

Reminiscing and Release of VSS Version 3.0



Vehicle Signal Specification

COVESA's [Vehicle Signal Specification \(VSS\) version 3.0](#) is now available.

Reminiscing

I was introduced to VSS 6+ years ago at an All Member Meeting in Paris. At the time GENIVI and the W3C were kicking around the idea of a common service that could deliver and receive signals (data) from a variety of contexts inside and outside of the vehicle using well known, ubiquitous web technologies. The vision was to standardize and democratize development, enabling a much wider range of developers to innovate in Automotive. Magnus Feuer, of JLR at the time, and Gunnar Andersson, of GENIVI, piped up and said, "We have the data model for you! Have you heard of VSS?"

They proceeded to present an incredibly simple and pragmatic approach to modeling vehicle data that could be used in a variety of in and out of vehicle contexts. It was agreed that the group would try using VSS for the service. The service became [Vehicle Information Service Specification](#). And, of course VSS is still VSS.

The following goals and approaches have been there from the beginning and have contributed to VSS' adoption and growth:

- keep it understandable and simple to get started
- allow for complexity as needed
- cover as many uses and contexts as possible
- allow for variability
- keep it useful

VSS v3.0 - Introducing Overlays

In keeping with these goals the most significant feature introduced in VSS v3.0 is [Overlays](#).

It is well understood, with vehicle data, variation is the norm not the exception. And, it is highly unlikely that any one organization will adopt and support the entire VSS [standard catalog](#) specification. It is, however, very likely that organizations will adopt a subset of the standard catalog but will need to add /modify nodes and add/modify metadata. For example, an OEM wishes to support a much wider set of proprietary or different HVAC signals than the standard catalog provides. The Overlay feature supports this variability.

Overlays also support specific Profiles. A Profile can be thought of as a specific type of vehicle, for example motorcycle, delivery truck, etc... The VSS group is considering the creation of recommended/standardized Profiles. Currently there is a draft version of [motorbike profile](#).

Overlays have been discussed with the VSS group for some time, but are still in their early stages. For details see [Overlay documentation](#) [here](#).

Additional v3.0 Additions and Changes of Note

- Introduction of *instantiate* keyword to exclude specific signals from instantiation. See [documentation](#).
- Refactoring of **CombustionEngine** signals
- **Battery** branch renamed to **TractionBattery**
- Refactoring and extensions of signals related to **TractionBattery** and **Charging**
- Keyword *enum* changed to *allowed*
- Refactoring of seat signals
- Extension of wiper signals

Complete v3.0 release notes with details are [here](#).

Thank You

COVESA gives a big thank you to all the people who contributed to this release. THANK YOU! The best way to thank them is get involved.

Get Involved

We are now at a point in time where the connected and software defined vehicle are starting to take off. OEM and vendor adoption of VSS has grown. Let's continue to grow adoption and mature VSS. Please get involved.

- Join our weekly [calls](#) on Tuesdays at 7am PT / 10am ET / 4pm CET
- Learn more about VSS and meet those involved at COVESA's All Member Meeting on October 18-20 in Dearborn, Michigan. There will be VSS sessions every day. Register [here](#).
- Bring and submit your ideas. Ideas and questions may be submitted via [GitHub issues](#) in the VSS project.
- Contribute to the specification and tools
- Look for more to come on COVESA's recently approved Data Expert Group
- Look for more to come on COVESA's relationship with other industry alliance

If you have any questions contact me: paul.boyes@covesa.global.