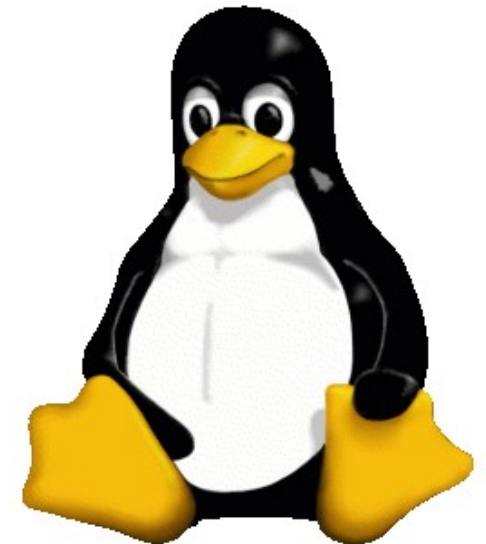
Milestones

- Upstream Replicant 2.3
- GTA04 Kernel 3.12
 - ADB, Suspend, Wakelocks, re-convince upstream
- Goldelico Replicant 4.0
- Goldelico Replicant 4.2
 - Voice Routing, Sensors, Universal Image
- Upstream Replicant 4.2
 - GPS, Encryption, Headset



Kernel Status

- Superset of goldelico/master (3.12)
 - Android Debug Bridge, Wakelocks, Netfilter
 - ~75 additional patches (30 adb, 9 defconfig, 7 otg)
 - Missing: Bluetooth, Power Management
- Future: Rebase to newer version
 - Device-Tree
 - Neo900
 - Pyra-Handheld



Replicant Development

- Repositories (Manifest)
 - Goldelico Overlay (local manifest)
- File Structure
 - device/goldelico/gta04/
 - kernel/goldelico/gta04/
 - goldelico/
 - out/target/product/gta04/



→ <http://projects.goldelico.com/p/gta04-replicant/page/Replicant-4>

Toolchain & Device Access

- Android.mk: LOCAL_MODULE
 - mmm path/to/module/
 - make clean-\$(MODULE)
- Package „android-tools-adb“ (Debian)
 - adb push out/target/[...]/libX.so /system/lib/libX.so
 - adb shell
 - adb logcat | grep XYZ



Thank You!



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