

# GENIVI Development Platform (GDP) Project update and technical overview

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Agustín Benito Bethencourt Principal Consultant – FOSS



# The speaker: Agustín Benito Bethencourt (toscalix)

- At GENIVI Alliance.
  - Codethink representative.
  - GDP Delivery Team Lead
  - Tools Team Expert Group
     Coordinator.
- At Linux Foundation:
  - Codethink representative.
  - o AGL's CIAT group member.
  - o CIP member.

- Principal Consultant FOSS
   at <u>Codethink Ltd</u>
- Based in Málaga, Spain.
- Experienced managing FOSS
  - & distributed projects in the
  - open.
- More: <a href="http://www.toscalix.com">http://www.toscalix.com</a>



### Who is the GENIVI Alliance

The GENIVI Alliance Community is currently represented by 140 member companies...

... committed to driving the broad adoption of specified,
Open Source, In-Vehicle Infotainment software.



## What does GENIVI Alliance do?

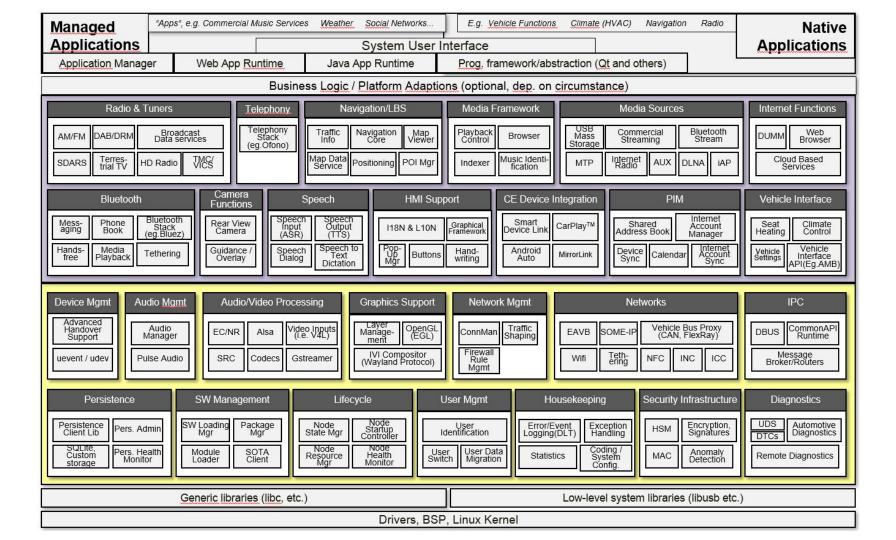
- A. Develop and deliver Open Source IVI middleware which scope is non-differentiating elements.
  - a. Individual software components and standard interfaces/APIs
  - b. A flexible technical architecture
  - c. Pre-integrated, reusable IVI software platform.
- B. Best practices and tools to ensure deployments when using GENIVI's IVI middleware.



## Open Source projects

GENIVI Alliance is the home of a variety of automotive FOSS projects.

- Software development projects: Expert Groups
- Integration and delivery projects:
  - Baseline (meta-ivi): focus on product compliance/certification.
  - GENIVI Development Platform (GDP): focused on innovation/developers.





## Why GDP?

- 1. Develop and deliver key automotive-specific software components together with industry experts.
- 2. Rapid prototyping/demo your automotive applications.
- 3. Become part of a disruptive change in automotive.
- 4. For some of the components that GDP ships, GENIVI is upstream.



## What is GDP?

## **GENIVI** Development Platform:

- Open Source project done "in the open" for developers.
- Delivery project.
- QEMU and several boards as targets.
- Includes <u>meta-ivi</u> (Baseline).
- Yocto (poky) and Baserock (future) based.



## **GDP** deliverables

### **GDP Master**

- Rolling release with the latest integrated software.
- Target FOSS automotive devs. & GDP hackers/contributors.

## **GDP** releases

- GDP-ivi9 is the latest major release. GDP 11 in Oct. 2016!!!
- Target automotive UI and app developers (users).



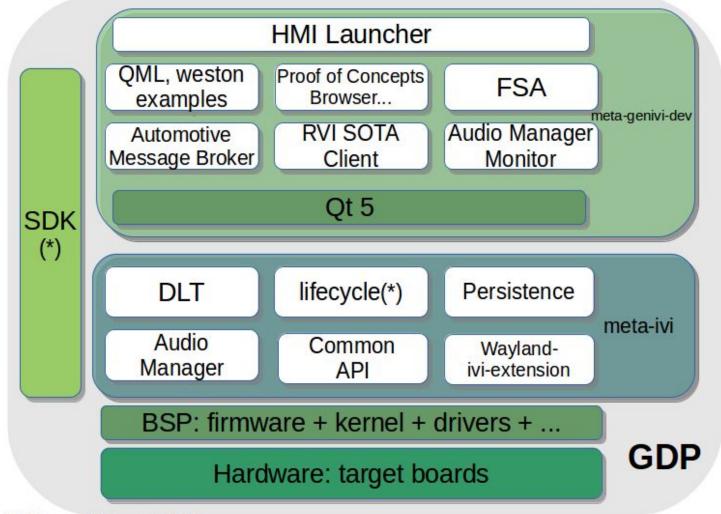
#### What is GDP-ivi9

- Released on April 19<sup>th</sup> 2016.
- Targets:
  - QEMU, Renesas Porter, RPi2 & Intel Minnowboard.
- Check <u>the feature</u> page for highlights.
- Download GDP-ivi9



## GDP in detail

GDP block diagram...





## People at GDP

## **Delivery**

- GDP maintainers
  - Changhyeok Bae, community.
  - Robert Marshall, Codethink Ltd.
  - Tom Pollard, Codethink Ltd.

- Other key people:
  - Meta-ivi & Renesas BSP maintainers, community management, devops/IT service, PMO, delivery team lead, GENIVI architect, LRT team ...

### Development

- GENIVI Expert Groups
- Community contributors



## **GDP** tools

## Tools GDP project uses today:

- <u>GitHub</u>: git repositories and code review.
- JIRA: bug tracker and task management tool.
- Confluence: wiki.

- **go.cd**: integration/delivery mgnt.
- <u>Mailman</u>: genivi-projects@lists. genivi.org
- IRC: #automotive at irc.freenode.net

#### Next:

Download infrastructure, analytics, test automation...



### Future of GDP

#### GDP 11:

- To be released early in Oct. 2016
- Based in Yocto 2.1, Qt 5.6 + meta-ivi 11
- Targets: QEMU, Renesas Porter & Silk, RPi2 and 3 & Intel Minnowboard...
- o Hands on Sessions at <u>GENIVI 15<sup>th</sup> AMM</u>: San Francisco, CA, US in Oct

#### • Improvements:

- Acceptance tests.
- Commit stage: pre-integration.
- Shorter feedback loop with GENIVI developers (Expert Groups).

## **Future of GDP**

But above all...

More focus on automotive developers.

Check the latest GDP <u>news</u>.



## Interesting links

- www.genivi.org
  - GENIVI FAQ
  - Projects.genivi.org
  - GDP latests GDP news
- GDP Master
  - genivi-dev-platform
  - o meta-genivi-dev
- Download GDP-ivi9

- Get involved:
  - Get <u>the sources</u>
  - Contribution policies
  - Report <u>bugs</u>
- Follow up
  - Delivery status <u>reports</u>
  - GDP overview (weekly)
  - GDP <u>Out There</u>



## Questions?

