Software Architecture

Use this space to document use cases during the Oct 2021 workshop.

- Pick a time frame – Model Year 27. (i.e., 5 year time frame)
- Ready for teams to start product development in spring or summer of 2024.
- What the use cases we are enabling?
- What does AGL provide?
- What does OEM and Tier One need to integrate?

- Can we use flatpak to deploy Flutter apps?
- Gap between Toyota Flutter implementation and Base system that has been released to AGL in Application management areas. May be released by Toyota in the future.
- App developers don't want to know anything about Yocto. They want to be able to write and deploy their apps.
- Open Source (Supply chain?) Cyber security built in
- Yocto LTS and AGL LTS – Yamaguchi-san: We should think about using Debian rather than Yocto for security updates over a very long term.
- ISO 21434: Cyber Security in automotive will be required
- IC will not use Flutter – do we need to maintain a non-Flutter version
- What is most important to the ecosystem, AGL components or the a complete distribution with demo/ reference apps?
  - Tier Ones have their own internal Linux system. How does AGL convince a Tier One to an AGL component or to the AGL distribution as a whole?
- APIs

Use Cases:

1) As a developer I want to write an app and simply deploy it to AGL using QEMU.

1. Develop app on my local desktop, test using cloud based CI/CD, then deploy to real hardware for testing seamlessly.

2) As an OEM I want interaction between the IC and IVI displays running both displays from a single SOC.

3) As an OEM or Tier 1 I want an open choice of app development toolkits such as Qt, Flutter, React, etc.

4) As a driver I would like to be able to update the IVI system for the lifetime of the car (at least 5 years) without out any significant downgrade of performance. This includes=

- Security patches
- New features using existing hardware
- OTA update so I do not have to return to the shop for everything.