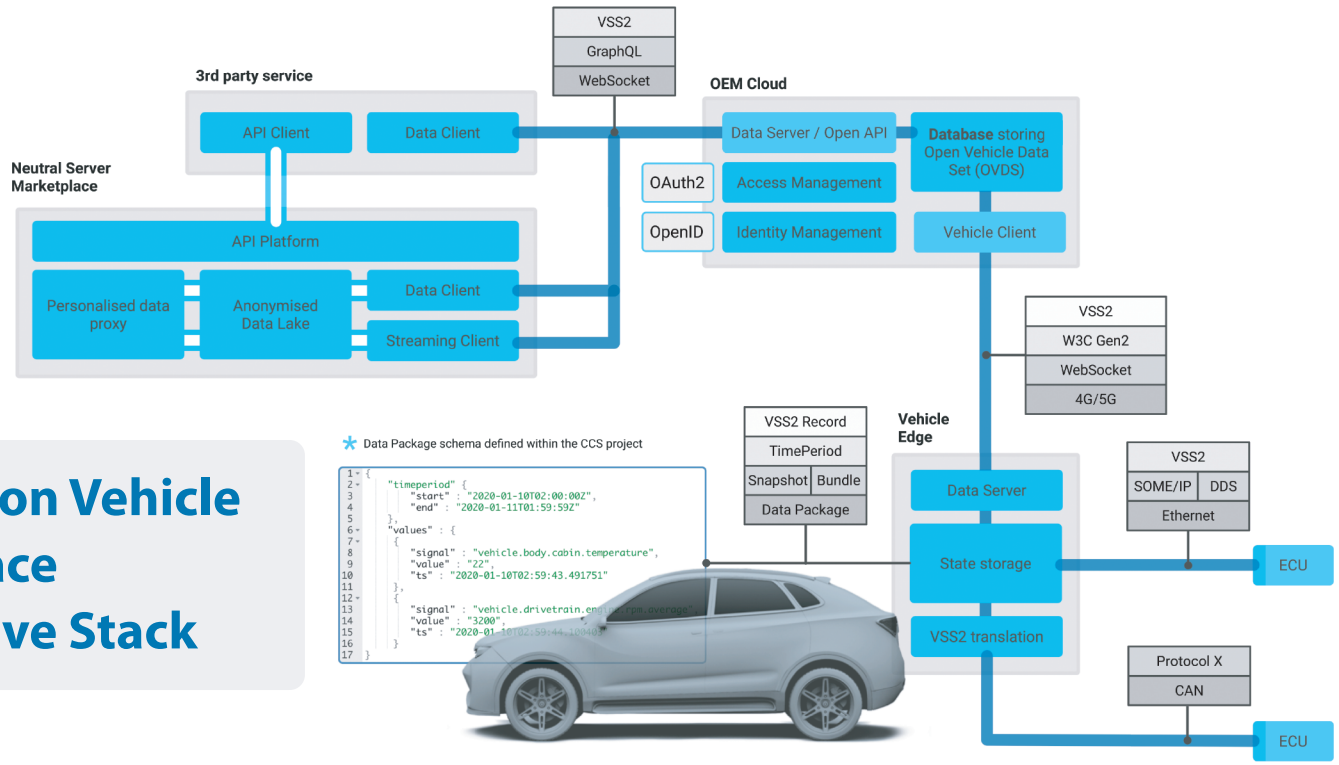
Connected Vehicle Interface Initiative (CVII)

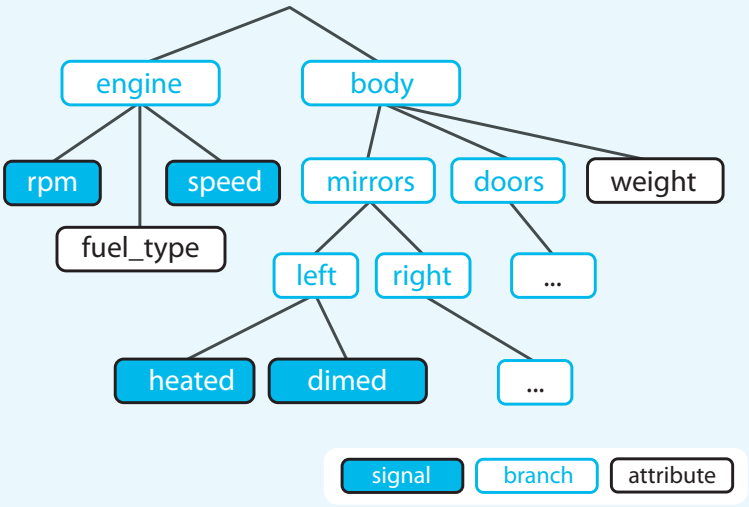


Common Vehicle Interface Initiative Stack

Connected Vehicle Interface Initiative (CVII) is an industry-wide, OEM-led dialog on joint development and adoption of common vehicle data models, access protocols and standard interfaces in the entire scope of the vehicle plus the cloud.
https://www.w3.org/2021/Talks/tg-auto/

We're working on standard vehicle service catalog (VSC) and related web-vehicle remote procedure calls. The combination of these existing and new activities forms a strong foundation for connected vehicles on the web. Join W3C's Automotive and Transportation and Smart Cities groups today to help us achieve faster results for the industry.
https://www.w3.org/2021/05/autowg-charter.html
https://www.w3.org/2021/06/smartcities-workshop/report.html

W3C and COVESA's partnership has already produced industry-relevant standards such as Vehicle Service Specification (VSS). We are working on Vehicle Information Service Specification (VISS)
https://www.w3.org/TR/vehicle-information-service/
and on Vehicle Signal Specification Ontology (VSSo)
https://w3c.github.io/vsso/



Industry Challenges

- Smart City trends require a common way to communicate with vehicles, destinations and devices.
- Third-party developer ecosystem wants common APIs to work across all brands of vehicles.
- Development time and costs are higher and integration is more difficult with proprietary approaches to data models.
- OEM and vendors in the vehicle data cloud market require integration/interoperability to realize revenue/profit potential. Fragmentation/integration/interoperability problems inhibit fast growth and slow innovation of important (end-user functions) functions
- Missing link between technical systems, humans and organizations necessary for buyers and sellers throughout the whole supplier chain to plan projects more accurately, increase use of off-the-shelf technology, and make development costs more predictable

Connected Vehicle Interface Initiative (CVII) Approach

- Build interoperable technology solutions for vehicle data and service delivery by standardizing data models and protocols
- Establish a common language to describe data and function interaction between all vehicle technology companies
- Develop industry-wide standards for a vehicle data model and service APIs
- Build ontology model to enable sharing more useful idata for cloud applications

Consumer and Commercial Impact

- Interoperable solutions for vehicle data and service invocation reduces costs and improves efficiency for the entire ecosystem
- Enables sharing of data for in-vehicle applications
- Improved passenger experiences, enhanced safety, real-time information/entertainment/effiency/maintenance/safety/convenience
- Common data model accelerates market for next generation apps that offer new conveniences and revenue opportunities

To learn more about Automotive and Transportation activities, visit:

https://www.w3.org/auto/

or email: Marty Voshell: **marty@w3.org**

or Alan Bird: **abird@w3.org**

COVESA