

The Scenario Editor allows the user to populate and animate driving databases with various self-defined kinds of vehicles. Special driving actions can be attached to vehicles in order to influence their behavior.

The main window displays the OpenDRIVE® road layout created e.g. with the road designer ROD® including all lanes and junctions in different colors for the respective lane types (like drivable, parking, border). The Scenario Editor provides continuously adjustable zoom and scrolling of display detail.

Vehicle types can be defined with custom properties like dimensions, maximum possible speed, torque, maximum deceleration and mass. For each type, the user can select between different graphical models delivered with our tool chain.

All defined vehicles, also called players, can be set up anywhere on the road with a direction and start velocity. By default all players are driving according to the traffic rules of each road and avoid accidents by themselves.

To create special behavior or critical traffic situations, actions can be created at trigger points, which may be located anywhere on the road. Triggers get activated directly through selected players or they may be depending on the state of a counter. Currently the following actions are available:

- Lane Change – time for lane change is definable
- Speed Change – target speed and acceleration are definable
- Autonomous Behaviour – sets behaviour according to the traffic rules
- Increasing of Counters – changes the value of user-defined variables

In order to fill the database with even more life and save time setting up players a global traffic definition is used. The number of players and their composition of cars, trucks and bikes can be adjusted as well as the pivot player and the circular or elliptical shape of the surrounding area.

During the preparation or run-time of a simulator experiment, the Scenario Editor can be connected to a running simulation and serve as a bird view. Every player can be selected from a drop down list which activates the tracking mode and automatically keeps this player in focus.

