
# FleetOps BOF

# PoC based on Eclipse SDV

OSS enablement Team

# Agenda

1) Why we did this ?
2) What is it ?
3) Who is involved ?
4) How to achieve it ?



# What ?

Is it : use-cases details & ideas

# Fleet Management Systems

## Problem Statement :

Fleet Operators are required by law to collect certain types of data points like Fuel Consumption, Mileage, Driver Information and others from Commercial Vehicles

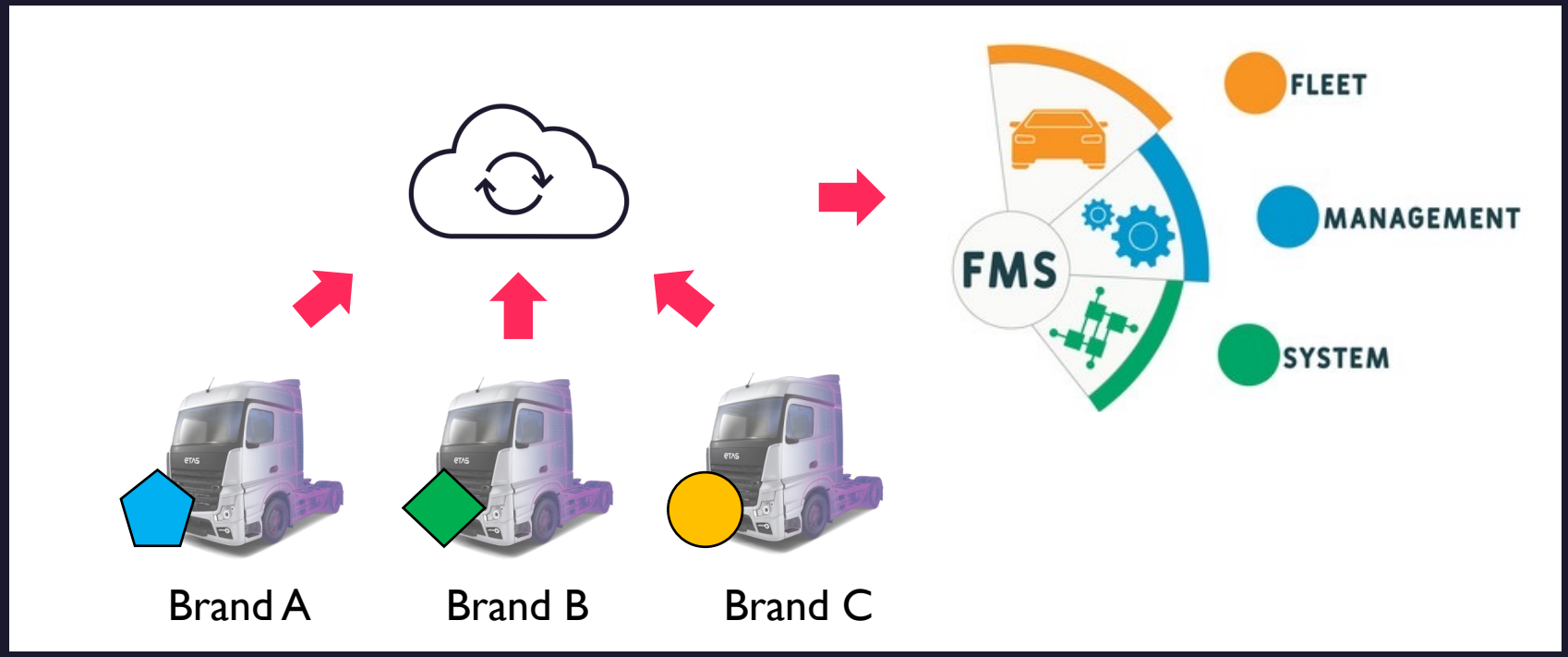

## The Challenge :

How do we get this very specific data out of the vehicles and into the Fleet Management System?

# FMS > How it is done today

## Status Quo:

FMS vendors and/or TIER's build dedicated *Telematics Units* to put into commercial vehicles.




## The Challenge :

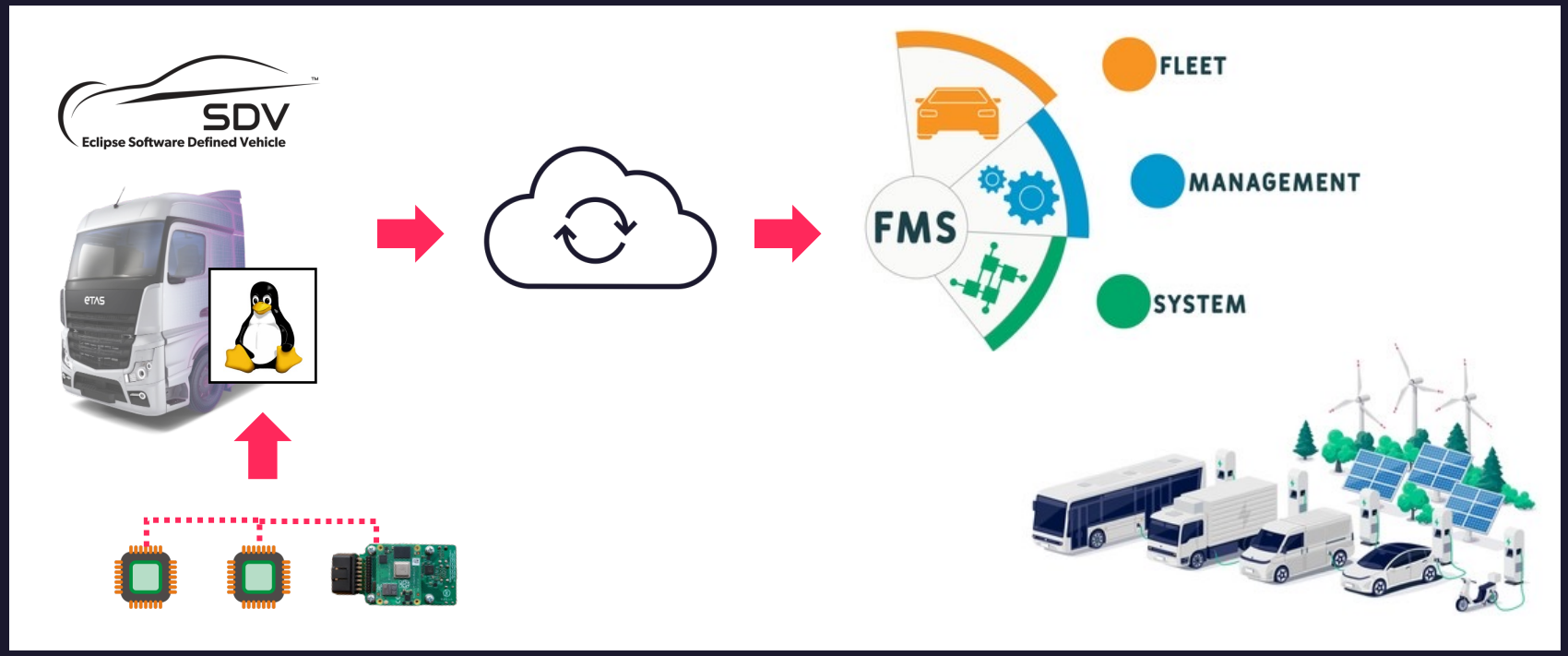
This needs to be done for each and every commercial vehicle brand in an FMS proprietary way

This is slow and costly and particularly tedious across brands and FMS vendors

# FMS > How does SDV help ?

## SDV potential:

Having a *generic* SDV in-vehicle computer allows to adapt any given commercial vehicle HW environment to any backend FMS simply by deploying some SW



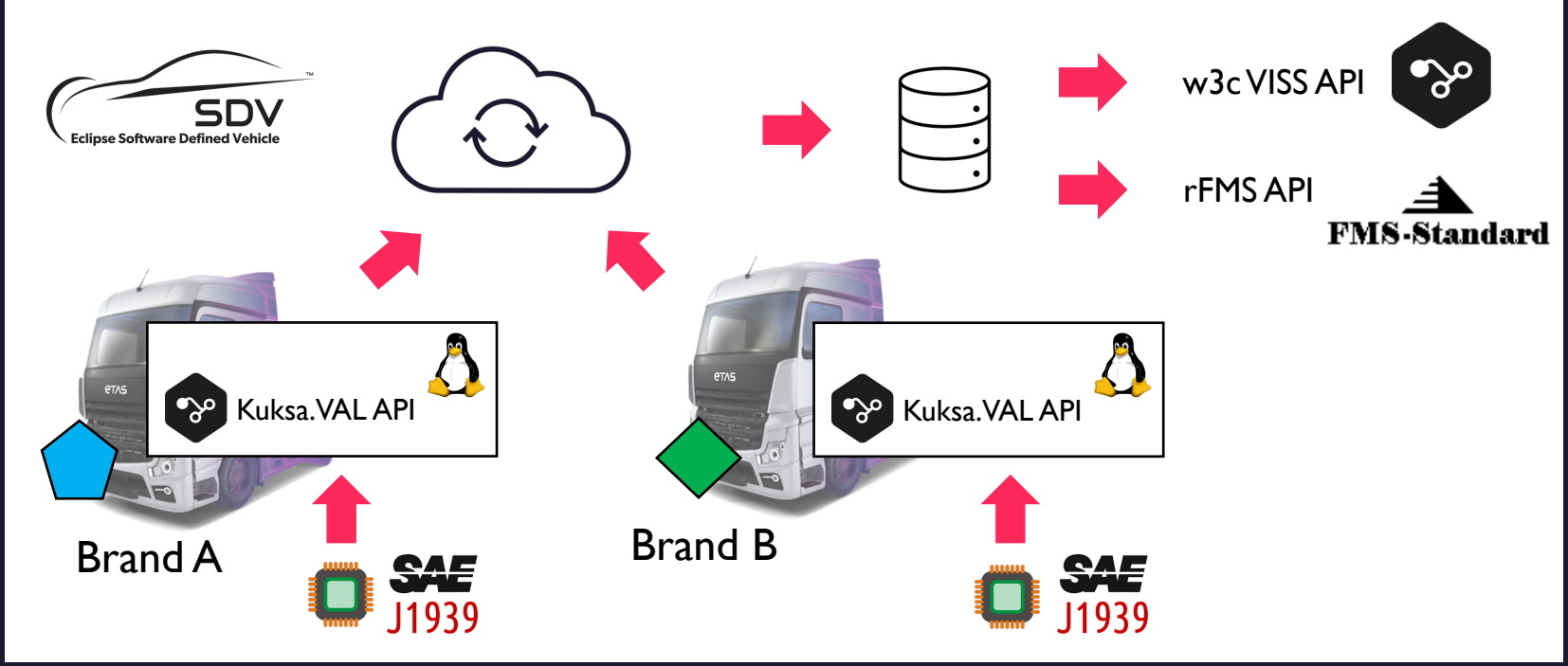

## The Challenge :

We still however need to have different SW that is specific to each Commercial Vehicle brand and FMS

# FMS > How do standards help?

## Standards potential:

Using standard APIs for accessing data allows for employing the same hardware & software components in Commercial Verhicles across brands and FMS vendors.




## The Solution :

This is the final stage in making the transition towards a fully software defined vehicle by leveraging Open standards and technology we can now

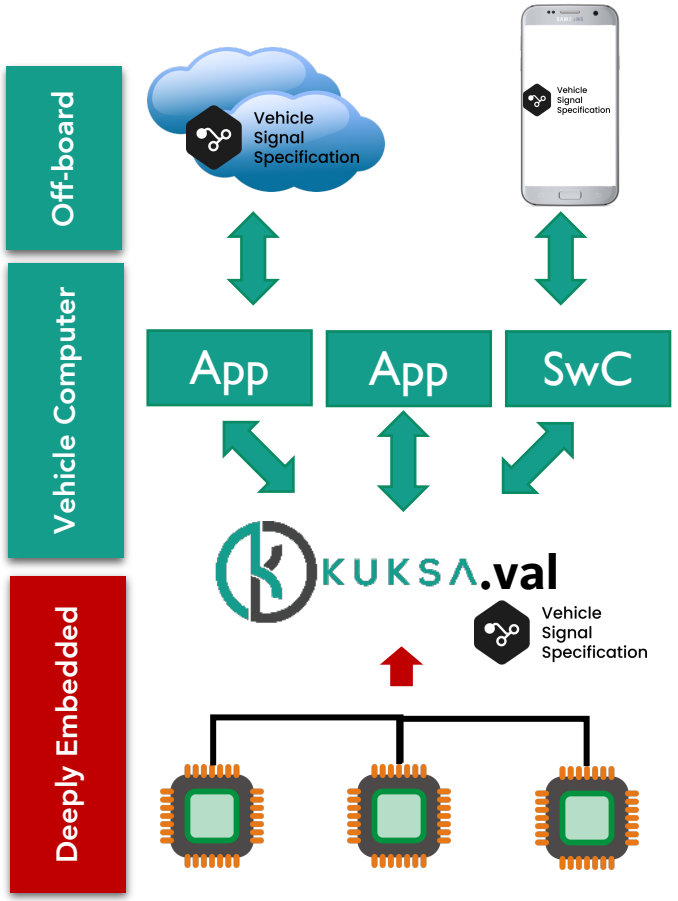
- ✓ Run Fleet SW on any vehicle
- ✓ Make changes to data reqs. & scale
- ✓ Simplify HW & focus on API's

# How ?

To achieve it &

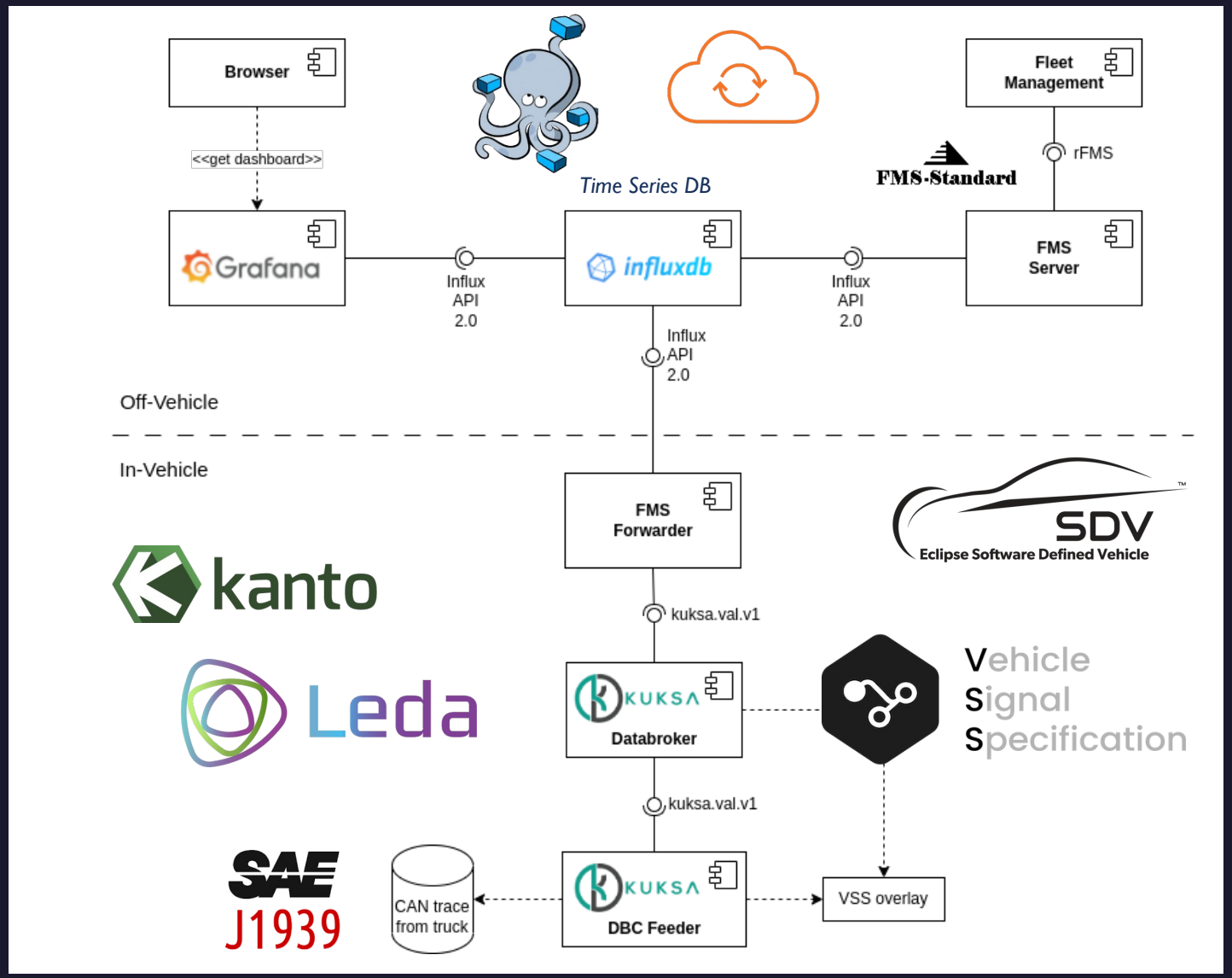
what is done already

# Hardware Abstraction



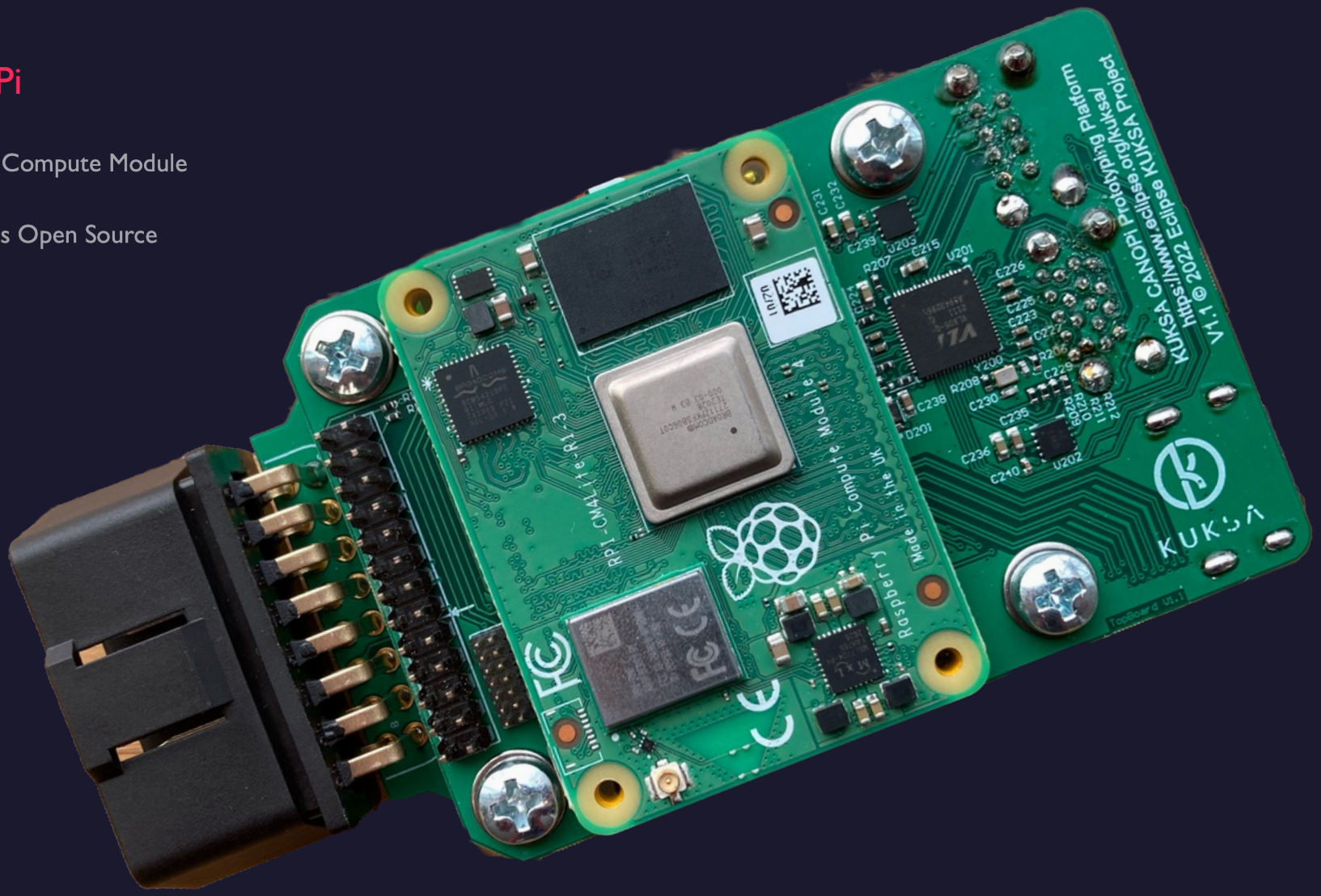
# Current Architecture

- What's missing
  - Service Discovery
  - (FOSS) cloud environment
  - more advanced edge client
- Topics for community discussions
  - Identify relevant and missing VSS signals
  - Map VSS signals to other standards
  - Vehicle Application SDK + data-driven broker client
  - Authentication & Authorization
  - an onboarding point for new devs (tutorial etc)
  - Something to use for demos



# Current Architecture

- Kuksa CANOPi
  - Based in RaspberryPi Compute Module
  - Schematics available as Open Source



# Current Architecture + Simulation

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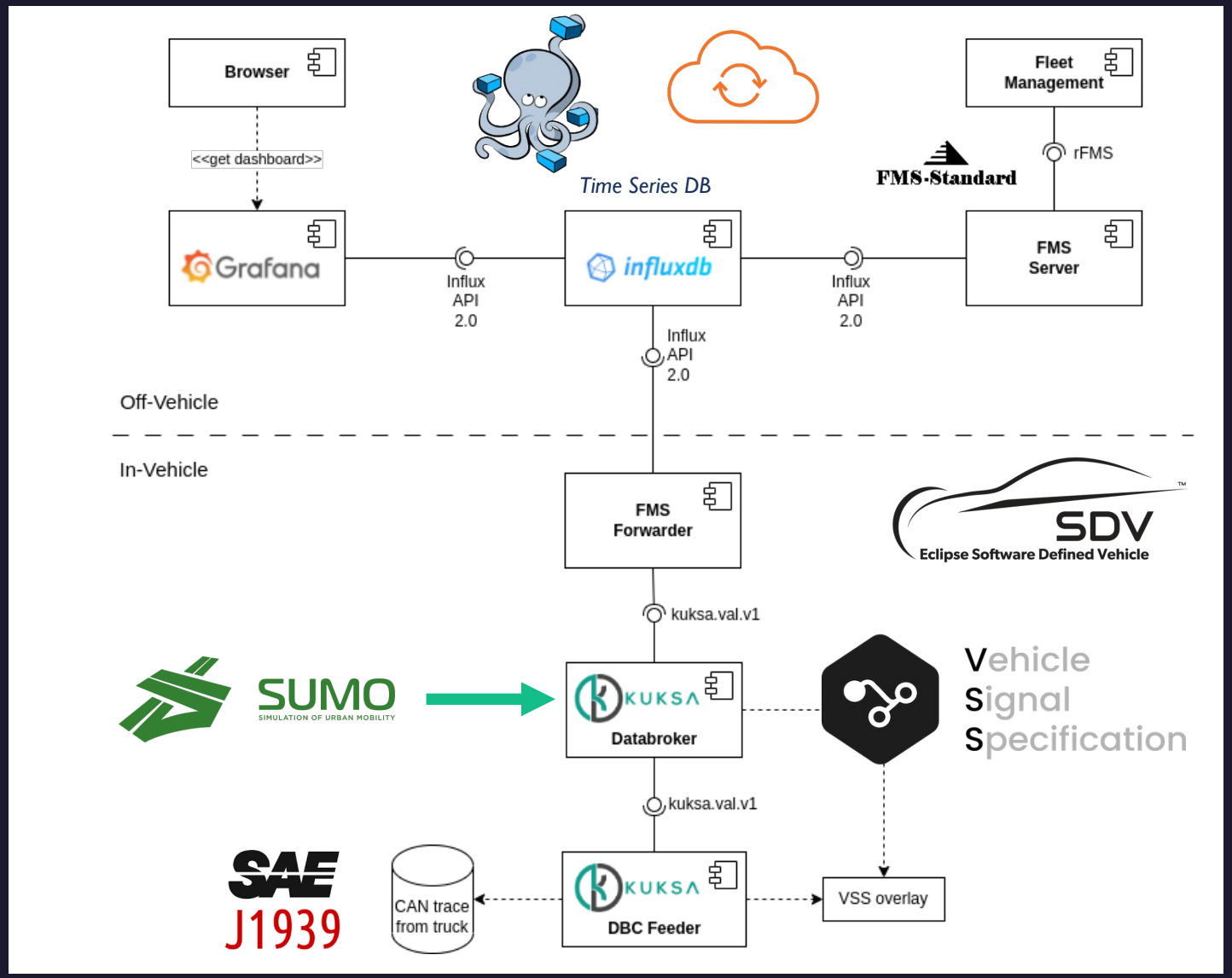
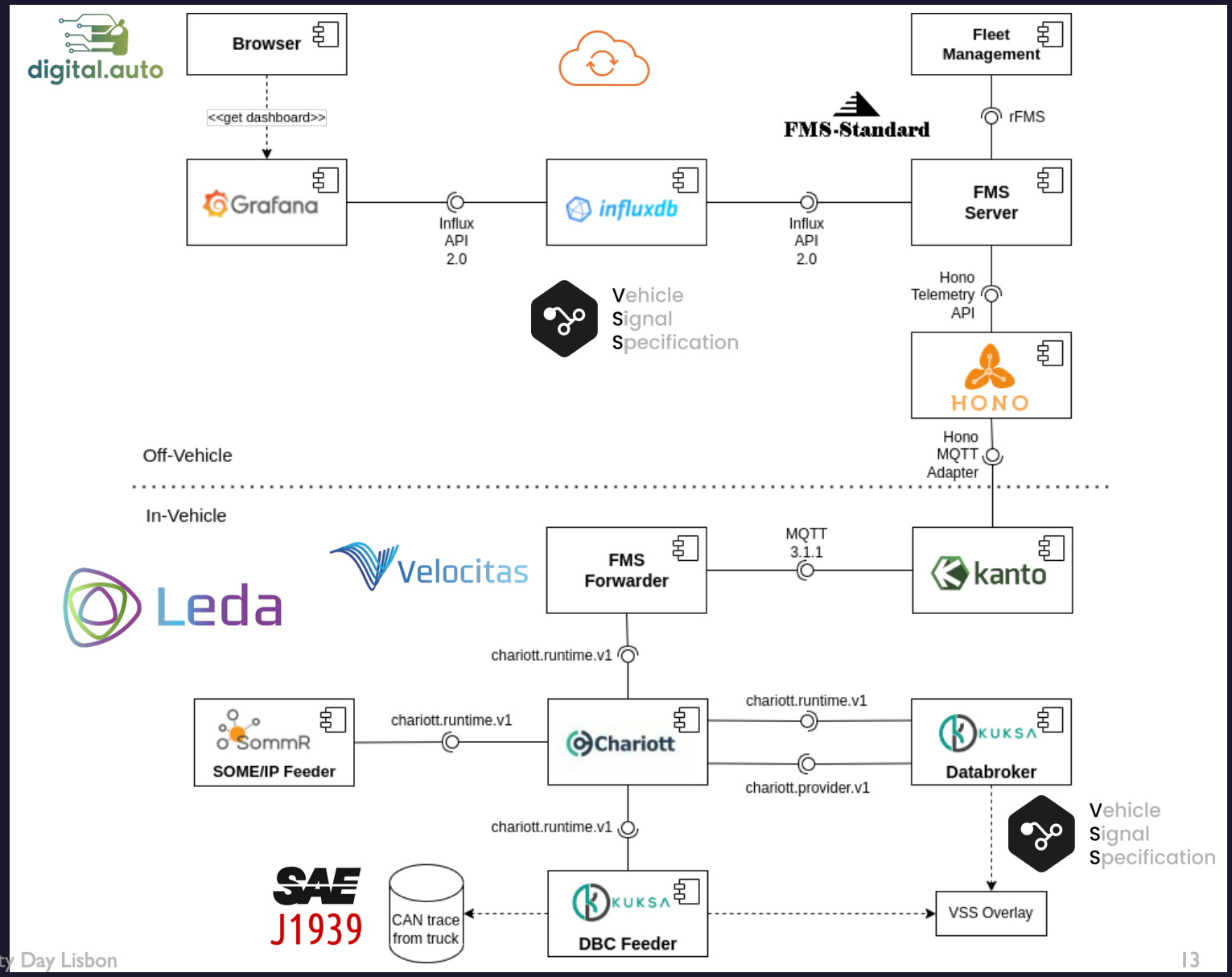


# Future Possible Architecture

- Here's what we'd like to do…
  - Use Eclipse Hono as cloud connectivity layer
  - Implement FMS Feeder as Eclipse Velocitas App
- Topics for community discussions
  - Auth using Eclipse Chariott
  - Onboarding point for new devs (tutorial etc)
  - Something to use for demos
  - Eclipse SommR based SOME/IP feeder



# Thank You

OSS enablement Team