

openMobility Working Group

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Knowledge for Tomorrow

Eclipse SUMO Project

SUMO

About Download Documentation Conference References Support Contact

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

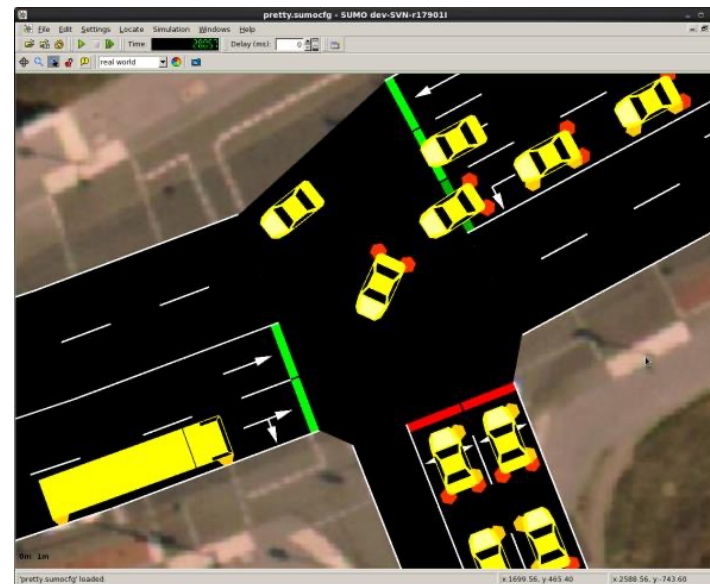
Time	Vehicle	Position	Speed	Acceleration	Braking	Engine	Brake	Light	Turn
66	1	100	10	0	0	0	0	0	0
76	1	100	10	0	0	0	0	0	0
86	1	100	10	0	0	0	0	0	0
96	1	100	10	0	0	0	0	0	0
106	1	100	10	0	0	0	0	0	0
116	1	100	10	0	0	0	0	0	0
126	1	100	10	0	0	0	0	0	0
136	1	100	10	0	0	0	0	0	0
146	1	100	10	0	0	0	0	0	0
156	1	100	10	0	0	0	0	0	0
166	1	100	10	0	0	0	0	0	0
176	1	100	10	0	0	0	0	0	0
186	1	100	10	0	0	0	0	0	0
196	1	100	10	0	0	0	0	0	0
20	1	100	10	0	0	0	0	0	0

<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



2D version



SUMO – what can be run?



- (AI
a c

ECLIPSE SUMO User Conference 2021 – Tutorial

Interval
 Create new interval
dataSet: test
Interval: 0:00 - 0:00:00

Data attributes
<all>
Scale: Min -> Max

Parameters
counts: 1000
Edit parameters

Legend
Area: 100

SUMO

Später ans... Teilen

User Tutorial - 2021

Ansehen auf <https://www.youtube.com/watch?v=tlshWdzFWpY>





ECLIPSE MOSAIC

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

 **Download Now**
Latest Release: 21.1

 **Read the Docs**

 **Tutorials**

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.

» [Learn More](#)

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.

» [Learn More](#)

Open for Extensions

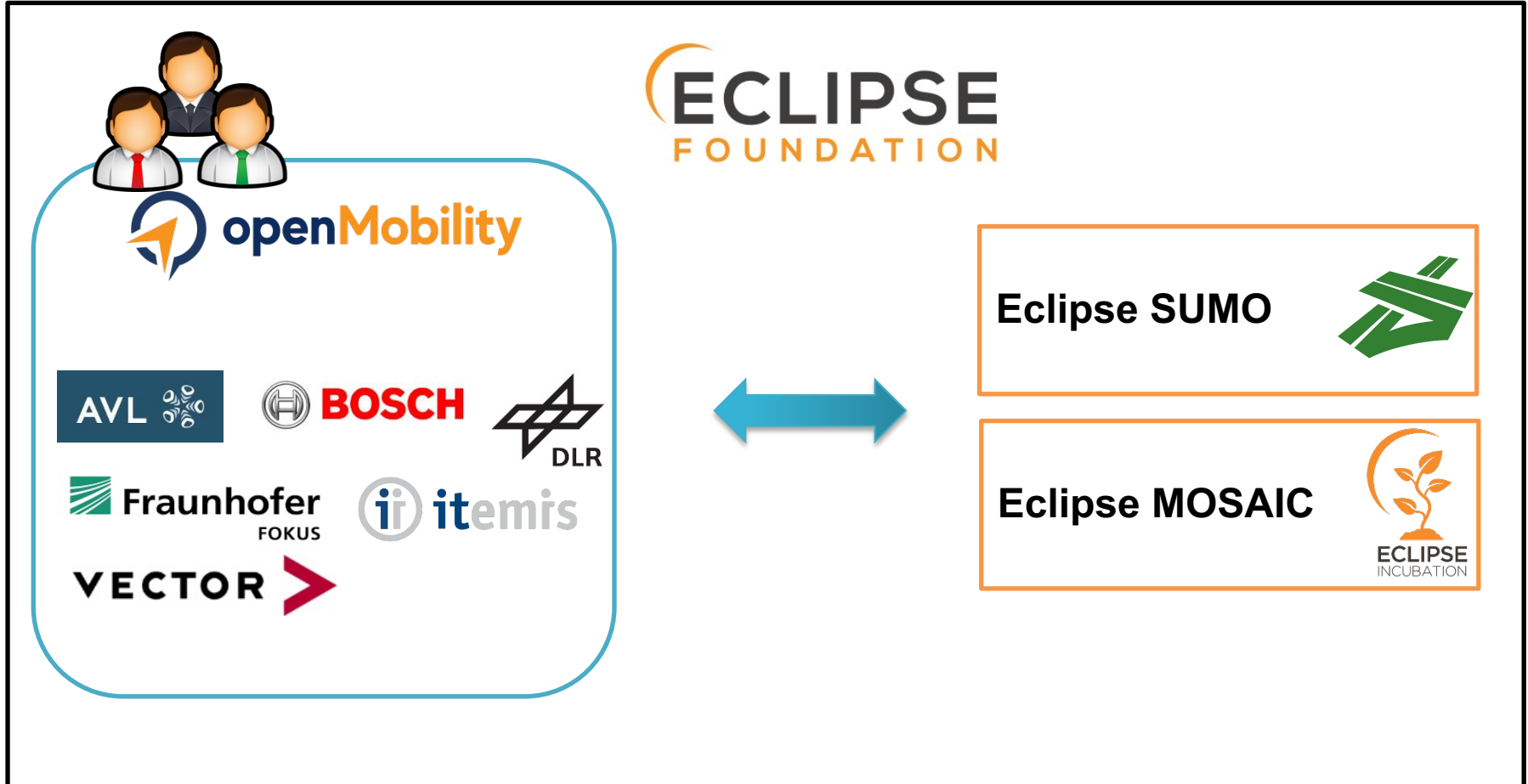
Eclipse MOSAIC is Open Source! This makes it very easy to extend the simulation framework by your own models. You can find the source code of the coupling engine, various simulators and models, and example scenarios on our GitHub page.

» [Contribute](#)

<https://www.eclipse.org/mosaic/>



openMobility Working Group



openMobility Working Group

The screenshot shows the homepage of the OpenMobility Working Group. At the top right, there are links for "Edit my account" and "Manage Cookies". The navigation menu includes "Home", "News", "Events", "Vision", "Technologies", "Members", "Working Group", and "More", along with a search icon. The main heading is "OpenMobility Working Group" with a horizontal line underneath. Below the heading is the tagline: "Driving the Evolution and Broad Adoption of Open Source Mobility Modelling and Simulation Technologies." At the bottom of the main section are three orange buttons: "Eclipse SUMO", "Become a Member", and "Contact".

Our Members



BOSCH
Invented for life



Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center



Fraunhofer
FOKUS



itemis

VECTOR



<https://openMobility.eclipse.org>



Joining the openMobility working group - Why? (1)

openmobility-wg / userstories

Unwatch 8 Star 6 Fork 0

Code Issues 12 Pull requests Actions Projects Wiki Security Insights Settings

Filters is:issue is:open Labels 9 Milestones 0 New issue

12 Open 1 Closed Author Label Projects Milestones Assignee Sort

- Use customisable API in Traci/Sumolib to change vehicle parameters** User: BOSCH
#13 opened on 20 Apr by ZoltanBaksa
- Understand vehicle's decisions** SUMO User: BOSCH User: Uni Trento/Bolzano 5
#12 opened on 2 Sep 2019 by RobertHilbrich
- Be able to use SUMO in an ASAM openX Standards environment** SUMO User: BOSCH User: DLR User: Vector 1
#11 opened on 2 Sep 2019 by RobertHilbrich
- Create traffic surrounding an ego-vehicle "on-the-fly"** SUMO User: DLR User: Vector 3
#10 opened on 2 Sep 2019 by RobertHilbrich

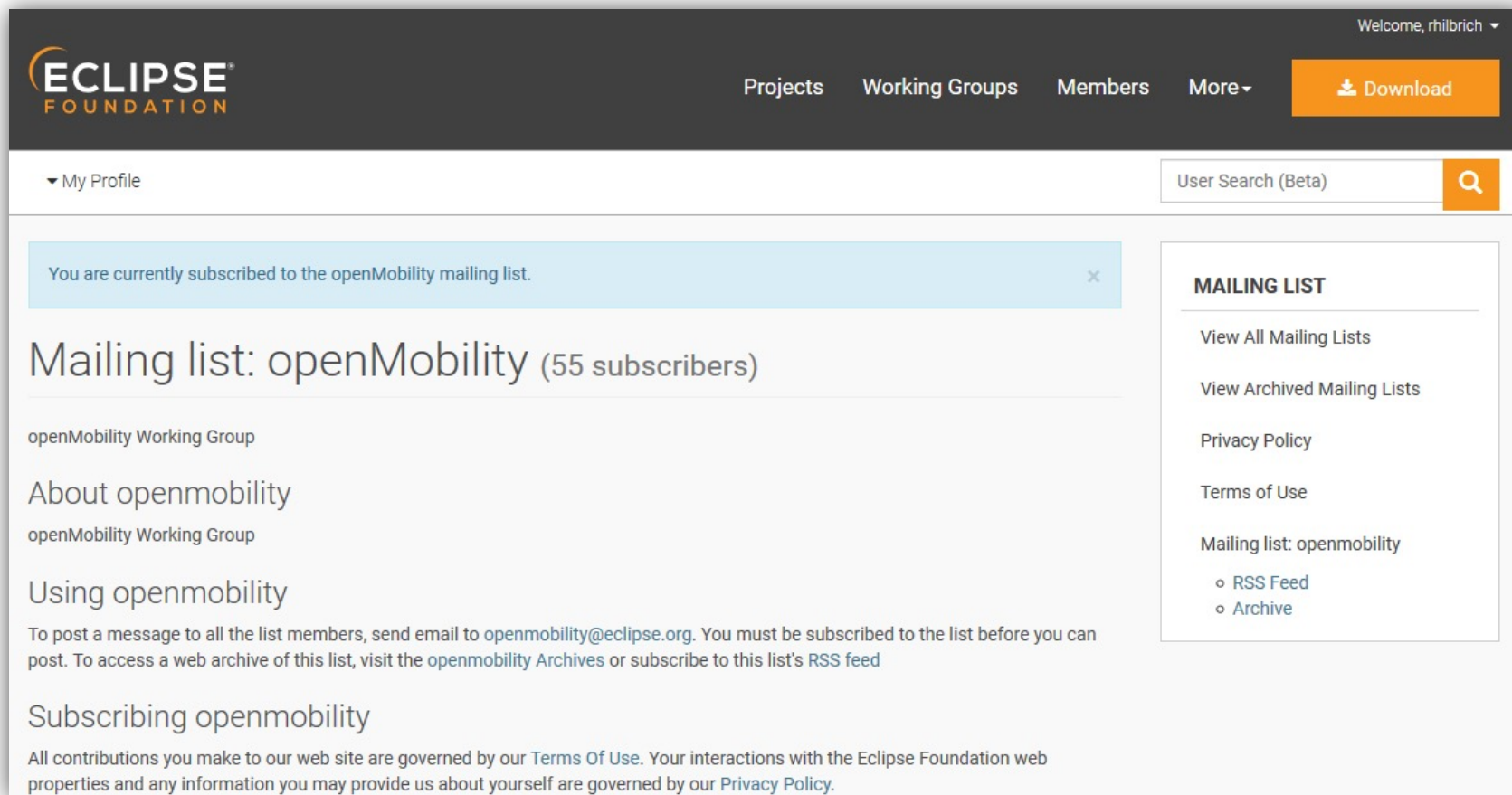


Joining the openMobility working group - Why? (2)

- 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



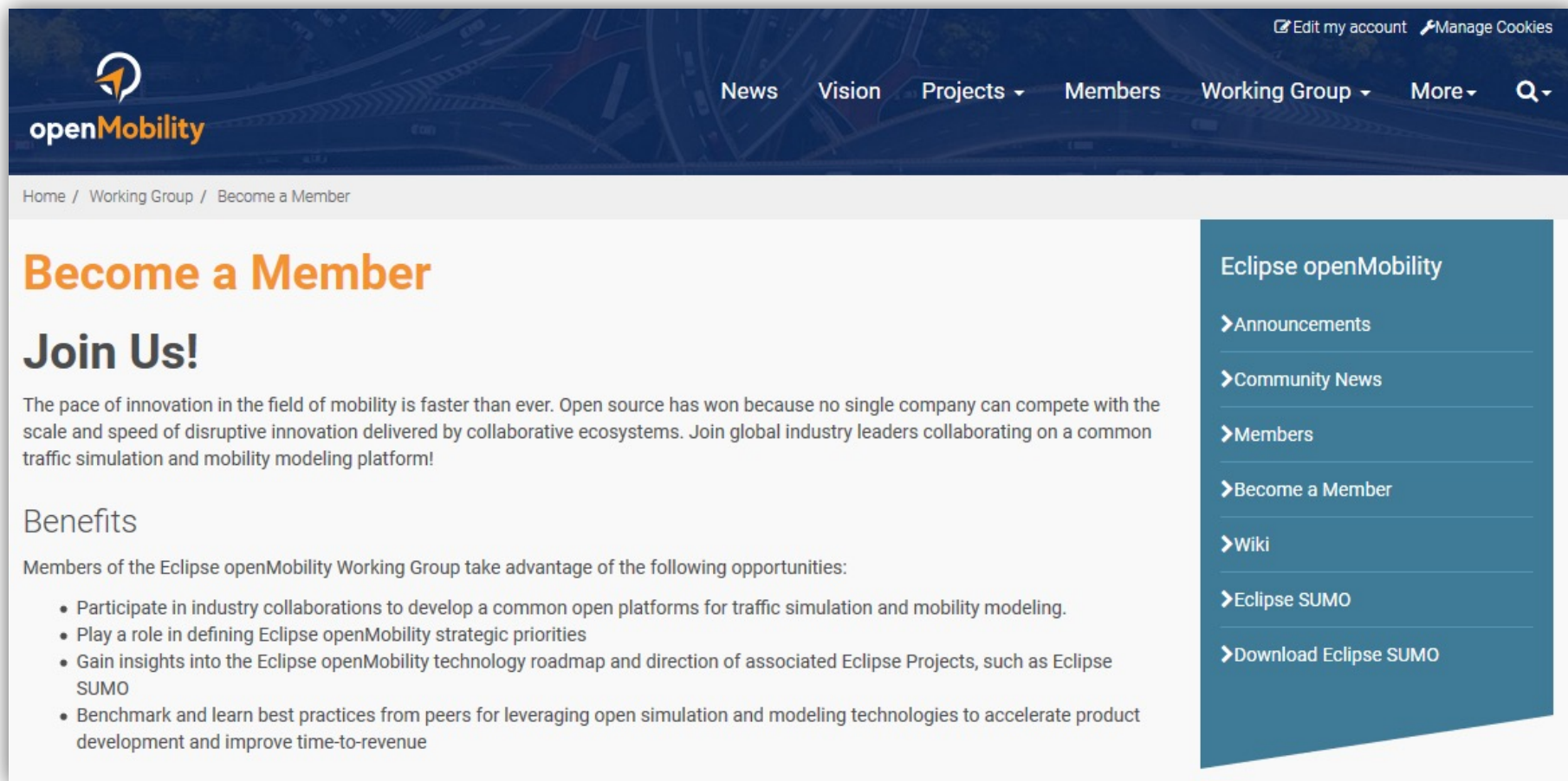
How to get in contact with openMobility?



The screenshot shows the Eclipse Foundation website interface. At the top, the Eclipse Foundation logo is on the left, and navigation links for Projects, Working Groups, Members, and More are in the center. A 'Download' button is on the right. A user profile dropdown shows 'Welcome, rhlbrich'. Below the navigation, there is a 'My Profile' dropdown and a 'User Search (Beta)' input field with a search icon. A blue notification bar states: 'You are currently subscribed to the openMobility mailing list.' The main content area is titled 'Mailing list: openMobility (55 subscribers)'. It includes a link to the 'openMobility Working Group', an 'About openmobility' section with a link to the 'openMobility Working Group', and a 'Using openmobility' section with instructions: 'To post a message to all the list members, send email to openmobility@eclipse.org. You must be subscribed to the list before you can post. To access a web archive of this list, visit the [openmobility Archives](#) or subscribe to this list's [RSS feed](#)'. A 'Subscribing openmobility' section contains a disclaimer: 'All contributions you make to our web site are governed by our [Terms Of Use](#). Your interactions with the Eclipse Foundation web properties and any information you may provide us about yourself are governed by our [Privacy Policy](#).' On the right side, a 'MAILING LIST' sidebar contains links: 'View All Mailing Lists', 'View Archived Mailing Lists', 'Privacy Policy', 'Terms of Use', and 'Mailing list: openmobility' with sub-links for 'RSS Feed' and 'Archive'.

<https://accounts.eclipse.org/mailling-list/openMobility>





The screenshot shows the Eclipse openMobility website's 'Become a Member' page. The header features the openMobility logo and navigation links: News, Vision, Projects, Members, Working Group, More, and a search icon. A utility bar includes 'Edit my account' and 'Manage Cookies'. The breadcrumb trail reads 'Home / Working Group / Become a Member'. The main heading is 'Become a Member' in orange, followed by 'Join Us!' in bold black. A paragraph describes the platform's innovation and collaborative nature. A 'Benefits' section lists four opportunities for members. A right-hand sidebar contains a menu for 'Eclipse openMobility' with links to Announcements, Community News, Members, Become a Member, Wiki, Eclipse SUMO, and Download Eclipse SUMO.

DLR.de • Chart 11

Edit my account Manage Cookies

openMobility

News Vision Projects Members Working Group More

Home / Working Group / Become a Member

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

Eclipse openMobility



- › Announcements
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- › Wiki
- › Eclipse SUMO
- › Download Eclipse SUMO

<https://openmobility.eclipse.org/working-group/become-a-member/>



Q & A

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 @EclipseSUMO
 @open_mobility

