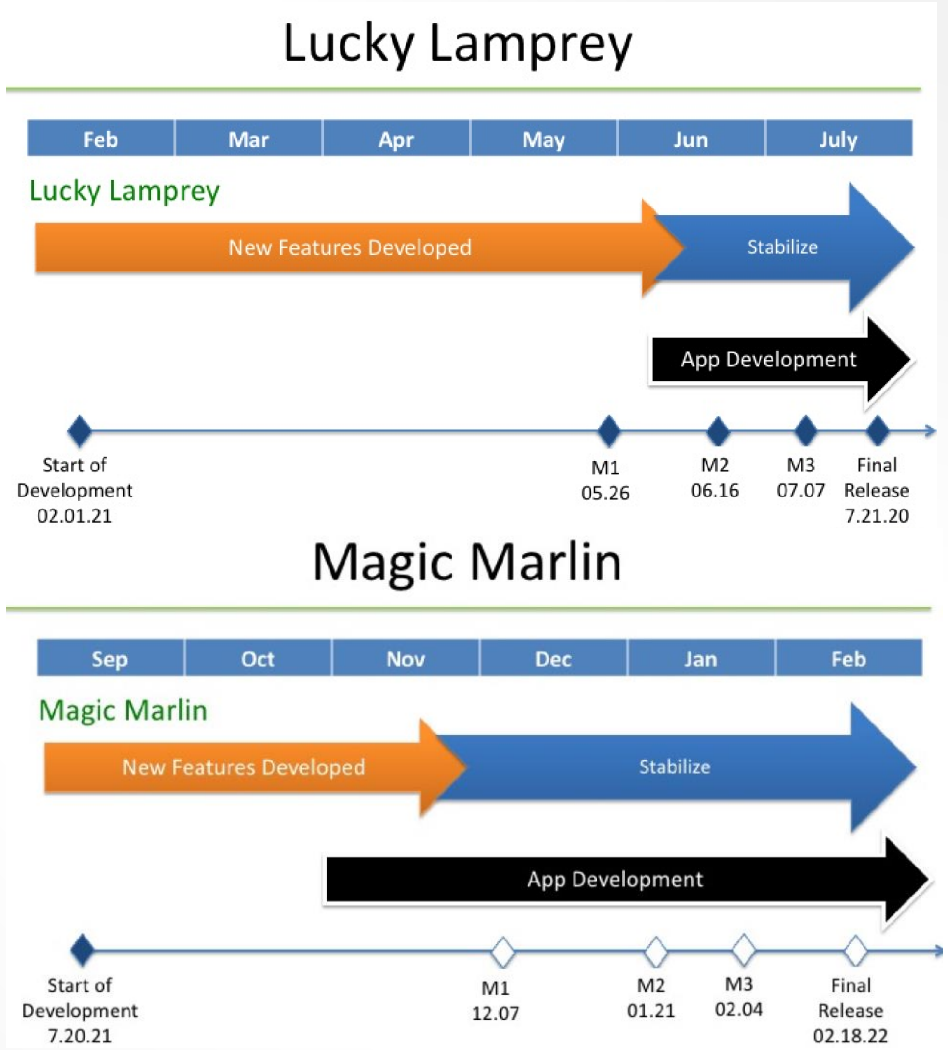
AGL Instrument Cluster EG update and plan for 2022

AGL Instrument Cluster

- AGL Lamprey released in July/2021.
  - Upstreaming start.
  - Most basic integration feature was merged.
  - This release support container integration using Yocto.

- AGL Marlin released in Mar/2022.
  - Some common software merged.
  - Some development issue fixed.
  - Some demo software merged to evaluate AGL Instrument Cluster architecture.



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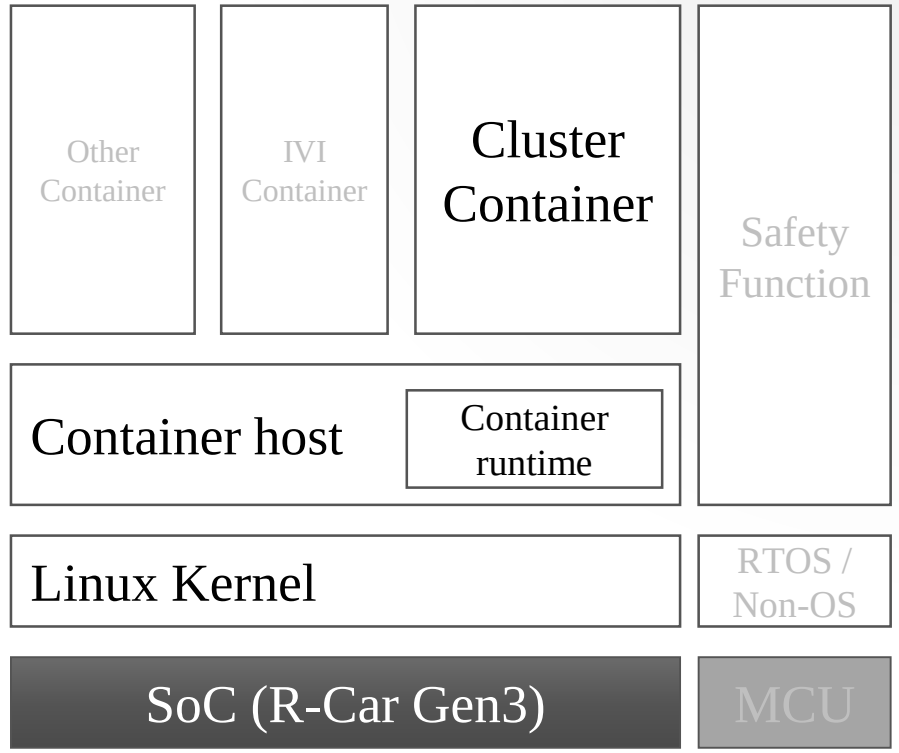
Status for Lamprey release

- Most basic integration feature was merged.
  - Limited container host and cluster container are available.
    - Separate cluster feature into container.
  - Display isolation feature is integrated. But it support single display only.
  - Demo GUI is available. It support standalone demo.
  - Support container image build using Yocto.
  - R-Car H3/M3 starter kit without kingfisher board support only.

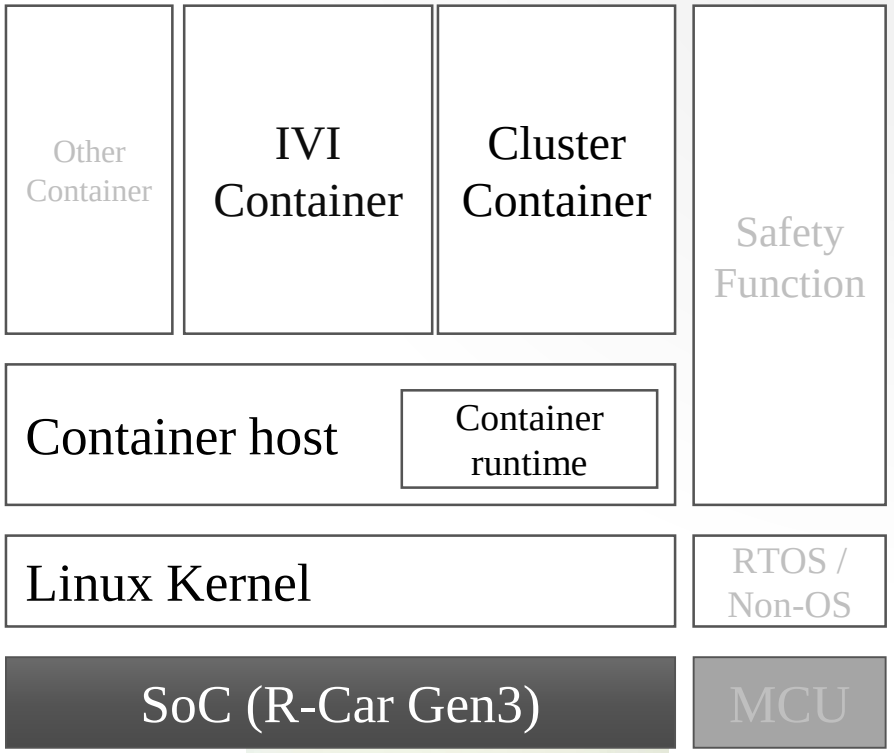


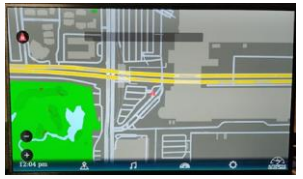
Demo Display 1920x1080

R-CarH3

Status for Marlin release

- Some common software merged.
  - IC service framework.
  - Multiple display support.
  - Guest networking support.
  - Firmware downloading.
  - Input device support for IVI container.
- Some demo software merged.
  - IC service for demo.
  - IVI demo software stack.
- Extended board support.
  - R-Car H3/M3 starter kit with kingfisher
  - Ref-hw





Infotainment Display 1920x1080

R-CarH3+Kingfisher

Cluster Display 1920x720

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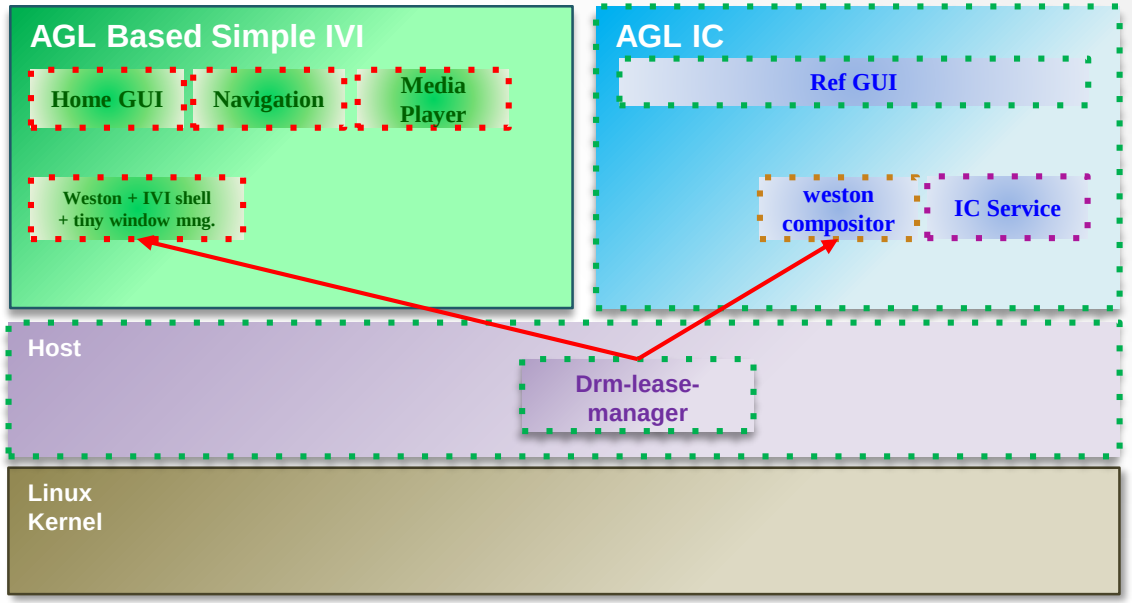
Some demo software merged.

- IC service framework is already merged in master branch.
  - We develop reference cluster service framework.
  - Ref-GUI draw speed meter, telltale and more vehicle information, available.
- IVI container is now developing.
  - Sample Navigation, Media Player, Home UI are already merged.
  - These are running on weston with IVI extension.
  - These software are only for demo and evaluation for container environment. Will replace AGL IVI profile based software in future release.



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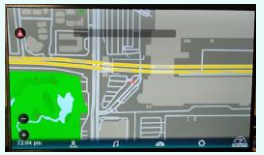
Some demo software merged

- In initial release at Lamprey, IC software stack run on R-Car H3/M3 Starter Kit with Full HD Display only.
- In Marlin release, IC software stack with demo IVI run on R-Car H3/M3 Starter Kit on Kingfisher board with two Display.
- AGL Ref-HW support merged.

Demo Display 1920x1080

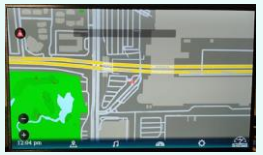
R-CarH3



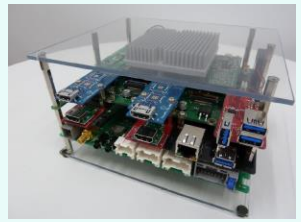
Infotainment Display 1920x1080

R-CarH3+Kingfisher

Cluster Display 1920x720



Infotainment Display 1920x1080

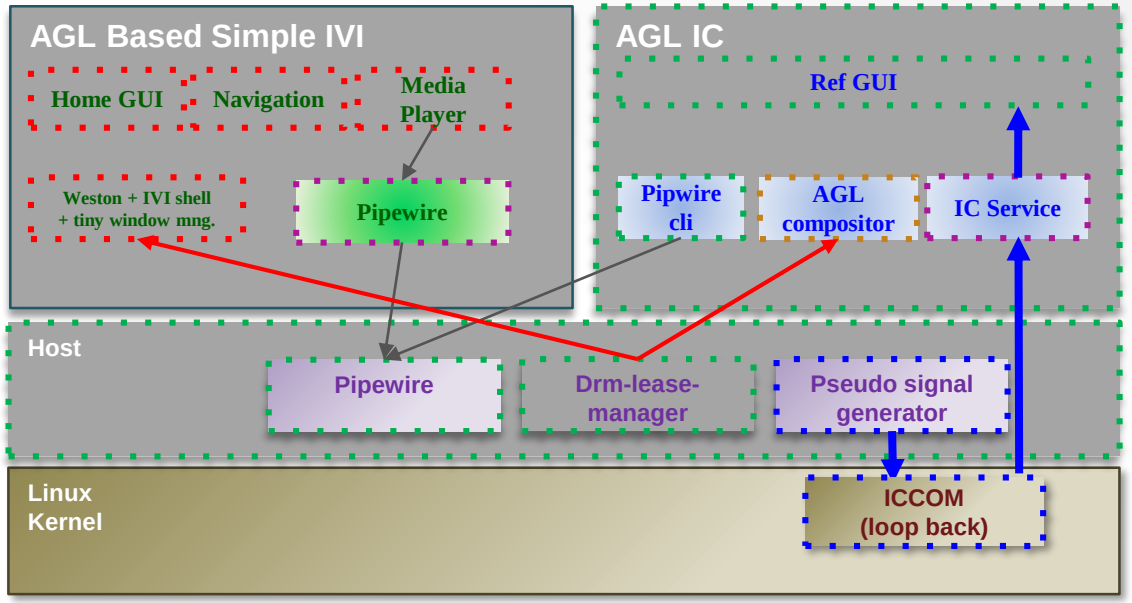


AGL Ref-HW

Cluster Display 1920x720

Dropped feature at Marlin

- Dropped feature
  - Pipwire integration
    - Feature development was completed by contractor work in y2021.
    - Will update in miner release.
  - Migrate AGL compositor from Weston in IC
    - Feature development is on going in contractor work in y2022.
    - Will update in NN or OO release.
  - IC Service implementations
    - IC service framework has some structured issue.
    - It’s blocked IC service implementations.
    - Will work in y2022.
  - Documentations
    - Will update in miner release.



New task for this year

- Good practice sharing.
  - IC EG work is including some experimental containerization. But this information is not sharing all in AGL. Will documented it.
- Continue to develop how to handled input devices.
  - Marlin release is including input device support in IVI demo guest, But it is not mach real use case, only to demo implementations.
- Continue to develop how to handled dynamic devices.
  - ex. uevent injections.
- Continue to work OSS assessment.
  - This task entry to contractor work candidate in this year.

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Other task

- Maintain for AGL IC profile
  - Ref-GUI adopt to Qt 5.15
  -
- Migrate IVI guest from our code dorp demo to AGL new IVI with new AppFW and flutter.
  - For CES2023 demo?

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Thank You