VEC Implementation Guidelines

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The VDA recommendation 4968 / prostep ivip recommendation PSI21 "Vehicle Electric Container (VEC)" defines an information model, a data dictionary, a XML schema and a RDF onthology derived from and compliant to the model. The intention of the model was to cover a wide range of use cases and application scenarios. For this reason the specification had to be kept generic in some degree and in some aspects. However, for specific scenarios and / or use cases a more detailed description on "how the different pieces fit together" is possible.

To avoid dialects in the different VEC implementations, further guidelines or recommendations are necessary. This collection of implementation guidelines contributes to the unambiguous interpretation of the VEC standard. For various wiring harness definition or electrical system aspects and scenarios the correct instantiation is shown and specific hints for correct usage are given.

Contributing and Proposals

If you find any bugs in the implementation guidelines or if you have a request for a specific topic, or if you would like to contribute your own tutorials please drop us an issue on the PROSTEP JIRA. If you don't have an account there yet, see here for the procedure to get one.

Additional Resources

- VEC Implementation Guidelines
- VEC Implementation Guidelines (PDF-Version)
- Section 2012 VEC Compliance Test Suite

Currently Under Review

The following table contains pages currently under review.

Title	Latest Content Addition / Commit	Created	Changed
Internal Connectivity	<u>#915</u> : New generic concept for E/E component with internal connectivity. Latest Commit: Improved GitHub issue integration for review listing & latest changes.	2025-07-08	2025-07-11
Connectors	<u>#957</u> : Improved cavity mapping for modular connectors. Latest Commit: Improved GitHub issue integration for review listing & latest changes.	2018-11-29	2025-07-11
<u>Wires</u>	KBLFRM-1234: Added description for layering and odering of wire elements. Latest Commit: KBLFRM-1256: Added routing implementation guideline.	2019-03-07	2024-12-27
Routing	KBLFRM-1256: Routing Variants in the VEC Latest Commit: KBLFRM-1256: Added routing implementation guideline.	2024-12-23	2024-12-27

Latest Changes

The following table contains lately changed pages, sorted descending by last change.

Title	Latest Content Addition / Commit	Created	Changed
Internal Connectivity	<u>#915</u> : New generic concept for E/E component with internal connectivity. Latest Commit: Improved GitHub issue integration for review listing & latest changes.	2025-07-08	2025-07-11
<u>Connectors</u>	<u>#957</u> : Improved cavity mapping for modular connectors. Latest Commit: Improved GitHub issue integration for review listing & latest changes.	2018-11-29	2025-07-11
ECUs, EE-Components and Component Boxes	Latest Commit: Addeds some notes for guidelines using the pre 2.2 internal connectivity.	2019-05-05	2025-07-11
Relays	Latest Commit: Addeds some notes for guidelines using the pre 2.2 internal connectivity.	2018-11-29	2025-07-11
Multi Fuses	Latest Commit: Addeds some notes for guidelines using the pre 2.2 internal connectivity.	2019-03-07	2025-07-11
<u>Files, Partitioning, Sizing & Packaging (XML)</u>	KBLFRM-1100: Initial Definition of File-Extension Latest Commit: Fixed a typo.	2024-03-14	2025-02-27
Placements and Dimensions	Latest Commit: KBLFRM-1256: Added routing implementation guideline.	2019-03-11	2024-12-27
<u>Topology</u>	Latest Commit: KBLFRM-1256: Added routing implementation guideline.	2019-12-05	2024-12-27
Wires	KBLFRM-1234: Added description for layering and odering of wire elements. Latest Commit: KBLFRM-1256: Added routing implementation guideline.	2019-03-07	2024-12-27

Title

Created Changed

Routing

KBLFRM-1256: Routing Variants in the VEC Latest Commit: KBLFRM-1256: Added routing implementation guideline. 2024-12-23 2024-12-27

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