



Scenario Generation

Bringing the complexity and realism of
the real world into simulation

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Highlights

- Flexible logical scenarios
- Accurate replay scenarios
- Realistic 3-D environments for digital twins
- Support of any sensor setups & data formats
- Road model generation from raw data



Use Real-World Scenarios to Validate ADAS and AD Functions

The reliable validation of autonomous or semi-autonomous vehicles requires thousands of realistic traffic scenarios – including rare events. However, manually creating these rare events in dedicated editors is extremely time-consuming and limited by human imagination.

Test the Important: Scenario-Based Testing

Generating scenarios from a host of real-world data brings the complexity of the real world into simulation and enables you to validate ADAS and AD functions with thousands of relevant and realistic simulation scenarios. Critical situations experienced in test drives can be examined and debugged in reproducible simulations.

Trust Your Simulations: Sensor Model Validation

Real-world scenarios also help you test perception algorithms and increase confidence in the sensor models used in your test systems, because the synthetic sensor data generated from simulation can be compared with real sensor data of the same scenario.

Generate Simulation Scenarios from Recorded Data

- Cost-effective and quick service for generating simulation scenarios from real-world data
- Realistic simulation scenarios for scenario-based testing and physics-based sensor simulation in HIL & SIL applications
- Support for OpenSCENARIO and OpenDRIVE
- Accurate ground truth scenarios generated from raw data (camera, lidar, GPS)
- Scenario generation from object list data or data sets (object lists, GPS, HD map)
- Road generation from raw data or import of HD maps

Key Benefits

- Elevate your test and validation activities with real-world scenarios
- Progressively build up your scenario database with important scenarios matching your operational design domain
- Use recorded data for scenario-based testing to find new corner cases
- Validate your models and simulations
- Debug critical situations experienced during test drives in simulation
- Continuously virtualize scenarios to enhance the test coverage of your operational design domain

Elevate your test and validation activities with real-world scenarios

