Fact sheet

ASAM OpenDRIVE®

Positioning

Simulation

Measurement & Calibration

Data Management & Analysis

Diagnostics

Test Automation

ECU Networks

Software Development

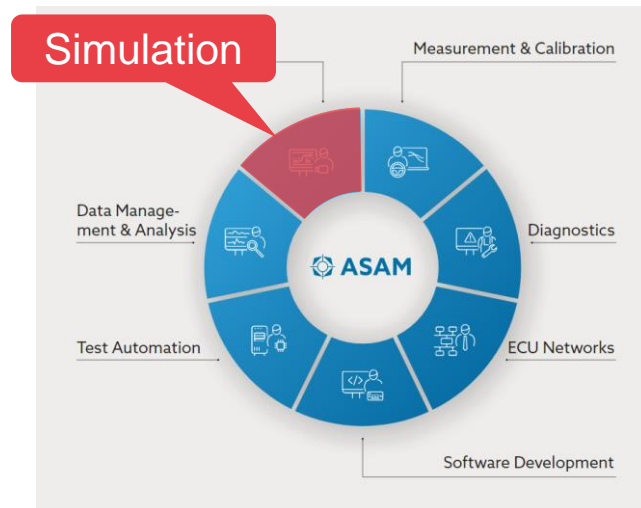| Version	Format	License
1.8	**XML XSD**	**free**
		First release **2018**

Topics

Daimler DRIVE → OpenDRIVE (VIRES, 2005) → ASAM OpenDRIVE (2018)

- First OpenX-standard to be transferred to ASAM
- Foundation for ASAM's domain „Simulation"

Scope

- Description of static road networks

Connects with

- ASAM OpenCRG
- ASAM OpenSCENARIO

Application areas

- Description of synthetic and real-world road networks
- Driving and traffic simulation

Fact sheet

ASAM OpenCRG® (Curved Regular Grid)

Positioning

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Software Development

ASAM

Topics

Daimler CRG → OpenCRG (VIRES, 2008) → ASAM OpenCRG (2018)
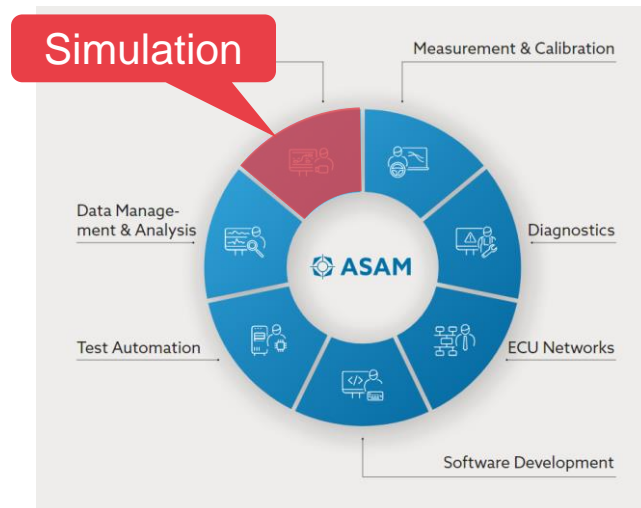
- OpenCRG was a joint effort by Daimler, BMW, Audi, Porsche, Volkswagen
- Transfer to ASAM in 2018 along other OpenX-standards

Scope

- Description of road surfaces

Connects with

- ASAM OpenDRIVE

Application areas

- Driving simulation
- NVH simulation
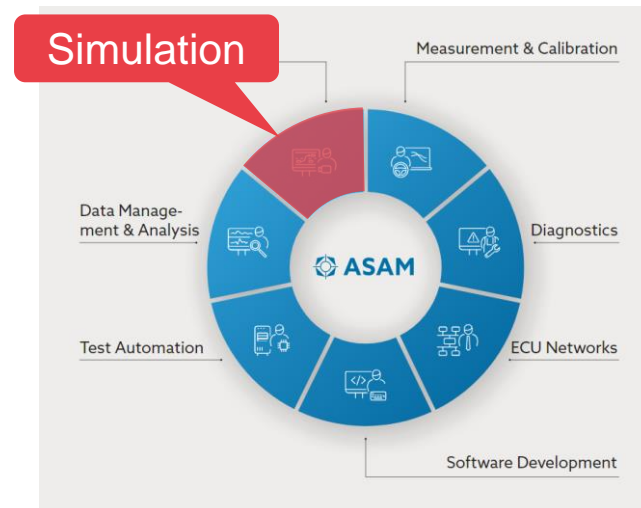- Endurance testing

Version	Format	License
1.2.0	**CRG + s/w**	**free**
		First release **2018**

ASAM

ASAM OpenSCENARIO®

Positioning

Simulation

Measurement & Calibration

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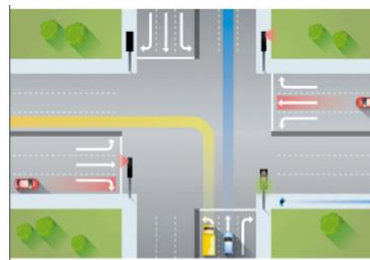| Version	Format	License
1.2.0	**XML XSD**	**free**
		First release **2018**

Topics

OpenSCENARIO (VIRES, 2013) → ASAM OpenSCENARIO (2018)

- Intended for logical (paramerized) and concrete scenarios
- Reference implementation: esmini (on github)
- Large user base

Scope

- Description of dynamic elements in road networks
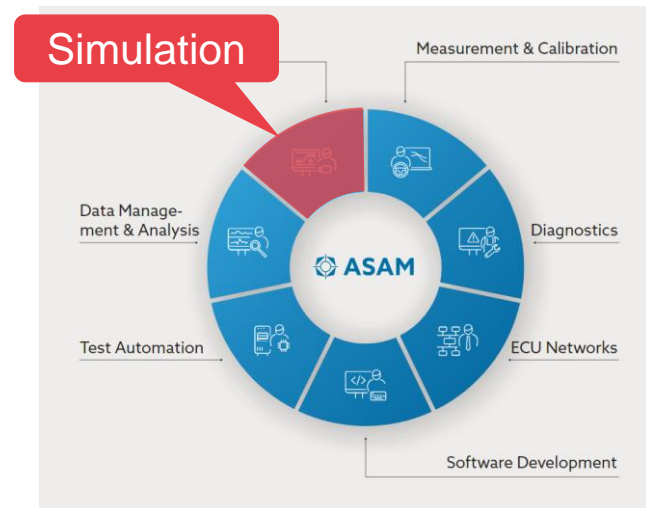

Connects with

- ASAM OpenDRIVE

Application areas

- Traffic simulation
- Scenario simulation
- Vehicle maneuvers and actions

Fact sheet
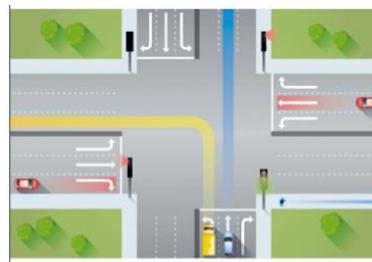
ASAM OpenSCENARIO® 2

Positioning

Topics

- Developed by ASAM
- Ideal for abstract and logical (paramerized) scenarios
- Abstraction of actions from static environment (road)

Scope

- Dynamic scenario description

Connects with

- n/a

Application areas

- Coverage-based testing
- X-in-the-loop testing
- Scenario simulation

Version	Format	License
2.0.0	**Language + Domain model**	**free**
		First release **2022**

ASAM

Fact sheet

ASAM OpenLABEL®

Positioning

- Simulation
- Measurement & Calibration
- Diagnostics
- ECU Networks
- Software Development
- Test Automation
- Data Management & Analysis

Version
1.0.0

Format
JSON
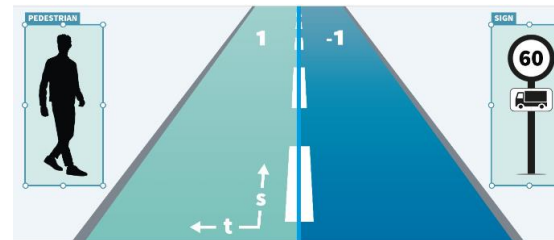
License
free

First release
2021
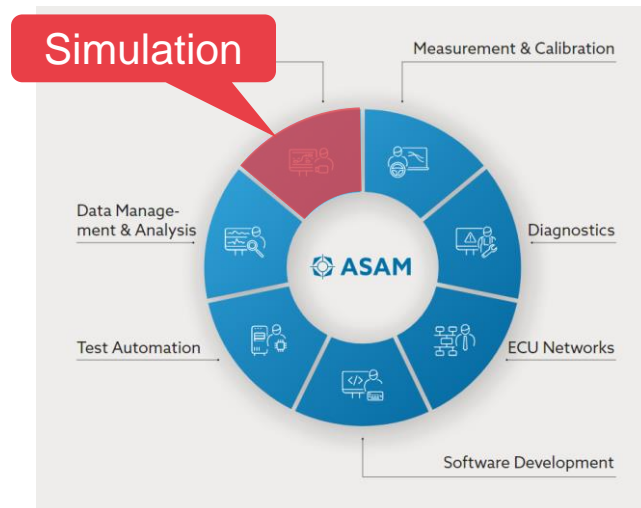
Topics

- Initiated and developed by ASAM
- Allows the import of ontologies and taxonomies
- Labeling in single frames or across series of frames
- Quickly adopted by railroad industry

Scope

- Object labeling and scenario tagging

Connects with

- OpenXOntology

Application areas

- Multi-sensor data labeling
- Scenario tagging

ASAM