OPENHARMONY, AN OPERATING SYSTEM WITH OPENCHAIN IN MIND

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Agenda

- Chapter 1: The Author
- Chapter 2: openharmony
- Chapter 3: Open source and Huawei
- Chapter 4: The Open Source Technology Center
- Chapter 5: openharmony hits the road in Europe
- Chapter 6: The nature of the beast
- Chapter 7: The Tale
- Chapter 8: One Policy to rule them
- Chapter 9: Can never be too prepared
- Chapter 10: Release Early, Release Often
- Chapter 11: Back Again
Chapter 1: The author

- Director, Open Source Technology Center at Huawei
- MS in Computer Engineering, AI and Robotics
- 15+ year in Open Source @ Wind River and Intel OTC
- Kernel developer, FAE, PM, Director of Product, GM
- Contributed to Yocto Project, Zephyr, Openchain, OVA, Eclipse

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FOSS Compliance Must Come First.
Chapter 2: openharmony

- Edge to cloud o.s. for IoT and consumer devices
- Initially developed by Huawei
- Leverages broad spectrum of open source components
- Delivers on the promise of autonomous, cooperative devices
- Cooperation at the edge, with efficiency and privacy in mind
- Initial China code @ https://gitee.com/openharmony
- European code base being prepared
Open Source is strategic to Huawei
Breaks vendor lock-in
Huawei products built on technology shared by most
If done right, increases Huawei’s brand value
All eyes on us
Chapter 4: The Open Source Technology Center

- Pan European
- Built with Best In Class in mind
- Milan, Munich, Warsaw, Helsinki, London, Cork, Lyon
- Engineering, Marketing, Product Management, Field Eng, Evangelism
- First big project: take openharmony to Europe

Come talk to us

- ohos-eu-incubator on freenode
- incubateohos@huawei.com
Chapter 5: *openharmony* hits the road in Europe

Figure 1: *openharmony* EU roadmap

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WHY

- OS in full open since day #1
- Compliance, OpenChain fundamental building blocks
- The first step of a long journey
- An example for others
WHAT

All internals
WHEN

- Now: Policy
- In the future many things in the works (Toolchain, etc.)
POLICY

- Decoupling general, “constitutional” groundwork from specific annexes
- Next: In different versions. Company | projects (including working group) | firmware/non firmware
TOOLCHAIN

Scancode ➔ Fossology

- How come?
- Integrated in a CI/CD (Via a Gitlab CI Pipeline)
- Want to have a peek? https://git.ostc-eu.org/playground/fossology
WIP

How to generate a graph of dependencies to look at the copyleft interactions and decisions on compliance of the package license (likely at– or after build time).

Note: SPDX can’t store abstract dependencies

A job for DepTree™
SPDX DATABASE OF DECISIONS

- Results of our scans + decisions
- Results from other sources (e.g. Debian)
- Little help as of now from Clearly Defined (due to different focus)
- CC-by under condition of no liability, no mention
- Full SPDX compliant for feeding into Fossology (with simple transformations)
- Contributed upstream?
REUSE, FOR OWN SOFTWARE

- Pull request for upstream? (Just an idea)
OVER TO DAVIDE

thank you

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