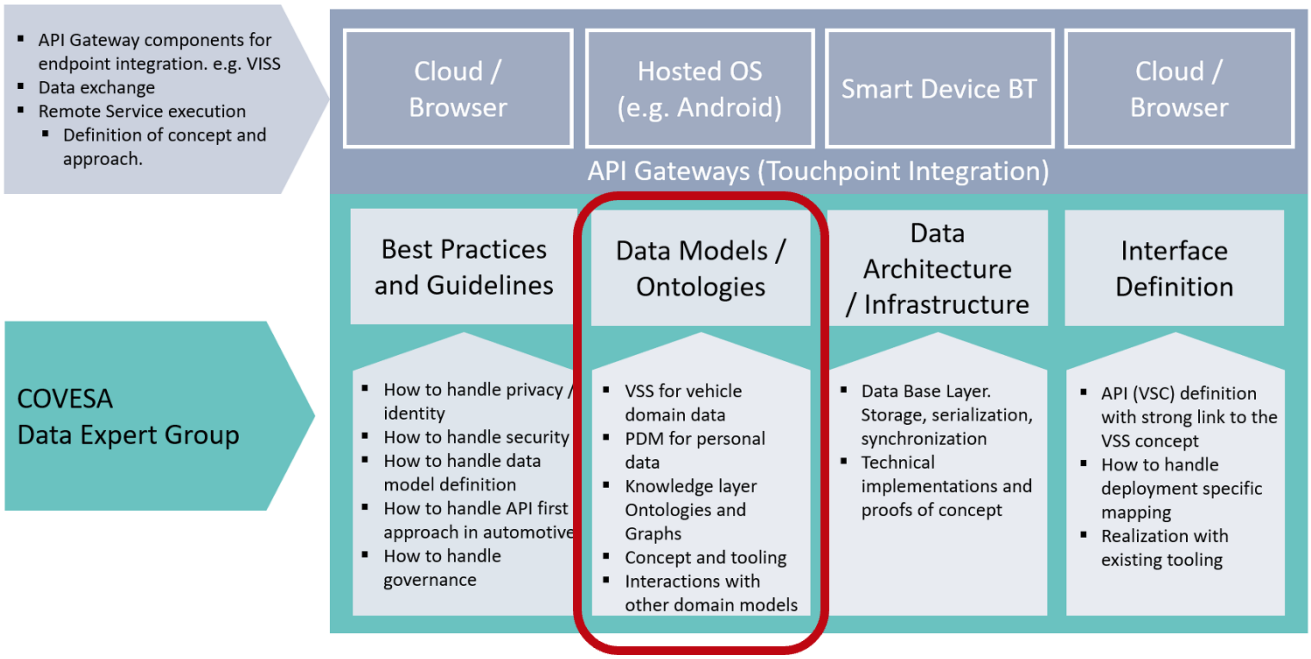
Data Models and Ontologies

Overview



Responsibilites

The Data Models and Ontologies Pillar shall:

- host the Vehicle Data Project(VSS) ensuring a consistent vehicle data rule set & development of a vehicle data catalog
- discuss and document a personal data model (PDM) and align with best practices of privacy and identity
- host discussion on vehicle data concepts and related tooling

The Data Models and Ontologies Pillar may:

- discuss interaction with other domain models Includes the following existing activities:•Vehicle Signal Specification project

Activities

- Vehicle Signal Specification
  - VSS Resources at a Glance
  - Documentation
  - GitHub

Proposals and Presentations

The proposals below have been presented along the 2023 activities with the aim of restructuring (or extending) the data modeling tasks at COVESA.

Proposal name	Author	Reference resources	Main idea(s)

Transforming from a vehicle centric data model to a domain agnostic information model	Ulf Bjorkengren (Ford)	 Presented at COVESA AMM Porto (April 2023)	

Defining the COVESA data modeling strategy and its associated artifacts	Daniel Alvarez (BMW AG)	
		Presented at COVESA AMM Porto (April 2023)
			• Use the right tool for the job.
			  ◦ Do not try to cover multiple domains with only one tree.
			  ◦ There are other types of data models that are more expressive than a tree.
			• Use an standard language to express cross-references (e.g., RDF).
			• Use ontologies to handle data integration and the identification of resources.
			• Provide the mechanisms to sync a tree to an ontology, and standardise the steps to follow.
			• Do you need a data model, or are you looking for a use-case specific data schema?
			• For more details, see the extended description.

GraphQL schema as contract	Daniel Wilms (SPREAD GmbH)	 Presented at VSS data modeling group on 01 Aug 2023	

Integrating Vehicle Signals with VSS and Metadata	Alan Freedman (Ford)	Recording of Presentation Passcode: #+wbA5dy  	
A consolidated view on Vehicle Data Modeling at COVESA	Daniel Alvarez (BMW AG)		• A proposal that combines the features of the multiple approaches that have been presented so far into one.