Common Vehicle Interface Initiative

Bosch Stack

CVII Working Session
GENIVI: 18.02.2021
Common Vehicle Interface Initiative
Recap: VAPP in a nutshell

Vehicle Application Plugin Platform (VAPP)\(^1\) is an open\(^2\), responsive, lightweight, vehicle-2-X Complex-Event-Processing & agent-network (Vehicle App) runtime

- **Flexible integration** for
  - common vehicle interface
  - transport layers (e.g. CAN, DDS\(^3\), SOME:IP\(^3\)),
  - computing units & safety domains (e.g. Safety: QNX, QM: Apertis Linux) and,
  - freely deployable on environments like cloud provider.

- **Programming language agnostic** (SDKs for NodeJS, Python, C++\(^4\))
- **Flexible “vehicle app” orchestration** via event driven programming approach
- **Flexible analytic and machine learning** support
- **Flexible tooling** support e.g. Visual Studio Code & NodeRed

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\(^1\) in active development, not finished all quality gate processes, \(^2\) we strive to make it publicly available, \(^3\) via C++ SDK and respective libraries, \(^4\) currently not fully covers the richness as the NodeJS and Python SDKs

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Northbound Components

IoT Event Analytics Platform
IoTEA

VSS

Kuksa.VAL

Vehicle App

HAL Interface Adapter

HAL Interface

Northbound Components

Signal