openMobility Working Group

Dr. Robert Hilbrich
robert.hilbrich@dlr.de

German Aerospace Center (DLR)
Berlin, Germany
Eclipse SUMO Project

Simulation of Urban MObility

Welcome to Eclipse SUMO (Simulation of Urban MObility), an open source, highly portable, microscopic and continuous multi-modal traffic simulation package designed to handle large networks.

SUMO 1.10.0 for Windows 64bits

Latest Development Version (Nightly Snapshots)

Older releases

View on GitHub  Star 1,239  Fork 793

http://eclipse.org/sumo
SUMO – What is it?

• DLR’s open source microscopic transportation system simulation software

• Under development since 2001, with the explicit goal to simulate even large cities / areas in more than real-time

• SUMO comes with a full-fledged suite of helper programs that do setting up, running, and controlling such a simulation
(Almost) any moving object in a city can be simulated with SUMO.
ECLIPSE MOSAIC

A Multi-Domain and Multi-Scale Simulation Framework for Connected and Automated Mobility.

Co-Simulation Framework
Eclipse MOSAIC couples best in class simulators together to create complex simulation scenarios quickly and easily. Standardized interfaces allow to couple new simulators without effort to extend the modeling capabilities.

Multi-Domain / Multi-Scale Models
The flexibility of Eclipse MOSAIC allows to combine simulation models of multiple domains (e.g. application, traffic, communication) on multiple scales (e.g. microscopic-traffic vs. detailed vehicle simulation) which all can be combined.

Open for Extensions
Eclipse MOSAIC is Open Source! This makes it very easy to extend the simulation framework by your own models. You can find the source code of the coupling engine, various simulators and models, and example scenarios on our GitHub page.

https://www.eclipse.org/mosaic/
openMobility Working Group

Eclipse SUMO

Eclipse MOSAIC
Joining the openMobility working group - Why? (1)
Joining the openMobility working group - Why? (2)

- Community gathering and networking events (every 6 weeks)
- Get in touch with the developers of Eclipse SUMO & Eclipse MOSAIC
  - Upcoming releases, new features, API changes, …
- „Deep dive“ workshops (every 3 months)
  - „The future of co-simulation APIs“
  - „The future of user interface libraries for simulation tools“
  - „Getting your hands on mobility data (= traffic demand)“
    - → ongoing joint effort towards a whitepaper
- Upcoming: „Simulation of shared space and pedestrian dynamics“
- Joint preparation of an EU research project proposal
How to get in contact with openMobility?

https://accounts.eclipse.org/mailing-list/openMobility
Become a Member

Join Us!

The pace of innovation in the field of mobility is faster than ever. Open source has won because no single company can compete with the scale and speed of disruptive innovation delivered by collaborative ecosystems. Join global industry leaders collaborating on a common traffic simulation and mobility modeling platform!

Benefits

Members of the Eclipse openMobility Working Group take advantage of the following opportunities:

- Participate in industry collaborations to develop a common open platforms for traffic simulation and mobility modeling.
- Play a role in defining Eclipse openMobility strategic priorities
- Gain insights into the Eclipse openMobility technology roadmap and direction of associated Eclipse Projects, such as Eclipse SUMO
- Benchmark and learn best practices from peers for leveraging open simulation and modeling technologies to accelerate product development and improve time-to-revenue

https://openmobility.eclipse.org/working-group/become-a-member/
Q & A

Robert.Hilbrich@dlr.de

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