

IVI-EG

13.May.2021
TOYOTA MOTOR CORPORATION
Woven Alpha, Inc.

Agenda

1. Production Readiness Requirement Definition
2. Flutter
3. Device lists and priority (for VirtIO)

■ Plan / History

#	date	Discussion Topics
1	Dec. 8, 2020	Kickoff, LifecycleManagement,
2	Jan. 7, 2021	LifecycleManagement, HelathMonitoring, + “HAL”, <i>Yocto Recipe</i>
3	Jan. 21, 2021	HelathMonitoring, PowerManagement , + α
4	Feb. 4, 2021	PowerManagement , AppFW related, Quick introduction to TestFW from Jan-Simon,
5	Apr. 1, 2021	PowerManagement(10min), Feature plan task(related with Virt-EG)(10min), + α (10min)
6	Apr. 15, 2021	Requirement Spec Status Update
7	May 13, 2021	Requirement Spec Review 1(PowerStateManagement), Flutter
8	May 27, 2021	Requirement Spec Review 2(PowerStateManagement + α), Flutter?, TBD

1. Created Confluence Page
 - a. URL
<https://confluence.automotivelinux.org/display/IVIPR/Production+Readiness+Specification+Requirements+Definition>
2. Discussed on the table of contents.
 - a. *Function will be added.
3. Toyota upload contents and explain. (Today)
 - a. Target : May 13
4. Community member review them
 - a. Target : May 13 - May 27
5. Discuss with other OEMs and Community members to select the common requirement
 - a. Target : May 27

Iterate 3~5 for each modules.

Flutter : Current Status

- We need more internal processes before disclosing source code
- Today :
 - just answer some questions :(

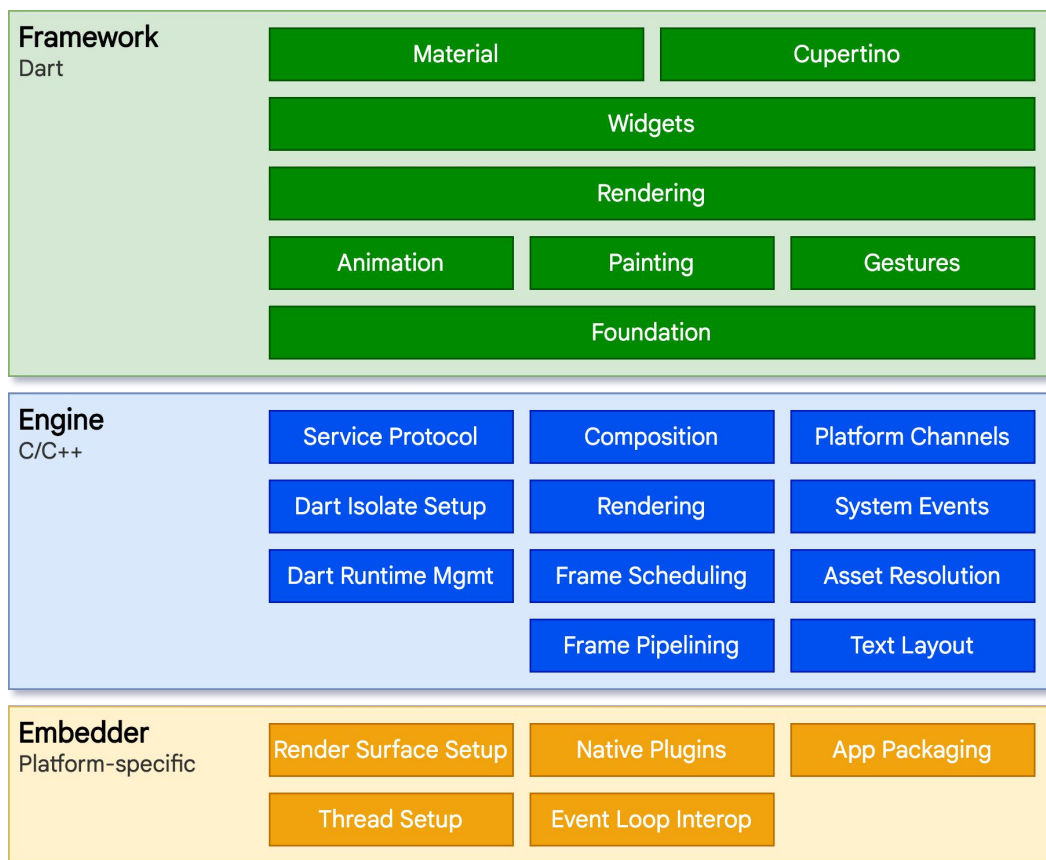
Flutter on AGL Trial

Flutter Components

- <https://flutter.dev/docs/resources/architectural-overview>

What can be contributed from TOYOTA?

- Flutter Embedder for AGL(agl-shell)
- Prototype of yocto recipes
 - Flutter build is based on GN + Ninja
 - Engine should not be modified from mainline



Rough comparison of Related Projects

- (This might not be correct because they are changing now)
- Key difference between (A) / (B)(C) is GTK
 - Minimise dependencies and footprint for embedded environments
- Key difference between (B) / (C) is the optimization for automotive use cases
 - (C) support plugins for 3D graphics for example
- We don't intend to compete each other. We plan to collaborate on contributing to upstream

	(A)Flutter Linux Desktop	(B) flutter-embedded-linux	(C) ivi-agl-flutter-embedder
Maintainer	flutter official (canonical)	sony	Toyota
Repository	https://github.com/flutter/engine/tree/master/shell/platform/linux	https://github.com/sony/flutter-embedded-linux	(not disclosed yet, based on https://github.com/jwinarske/flutter_wayland)
Target Environment	desktop	embedded system	automotive
Graphic shell support	GTK	wayland, DRM, (x11)	wayland (xdg, agl-shell for Jellyfish)

Next step

- We need more time for internal process :(
- yocto recipes
- Simple Demo?
- Detail architecture without source code?
- If you could post questions, we'd like to answer them

Device Lists and Priorities (for VirtIO)

- <https://docs.google.com/spreadsheets/d/1jpLNUBKz19LOdtGyqan5Wk4OgZFFxUNcSpMrFMPFCKI/edit#gid=22329838>
- TOYOTA filled in our thought
- Please update the list by the Next IVI-EG
 - New deadline is May 27th