



# **AGL State of the Alliance**

*Automotive Linux Summit 2018, Tokyo*

*Dan Cauchy*

*Executive Director, Automotive Grade Linux*

# Welcome to ALS + OSSJ - Tokyo 2018

*900+ people across 289 companies and 43 countries!*

Advanced Driver  
Information  
Technology

Advanced Telematic  
SYSTEMS

AJ  
AISIN AW CO. LTD.

ALPS

Continental

DENSO

Elektrobit

Eureka, Inc.

amazon

DENSO TEN

HARMAN

HI CORP.

NISSAN

HITACHI  
Inspire the Next

HONDA

intel

irdeto

Konsulko  
Group

LINKMOTION

MAZDA

MEDIATEK

mazda

NTT DATA

NTT DATA MSE Corporation

Mercedes-Benz

Mentor  
Automotive

MICROCHIP

micware

MITSUBISHI  
ELECTRIC

MITSUBISHI  
MOTORS

NEC

NXP

OPENSYNERGY

MICROCHIP

Qt  
The Qt  
Company

TOSHIBA

SUZUKI

Pioneer

REALVNC

Xevo

openinventionnetwork

RENESAS

SUBARU

TEXAS INSTRUMENTS

Suntec

Ubiquitous

ELECTRONICS

QUALCOMM

Panasonic

SONY

TOYOTA

TELENAV

TUXERA

WITZ

LINUX  
FOUNDATION

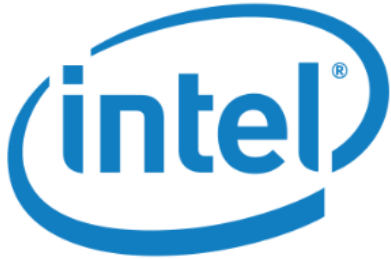
# Thank You to our ALS Sponsors!

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## Diamond



## Platinum



**Panasonic**

**TOYOTA**

## Gold

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## Silver

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## Bronze

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# 19 New AGL Members in 2018



# AGL Members - Total of 127 companies!

## Platinum



## Gold



## Silver



## Bronze







AGL: an open software platform for automotive  
the de facto standard for the industry

Code first

Reduce fragmentation

Foster an ecosystem

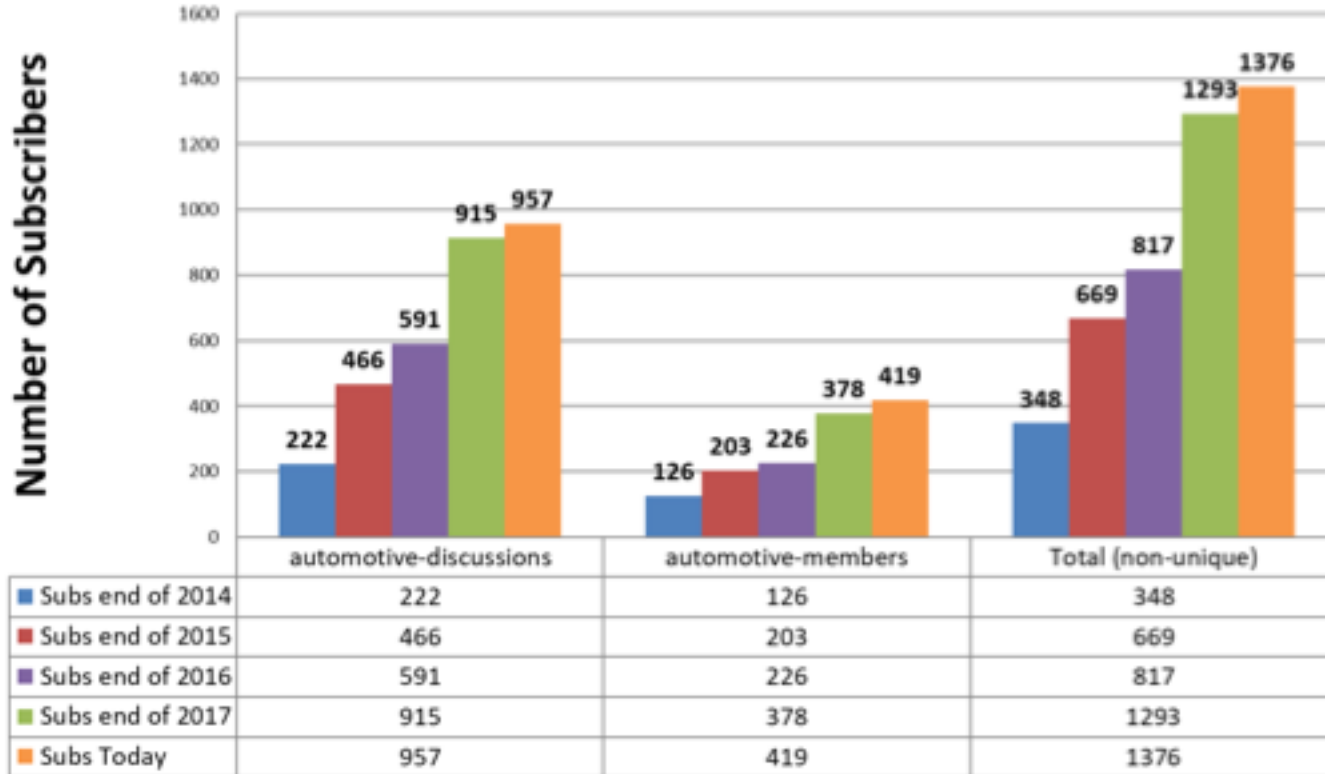
Decrease time-to-market

Drive rapid innovation



# Community: Mailing List Subscribers

AGL Mailing List Subscriber Growth



- Healthy community!
- 950+ developers on Automotive-Discussions list
- 106% growth since 2015



# Community: AGL Google Summer of Code

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- AGL accepted in Google Summer of Code (GSOC)
  - Students from University of Aberdeen (UK)
  - Focusing on application development
  - 2 months of coding and one month for documenting/finalizing
- Great exposure for AGL and the developer community
- Thanks to Jan-Simon Moeller for driving this process!



Google  
Summer of Code



AUTOMOTIVE  
GRADE **LINUX**

the only  
organization  
addressing  
all software in  
the car



**Infotainment**



**Instrument  
Cluster**



**Heads-up  
Display (HUD)**



**Telematics/  
Connectivity**



**Functional  
Safety**








**Advanced Driver  
Assistance Systems  
(ADAS)**



**Autonomous Driving**

# AGL Release: Thanks for all the fish...

AGL Release	Code Name	Release Date	Fish
AA	Agile Albacore	January 2016	
BB	Brilliant Blowfish	July 2016	
CC	Charming Chinook	December 2016	
DD	Daring Dab	July 2017	
EE	Electric Eel	January 2018	

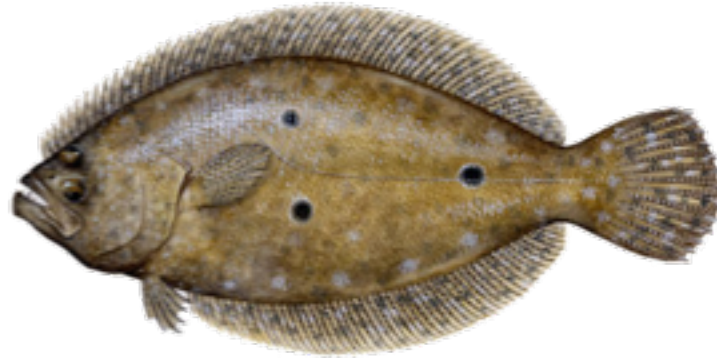
# Announcing AGL UCB 6.0 - FF

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## ***Funky Flounder***

***Release Candidate 1 – Available next week***

***Final release end of July***



# Funky Flounder Highlights

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- Yocto 2.4 – Rocko branch
- Graphics and Window Manager
- App Framework enhancements
- Audio refinements
- Connectivity
- Improved debug and monitoring
- *Release notes will be posted on AGL Wiki*



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# UCB 6.0 – Funky Flounder

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## New Profiles



**Telematics/  
Headless**



**Instrument  
Cluster**



**Heads-up  
Display (HUD)**



# AGL UCB Upcoming Releases

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## ***Grumpy Guppy***

***Release: Jan 2019***



# Grumpy Guppy



- Strong focus on hardening, stability and “production ready”
- Speech Services
  - Speech API
  - Speech enabled app framework
  - Speech enabled apps for CES 2019
- Vehicle-to-Cloud features



# Speech Recognition Expert Group

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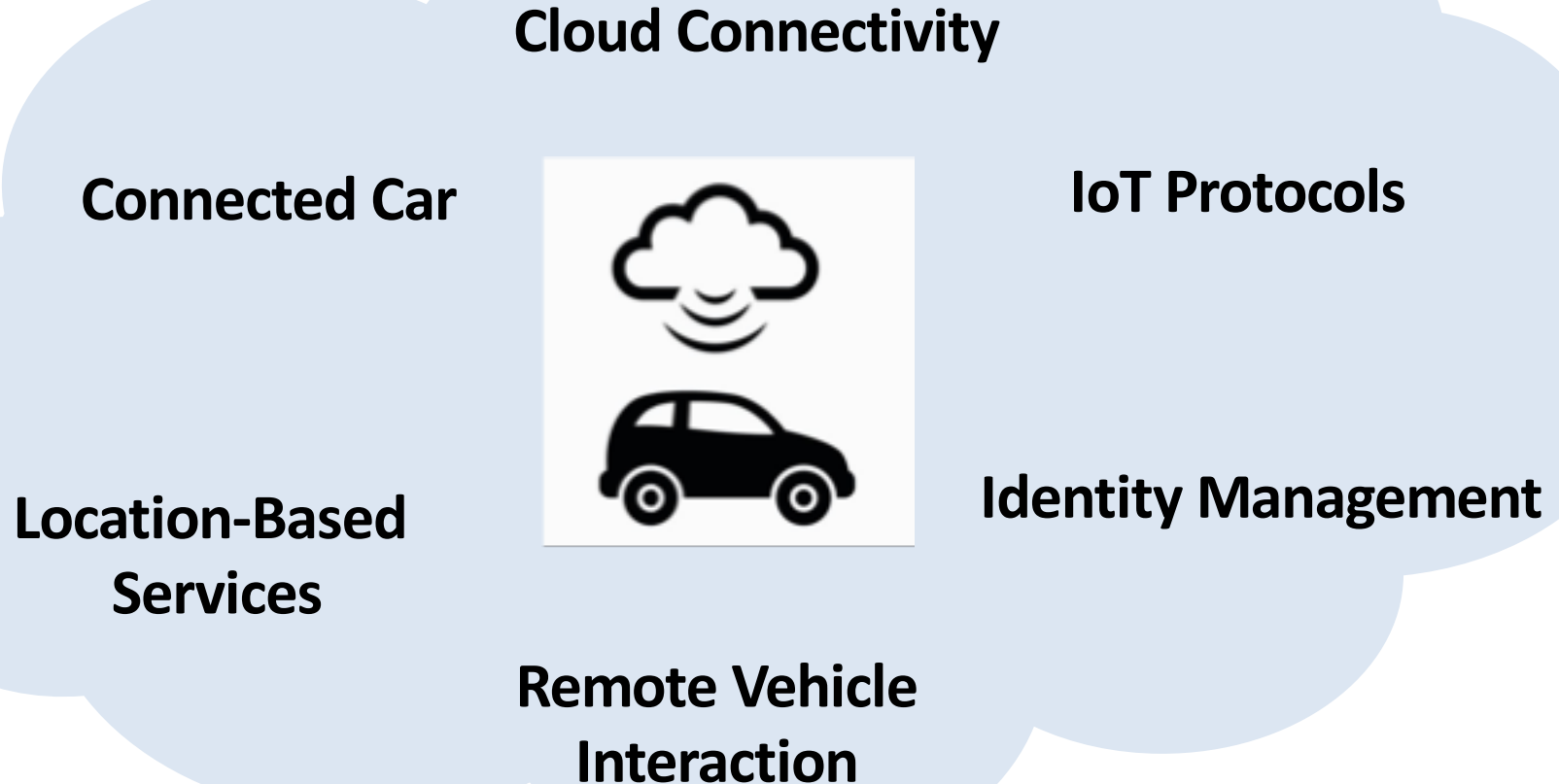


- New Expert Group formed at CES
- Vision:
  - We want to speech-enable every app in the vehicle!
- Goals:
  - Define industry standard APIs
  - Independent of the underlying technology
  - Simplify Speech Rec integration for app developers



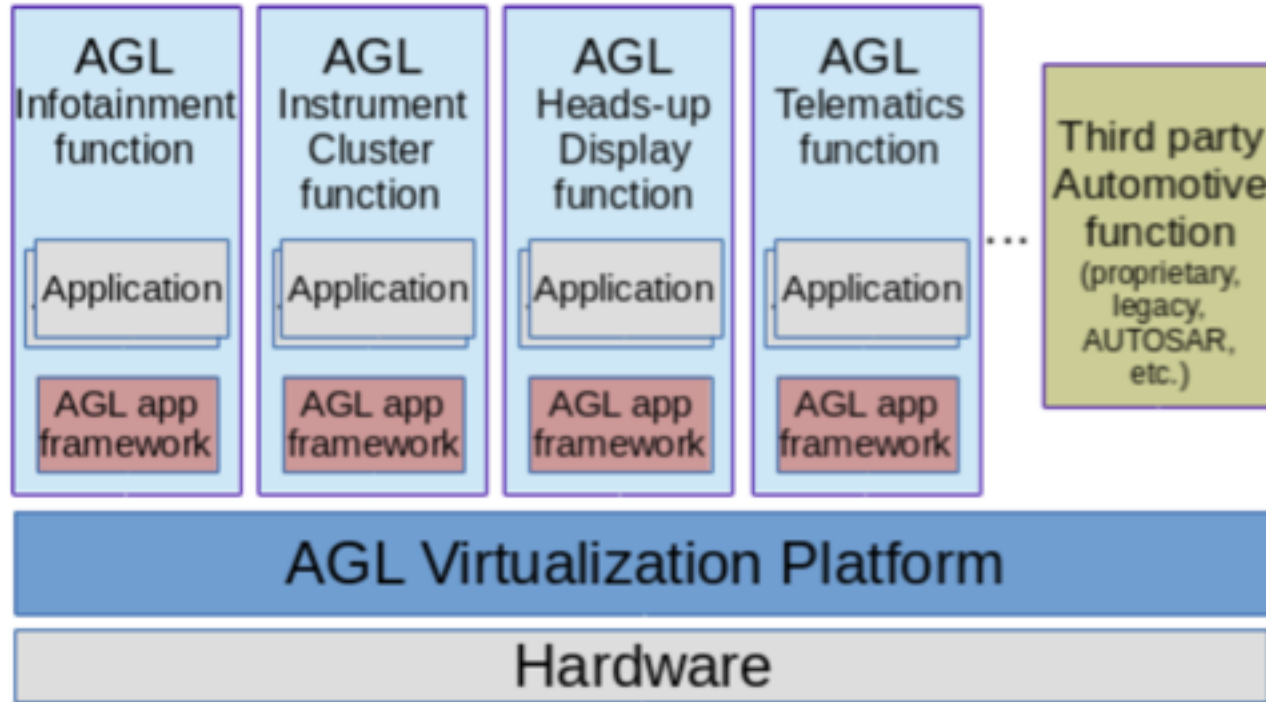
# Vehicle-to-Cloud Expert Group

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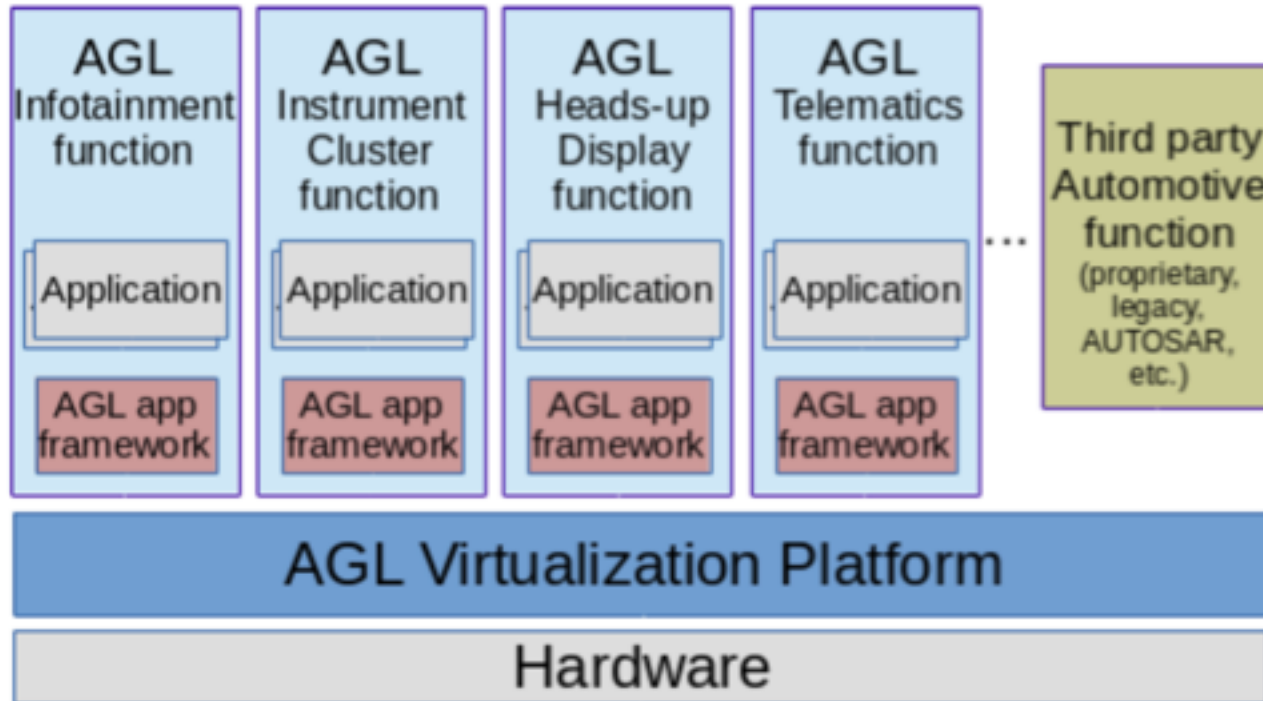
# Virtualization Expert Group

*Announcing: Publication of the Virtualization whitepaper*



# Virtualization Expert Group

Potentially a means to achieve interim functional safety with existing third party solutions.



# WHAT'S NEXT?

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**Autonomous Driving**

# ADAS and Autonomous



Autonomous Driving

- Plan
  - Leverage work on RT-Linux and Functional Safety
  - Build an AGL RT platform with support for major vendors of automotive camera, radar, lidar, sensors
  - Add OpenCV for visualization
  - Leverage AGL's extensive CIAT testing infrastructure to create a high quality platform
  - Leverage the work done by our V2C Expert Group and extend to V2V
  - Partner with other organizations in the industry
- Vision
  - Crowd-sourced 3D mapping database that is shared between the AGL OEMs

# Functional Safety



Functional  
Safety

- ISO26262 and/or other relevant certifications for Linux and AGL
- AGL Advisory Board approved the project and funding
- Get experts involved and define our roadmap
- Many companies want to get involved
- Leverage
  - Piggyback on the Linux Foundation's RT Linux project
  - Open collaboration channel with other LF projects such as Civil Infrastructure Project
  - All under one roof: The Linux Foundation

# AGL wins TechXLR8 Award



***AGL won the TechXLR8 award in Mobility (Connected Car category)  
Awarded on June 12<sup>th</sup> in London***

# AGL AMM Dresden – Oct 17-18

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# AGL Presence at CES 2019



# AGL Presence at CES 2019



- Expecting 15-20 AGL-based demos from member companies
- Located in the bustling Westgate show floor area
- Located in the Smart Cities Hall, near Ericsson booth

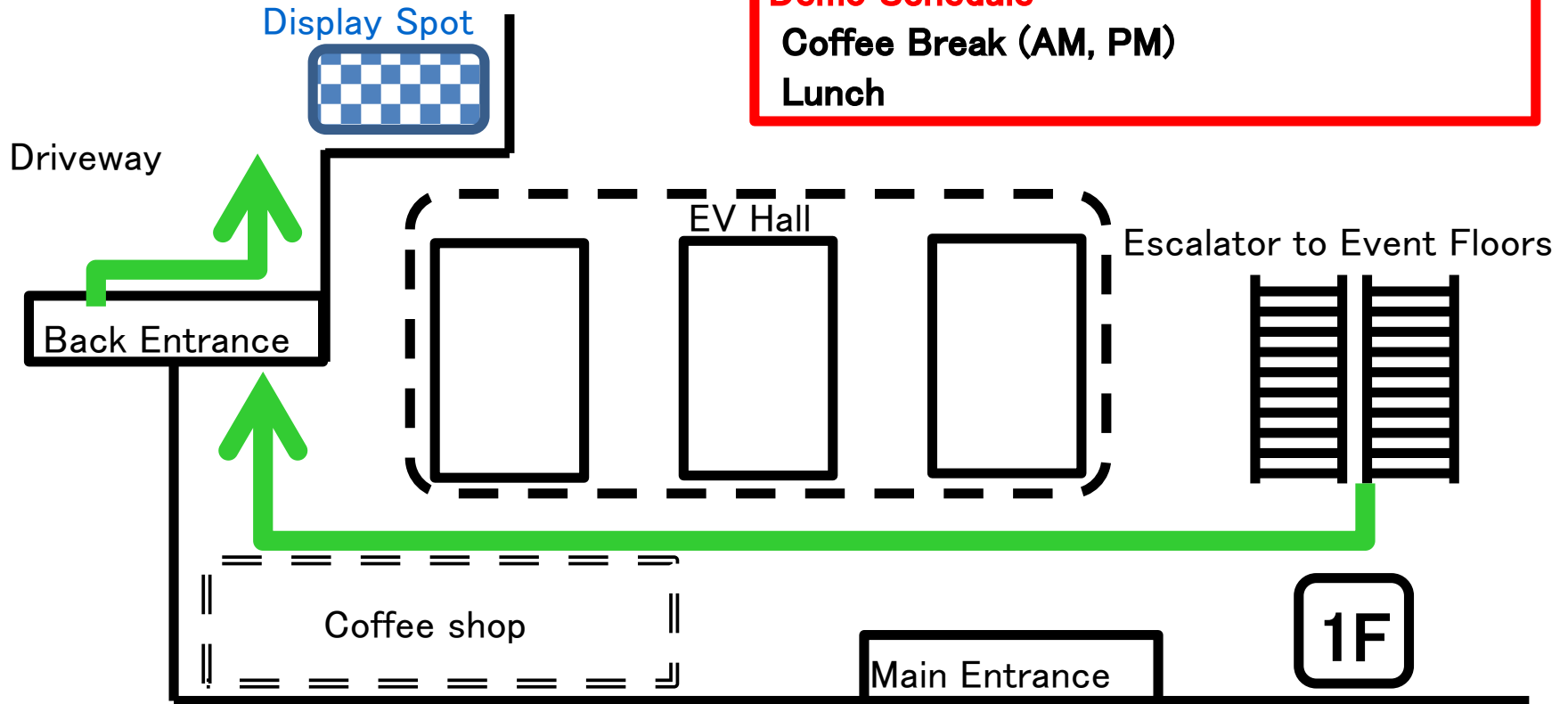


# Toyota Vehicle AGL Demo at ALS

## Demo Schedule

Coffee Break (AM, PM)

Lunch



# AGL is “Code First”



AutomotiveLinux.org