

# OPENHARMONY, AN OPERATING SYSTEM WITH OPENCHAIN IN MIND

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# Agenda

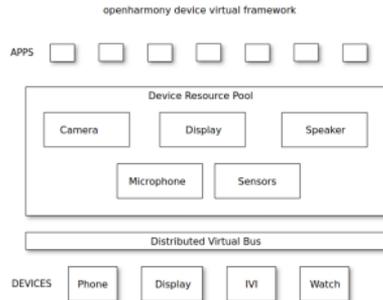
- Chapter 1: The Author
- Chapter 2: *openharmoney*
- Chapter 3: Open source and Huawei
- Chapter 4: The Open Source Technology Center
- Chapter 5: *openharmoney* hits the road in Europe
- Chapter 6: The nature of the beast
- Chapter 7: The Tale
- Chapter 8: One Policy to rule them
- Chapter 9: Can never 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



## 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

## Chapter 3: Open source and Huawei

### FOSS compliance must come first

- 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 **openharmoney** to Europe



Come talk to us

- **ohos-eu-incubator** on *freenode*
- **incubateohos@huawei.com**

# Chapter 5: *openharmy* hits the road in Europe

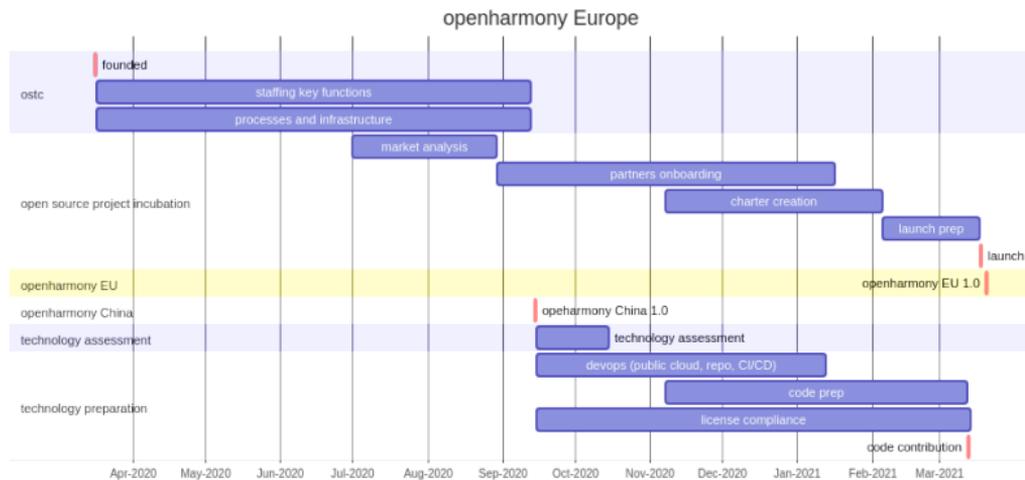


Figure 1: openharmy EU roadmap

# 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

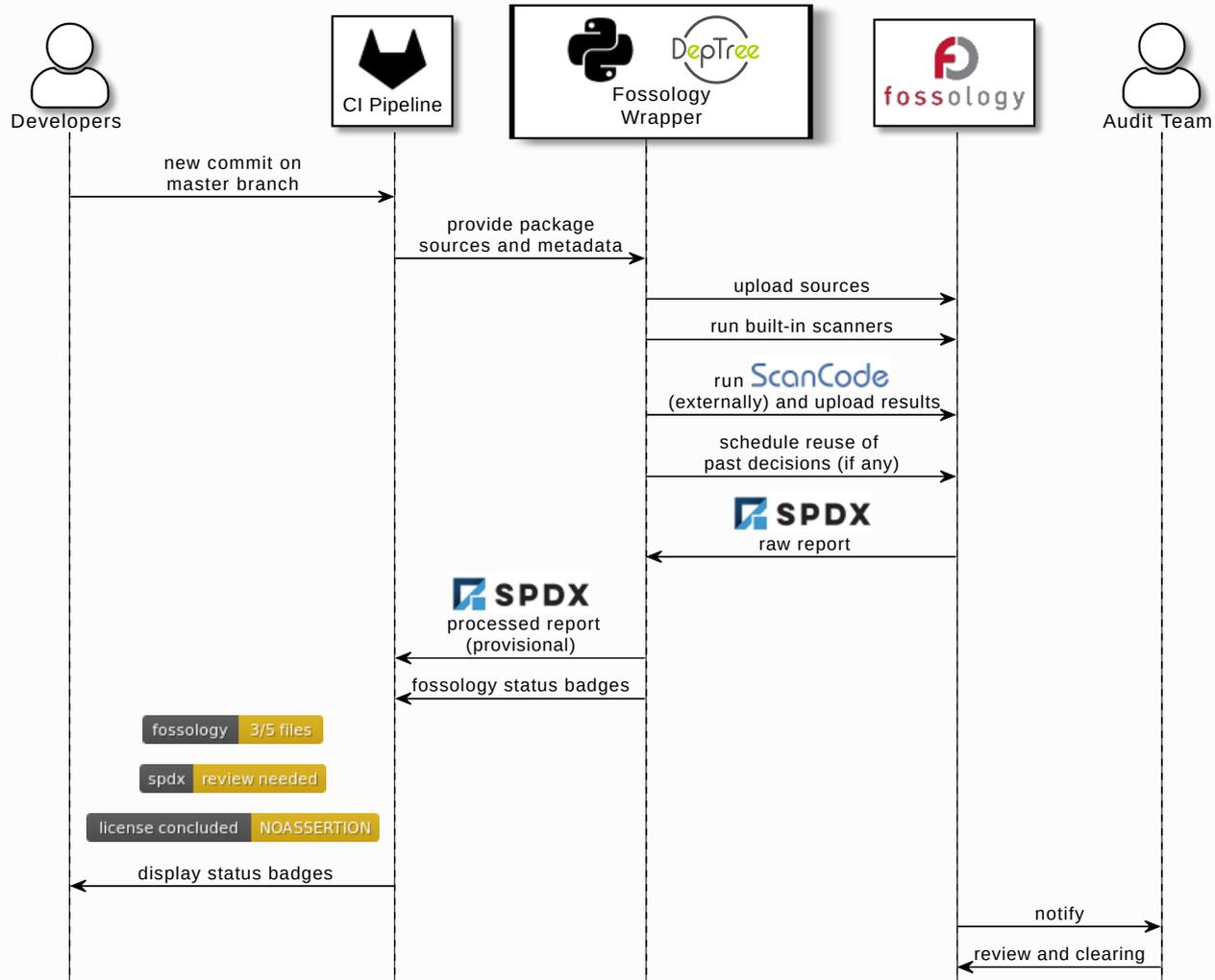
- Already published (first version) <https://git.ostc-eu.org/OSTC/OHOS/governance/ip-policy>
- Decoupling general, “constitutional” groundwork from specific annexes
- Next: In different versions. Company | projects (including working group) | firmware/non firmware

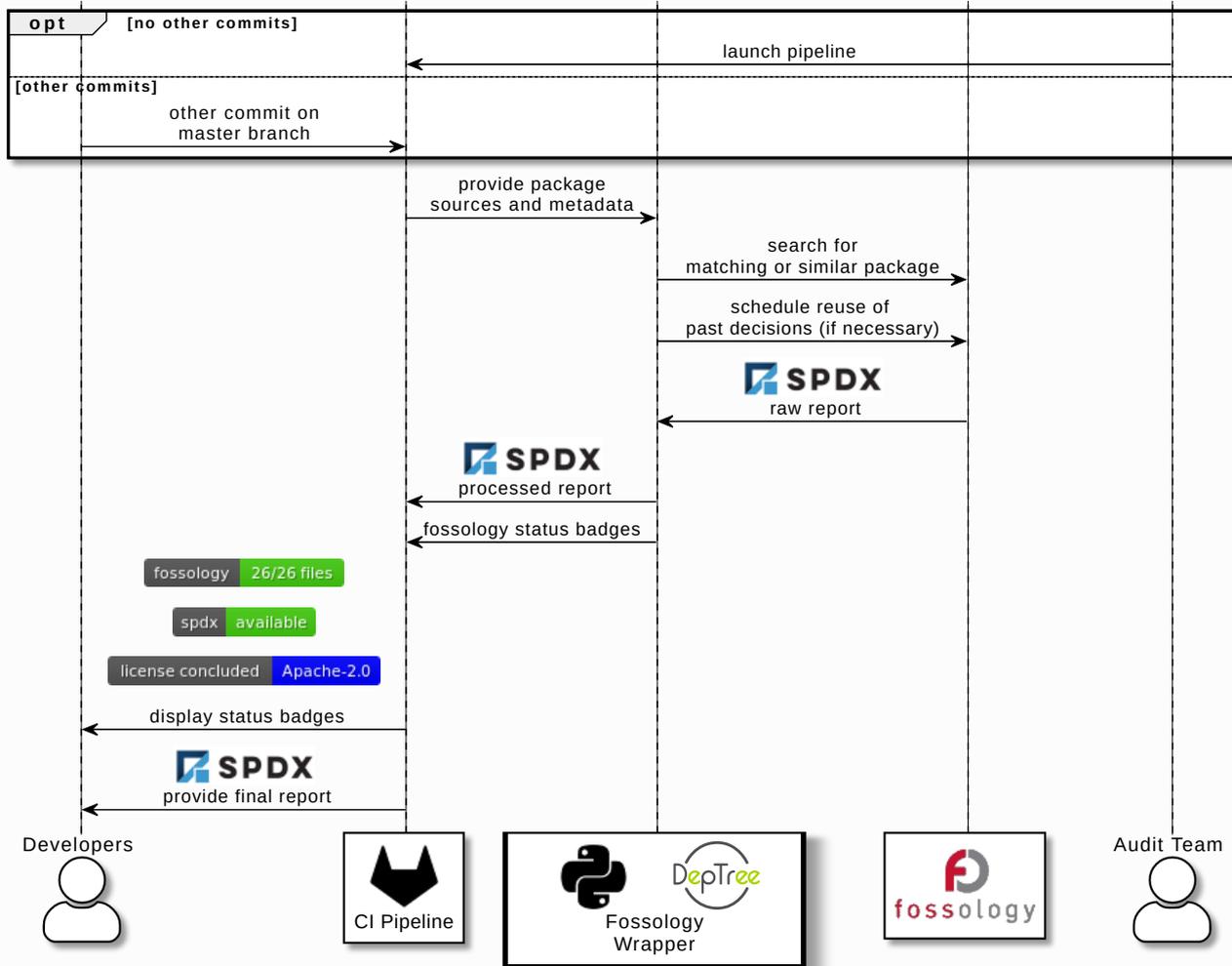
# TOOLCHAIN

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?

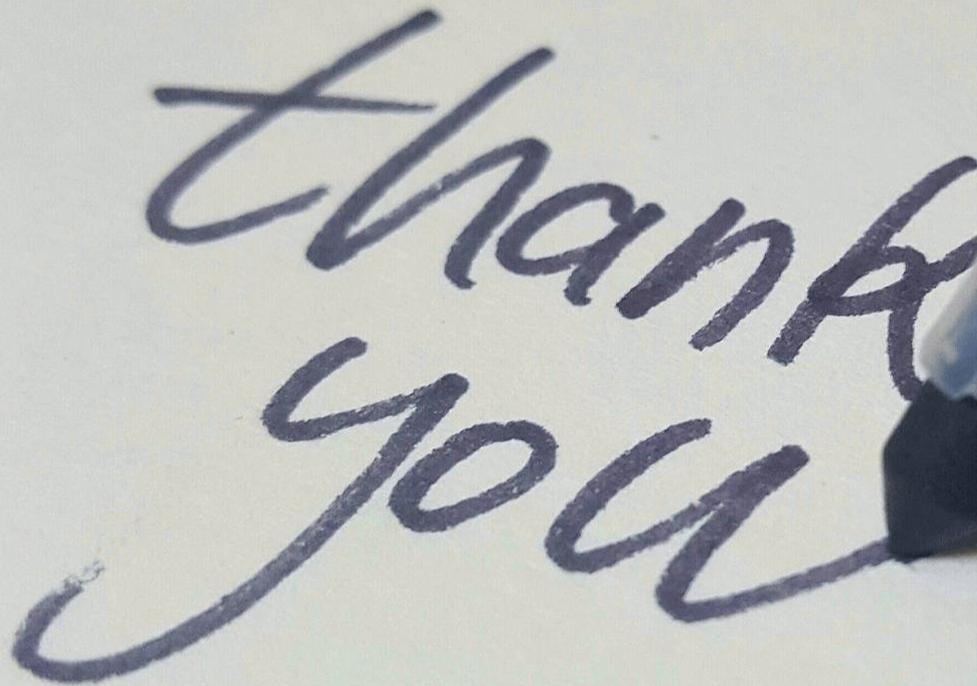
# REUSE, FOR OWN SOFTWARE



**REUSE**  
SOFTWARE

- Pull request for upstream? (Just an idea)

# OVER TO DAVIDE

A close-up photograph of a blue marker writing the words "thank you" in a cursive script on a white surface. The marker is positioned at the end of the word "you", with its tip touching the paper. The background is a plain, light-colored surface.

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