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Android internal service

Some signal-connecting library using VSS standard

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VSS to standard Vehicle HAL

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Translation from VSS to VHAL properties

- Flat the VSS hierarchy
- Map some of the „fields” to the one supported by hidl
- Loose „branch” type for grouping the properties
- Translation module for properties that are defined differently by both standards (translation of units or datatypes)

```
#
# Tire
#
- Tire:
  type: branch
  description: Tire signals for wheel

- Tire.Pressure:
  datatype: uint8
  type: sensor
  unit: kpa
  description: Tire pressure in kilo-Pascal
```

```
/**
 * Tire pressure
 *
 * min/max value indicates tire pressure sensor range.  Each tire will have a separate min/max
 * value denoted by its areaConfig.areaId.
 *
 * @change_mode VehiclePropertyChangeMode:CONTINUOUS
 * @access VehiclePropertyAccess:READ
 * @unit VehicleUnit:KILOPASCAL
 */
TIRE_PRESSURE = (
    0x0309
    | VehiclePropertyGroup:SYSTEM
    | VehiclePropertyType:FLOAT
    | VehicleArea:WHEEL),
```


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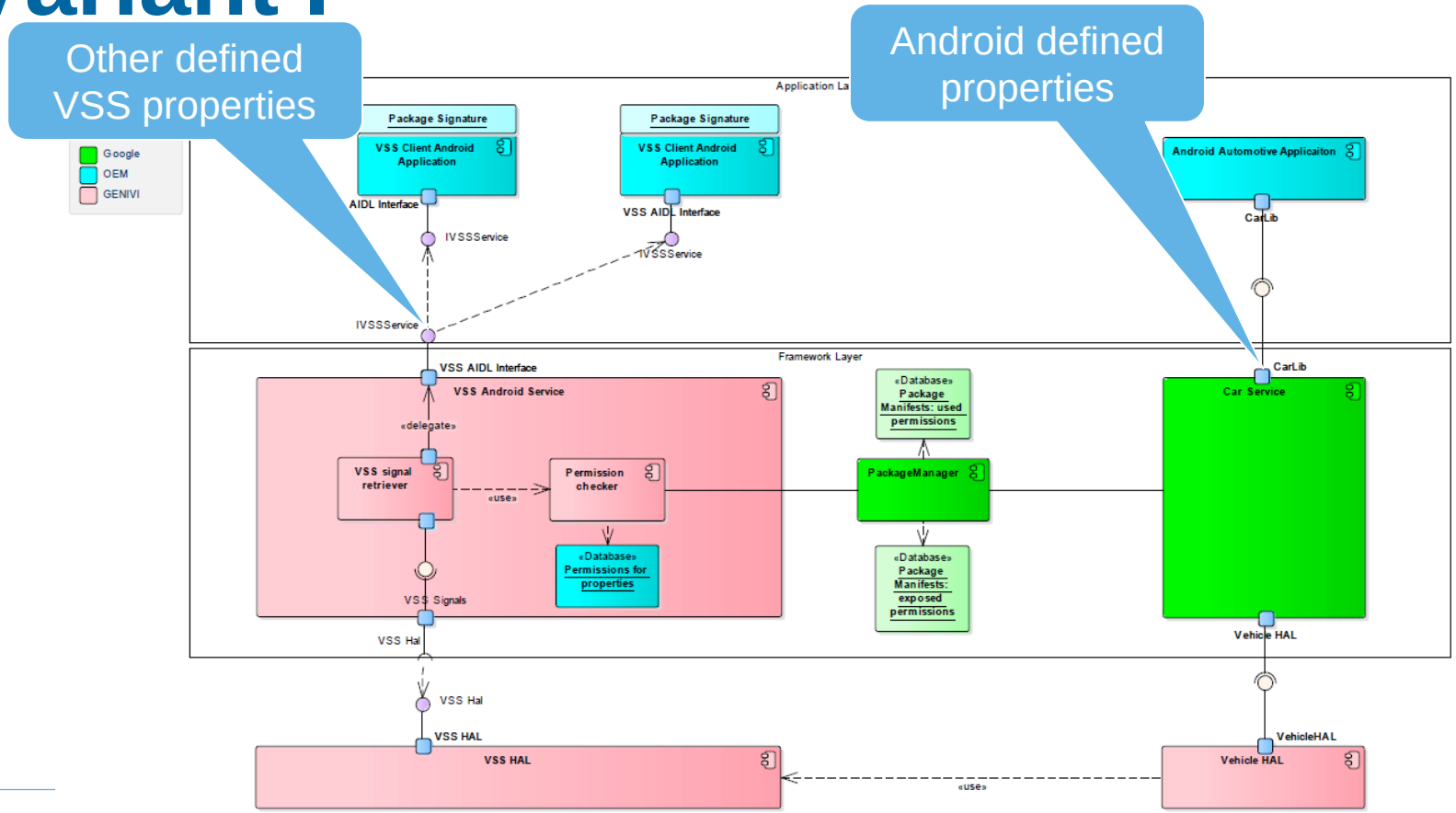
Variant I



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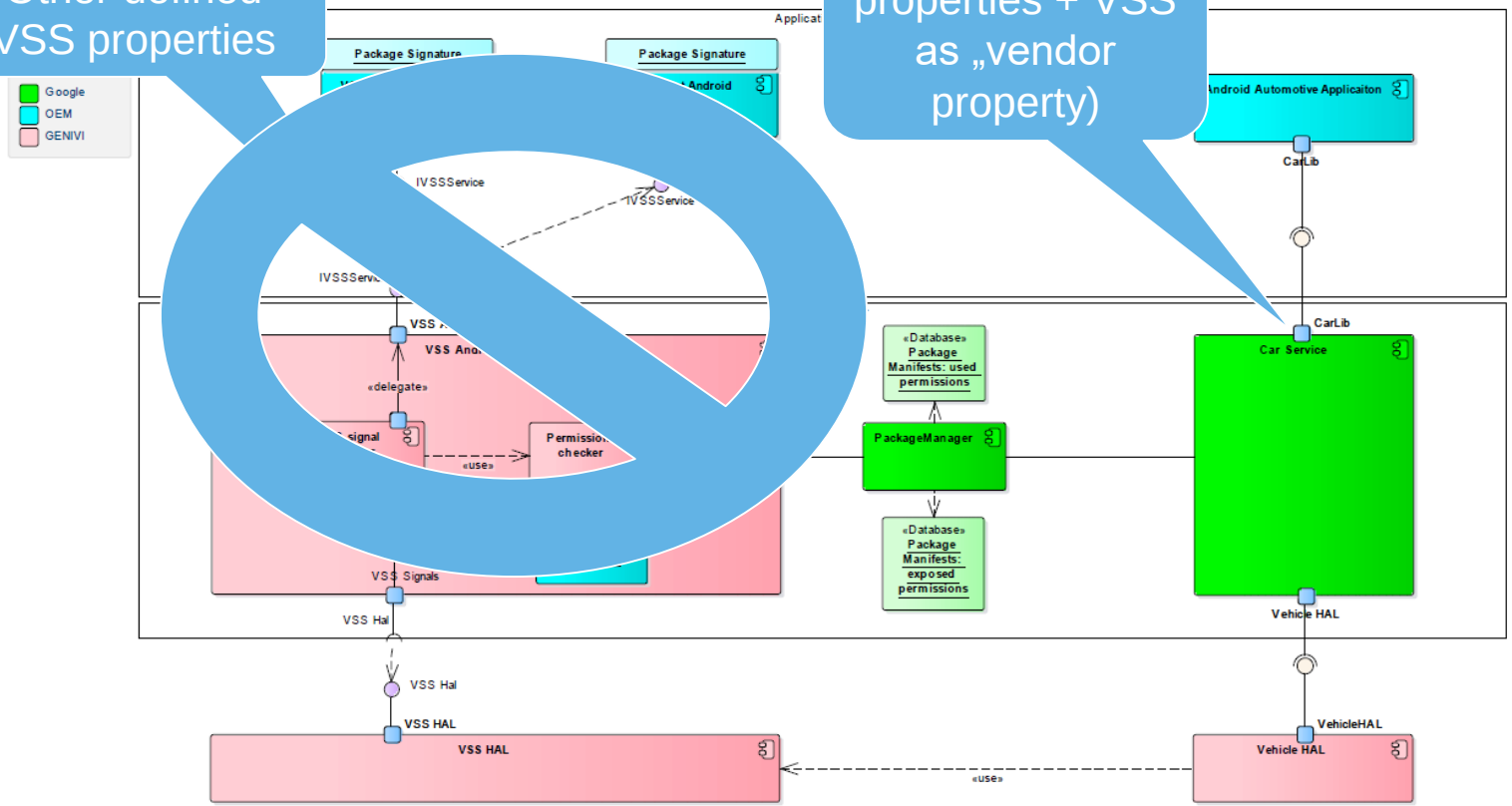
Variant II

Other defined VSS properties

Android defined properties + VSS as „vendor property)



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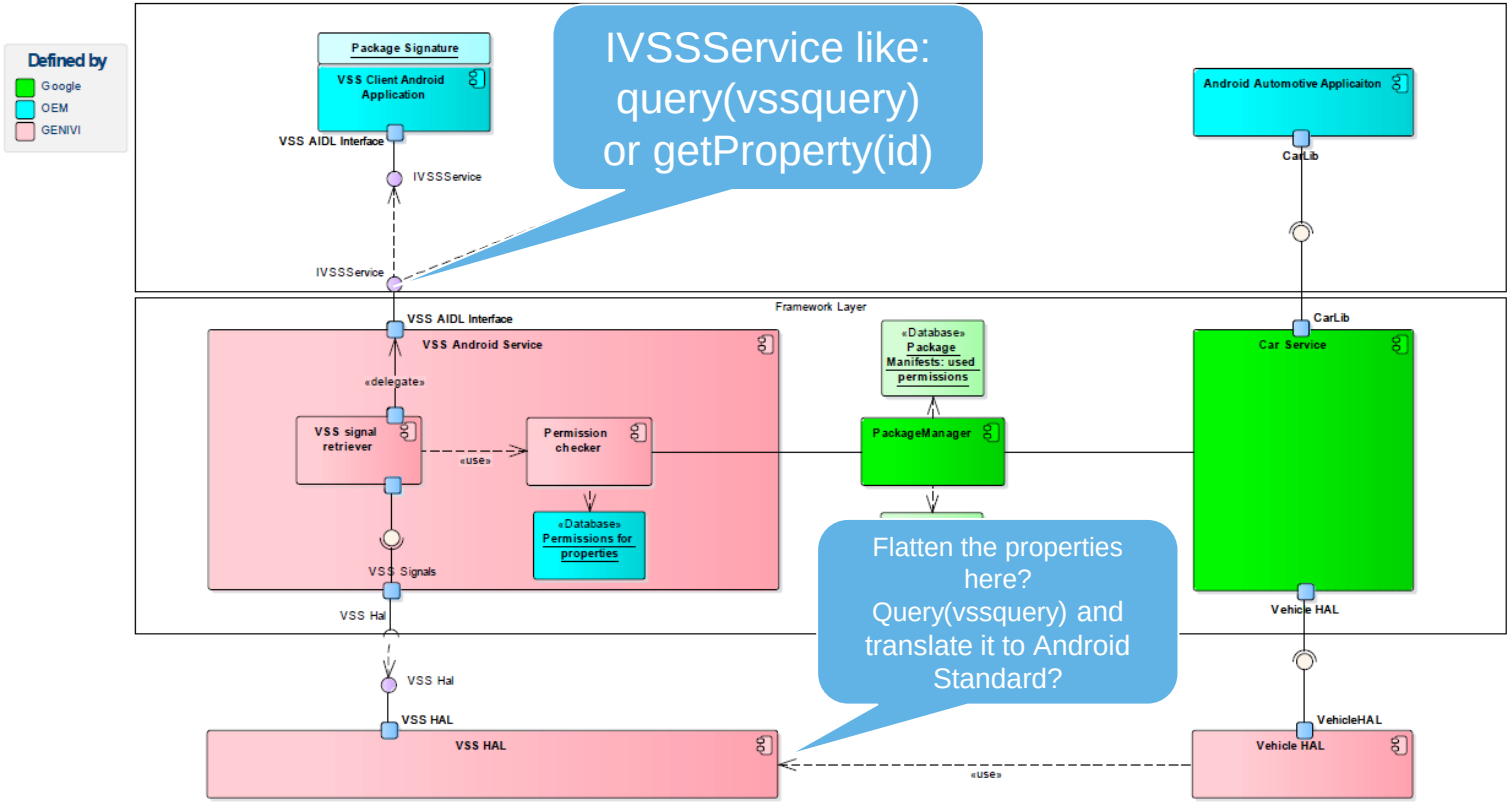
Variant III



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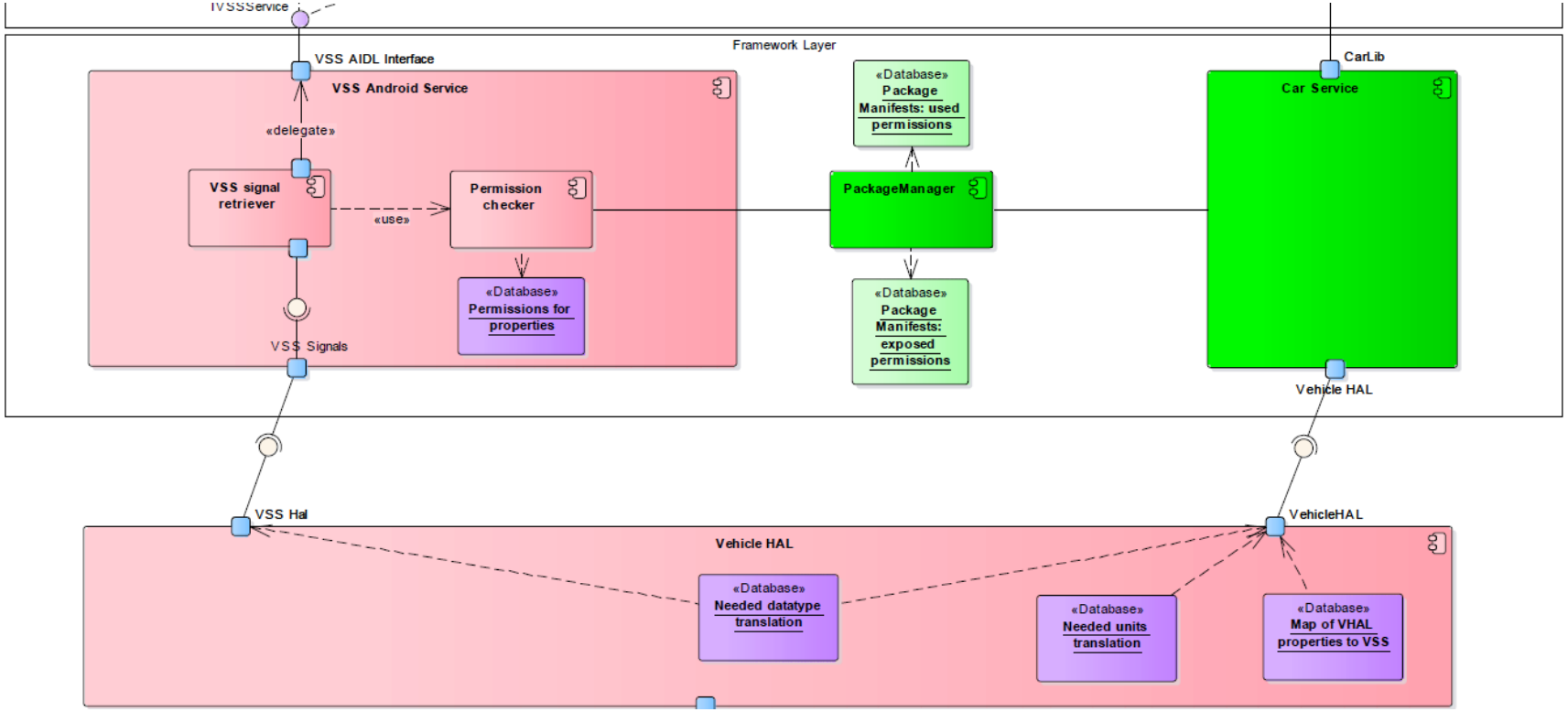

Help needed

- How to populate Android VHAL with properties
- Local DB as cache?
  - How to synchronise?
  - "Value banks" for flatten structure or sql with VSS format?
- Property value change needs to be propagated:
  - Android SDK allows to subscribe for value change:

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