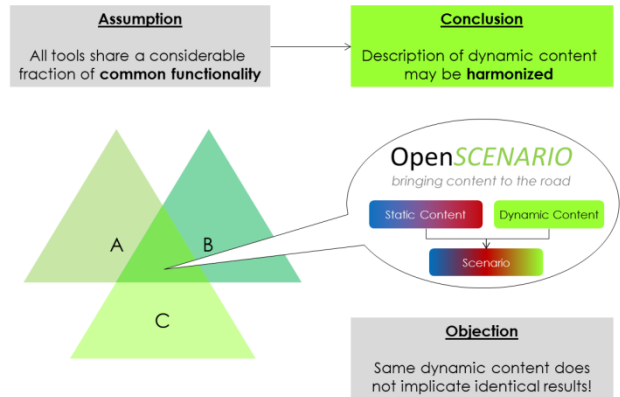
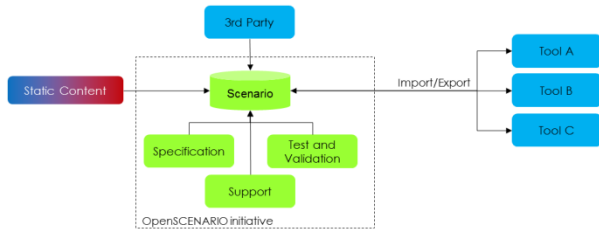


# OpenSCENARIO<sup>®</sup> - bringing content to the road

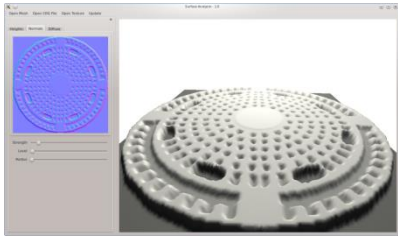
- Provide transferable XML **scenario definition** for various use cases
- Use **OpenDRIVE** / **OpenCRG** as basic layers
- Allow for independent content provision by 3<sup>rd</sup> parties
- Provide standardized / open **tool-sets** for validation of scenario definitions
- Establish **support** services



Further information: [www.openscenario.org](http://www.openscenario.org)

Drop us a line: [openscenario@openscenario.org](mailto:openscenario@openscenario.org)

# OpenCRG<sup>®</sup> - managing the road surface ahead



**OpenCRG<sup>®</sup> is the leading open source data format and tool-suite for the creation, management and evaluation of detailed road surfaces. Operation started in early 2010.**

Development and publication of **OpenCRG<sup>®</sup>** has been funded by five German automotive OEMs. It is maintained by VIRES Simulationstechnologie GmbH.

The **OpenCRG<sup>®</sup>** tool-suite contains a series of MATLAB<sup>®</sup> tools for the modification, generation, visualization and evaluation of CRG data sets. It is complemented by a C-API which provides evaluation-only functionality but which also guarantees maximum performance for real-time applications.

Further information and free downloads: [www.opencrg.org](http://www.opencrg.org)

Drop us a line: [opencrg@opencrg.org](mailto:opencrg@opencrg.org)

# OpenDRIVE<sup>®</sup> - managing the road ahead



**OpenDRIVE<sup>®</sup> is the leading open format and de-facto standard for the description of road networks in driving simulation applications.**

**OpenDRIVE<sup>®</sup>** is based on XML; it allows for the exact description of simulated roads using the same elements that are found in real roads (lines, curves, clothoids, (super-)elevation profiles, lanes, signals etc. ).

**OpenDRIVE<sup>®</sup>** started in 2005 as an initiative of Daimler AG Driving Simulator and VIRES Simulationstechnologie GmbH, Germany. It made its first public appearance in 2006 and is since supported by a constantly growing user community in the driving simulation industry.

**OpenDRIVE<sup>®</sup>** is a mature format which has proven its usability in numerous driving simulation solutions like vehicle dynamics, traffic simulation, scenario simulation etc. It is managed by a core team of international driving simulation experts who harmonize and translate incoming user requirements into regular updates of the format. With release 1.4, the data format has been adapted for the representation of real road networks including geo-referencing.

Further information and free downloads: [www.opendrive.org](http://www.opendrive.org)

Drop us a line: [opendrive@opendrive.org](mailto:opendrive@opendrive.org)