Oddlot

A graphical editor for OpenDRIVE and OpenScenario files

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FIVE SIDED CAVE

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DRIVING SIMULATOR

- 3 degrees of freedom
- 3 direct linear drives
- a-max 2g
- V-max 1m/s
- force feedback steeringwheel
- active gas pedal (Conti)
- active brake pedal
COMPONENTS OF THE DRIVING SIMULATOR

- Hardware
- Restbus Simulation
- Vehicle dynamics

- Road surface
- Street logic
- Third party vehicle simulation

- Landscape
- Buildings
- Traffic signs
- Side rails
- Trees

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THIRD PARTY VEHICLE SIMULATION

- Realistic behavior
- Respecting traffic rules
- Car to car / car to infrastructure communication
APPLICATIONS

- Standard tests, e.g. lane change test
- Evaluation of driver assistance systems
- Test of new HMI concepts
- Entertainment, GPS, Telephone, air conditioning
- Driver reaction in critical situations
- Visibility studies
- Evaluation of rear view mirrors
ODDLot

- Alignment
- OSM Import
- Road and lane links
- Road Objects
- Signals/Signs
- Road Markings
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• Internationalization of the driving simulator and oddLot
• New city models
• New signs
• New barriers
• New traffic lights
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• examples
Motivation

- our third party vehicle simulation is not flexible enough to describe complex scenarios.
- collaboration with different OEMs
- Sharing of scenarios with other research institutions
- New application areas: automated tests

OpenSCENARIO
OPENSCENARIO

- Extension of Oddlot to support OpenSCENARIO
- Extension of OpenCOVER to support OpenSCENARIO
- Development of an OpenSCENARIO parser which can be used in both applications

Design decisions for the OpenSCENARIO parser:
- Xerces as xml parser
- Abstract enumeration of Members
- Allow deriving your own classes from the base OpenSCENARIO types
- Allow deriving from member values
Please join the development at:

https://github.com/hlrs-vis/covise

Gettings started is as easy as:

git clone https://github.com/hlrs-vis/covise.git --recursive

Questions may be sent to the COVISE Mailinglist
https://listserv.uni-stuttgart.de/mailman/listinfo/covise-users

You can receive notifications of changes to the COVISE repository on the covise-commits list.
https://listserv.uni-stuttgart.de/mailman/listinfo/covise-commits