Automotive Grade Linux
Developer BoF Session

*Embedded Linux Conference*
October 27, 2020

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What is AGL?

Collaborating to build the car of the future through rapid innovation

- Open source Linux-based collaborative project
- Hosted at Linux Foundation
- Focused on rapid innovation of vehicle software using the AGL Unified Code Base
Total of 11 OEMs supporting AGL!

Accounts for approximately 60% of worldwide annual vehicle shipments

Sources:
AGL Members - Total of 155 companies!

**Platinum**
- DENSO
- mazda
- Panasonic
- Renesas
- Suzuki
- Toyota

**Gold**
- Honda
- The Power of Dreams

**Silver**
- Aisin AW Co., Ltd.
- Amazon
- Mercedes-Benz
- DENSO TEN
- DRIMRES
- NTT Data
- NTT DATA MSE Corporation
- Qualcomm
- SAIC
- Volkswagen
- Wind River
the only organization addressing all software in the car
AGL Unified Code Base

• Develop a single open source software platform for the entire industry, reducing fragmentation
• Provide at least 70% of the base platform for production projects
• Cultivate an ecosystem of developers, suppliers, and automotive expertise all using a single platform
• Reference hardware and applications available for adaptation

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2020 AGL Schedule

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<th>Jan</th>
<th>Feb</th>
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<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<tr>
<td>RCS5</td>
<td>9.0.0</td>
<td>9.0.1</td>
<td>9.0.2</td>
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Itchy Icefish

Jumping Jellyfish

FOSDEM | EW | AMM | F2F | ELC | AMM | F2F | ELCE | ALS

See [https://wiki.automotivelinux.org/schedule#latest_schedule](https://wiki.automotivelinux.org/schedule#latest_schedule) for latest schedule information
JUMPING JELLYFISH
Jumping Jellyfish

• Uprev to Yocto 3.1
  • Dunfell branch
  • Long-term Support version for Yocto
• Window Manager, Compositor, and Homescreen matches CES 2020 feature set
• New features driven by gap analysis and member donations
  • Evaluate for completeness and platform usability
  • Conversion to new or extending existing AGL binders
  • Test plans
Jumping Jellyfish (w/ YP 3.1)

- **Feb**
- **Mar**
- **Apr**
- **May**
- **Jun**
- **July**
- **Aug**
- **Sep**

### Jumping Jellyfish

**New Features Developed**

- **Stabilize**
- **App Development**

- **Start of Development** 01.15.20
- **Uprev to zeus complete** 03.03
- **Uprev to dunfell complete** 05.22
- **Renesas BSP** 06.19
- **RC1** 07.13
- **RC2** 08.04
- **RC3** 09.03
- **RC4** 09.13
- **Final Release** 09.18.20

*As of 12 October 2020*

*No Renesas BSP**

**With Renesas BSP**
Jumping Jellyfish Patch Releases

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<th>Sep</th>
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**Jumping Jellyfish**

Patch Updates

App Development

- 10.0.0 Release: 09.18.20
- 10.0.1: 11.20
- 10.0.2: 12.18
- 10.0.3: 01.22.21

As of 12 October 2020
Kooky Koi

- Continue to with Yocto 3.1
- Instrument Cluster containers
- VirtIO
- Rule based arbitration
Kooky Koi

**New Features Developed**

- **Start of Development**: 09.20.20
- **RC1**: 11.20
- **RC2**: 12.04
- **RC3**: 12.18
- **RC4**: 01.15
- **RC5**: 01.29
- **Final Release**: 02.12.21

As of 12 October 2020
Kooky Koi Patch Releases

As of 12 October 2020
Active Expert Groups

- Application Framework and Security
- Connectivity
- Continuous Integration and Automated Test
- Virtualization
- Reference Hardware System Architecture
- Speech
- Vehicle to Cloud
- Instrument Cluster
- IVI EG forming to focus on adding more production ready features to the IVI profile.
DEVELOPER RESOURCES
AGL Documentation

• Getting Started
  https://wiki.automotivelinux.org/start/getting-started
• AGL documentation site
  http://docs.automotivelinux.org/
• AGL Wiki
  https://wiki.automotivelinux.org/
• AGL Jira
  https://jira.automotivelinux.org/
Get The Code

• Pre-built binaries and source tar balls available
  • https://www.automotivelinux.org/software/download

• Latest Source Code and Build Instructions
  • https://wiki.automotivelinux.org/agl-distro/source-code

• Release Notes
  https://wiki.automotivelinux.org/agl-distro/release-notes
AGL Code

• AGL gerrit
  http://gerrit.automotivelinux.org/

• AGL git
  https://git.automotivelinux.org/
Ask Questions

• Weekly Developer Call on Tuesdays
  [https://wiki.automotivelinux.org/dev-call-info](https://wiki.automotivelinux.org/dev-call-info)

• IRC channel #automotive on freenode.net
  Discussion about open source software for vehicles. No help for mechanical issues should be accepted from anyone on this channel.

• Dev Community Mail List
  [https://lists.automotivelinux.org/g/agl-dev-community](https://lists.automotivelinux.org/g/agl-dev-community)
2019 F2F Workshop Update

• Mar 5-7 – Tokyo AGL AMM
• May 7-9 – A Coruña, Spain (Igalia)
• July 16 – Tokyo - Day before Automotive Linux Summit
• Sep 24-26 – Berlin (VW/ Carmeq)
• October 21 - 24 – Monte Carlo – AGL Fall AMM
• Nov 11 – 13 – Karlsruhe and Yokohama – CES Integration Session #1
• Dec 10 – 12 – San Francisco – CES Integration Session #2
• Jan 7-10 : CES 2020
2020 F2F Workshop Update

• Mar 17-19 – Hawaii AGL AMM – Canceled
• May 12 - 14 - Berlin (Mercedes Mbition) - Canceled
• July 15-17 – Berlin AMM – Virtual F2F
• Oct 6 – 8 – Virtual F2F
• Dec 7- 9 – Virtual F2F
THANK YOU