

openPASS AC – 07.04.2022

Donnerstag, 7. April 2022 14:01

Date: 07.04.2022 14:00

Location: Microsoft Teams-Besprechung

Participants

- [Das Arun, FG-463](#) (BMW Group)
- Per.Lewerenz@daimler.com (Mercedes Benz AG on behalf of Daimler TSS)
- [Duong Quang, Tuan](#) (TÜV SÜD Auto Service GmbH)
- Daniel.Schmidt6@de.bosch.com (Robert Bosch GmbH)
- [Schoenawa, Stefan, Dr. \(K-AERM/A\)](#) (Volkswagen AG)
- [Hammouda Manel, EG-342](#) (BMW Group)
- [Platzer Thomas, EG-342](#) (BMW Group)
- [Maschke, Jan Enno \(K-AERM/A\)](#) (Volkswagen AG)
- jan.dobberstein@mercedes-benz.com (Mercedes Benz AG on behalf of Daimler TSS)
- [Lucas, Gwendal, Dr. \(K-AERM/A\)](#) (Volkswagen AG)

Notes

Eclipse will discontinue Gerrit and Bugzilla operation. Tuan will archive the bug tickets from Bugzilla.

Current Pull Requests & Review

New merge requests have been opened by BMW / intech and have been presented by Arun.

https://gitlab.eclipse.org/eclipse/simopenpass/simopenpass/-/merge_requests/35

https://gitlab.eclipse.org/eclipse/simopenpass/simopenpass/-/merge_requests/75

https://gitlab.eclipse.org/eclipse/simopenpass/simopenpass/-/merge_requests/76

https://gitlab.eclipse.org/eclipse/simopenpass/simopenpass/-/merge_requests/77

https://gitlab.eclipse.org/eclipse/simopenpass/simopenpass/-/merge_requests/78

Next steps:

- Currently no partner is capable of doing an in depth review, therefore a shortened process will be applied.
- CI has to be green on MR-78 prior to merge
- PCM Bug will be investigated by Mercedes from user perspective with technical support from BMW
- Tuan will approve the merge requests
- Intech will take care of merging

Planning of Release v0.9

The AC decided to release the status of simopenpass after merging the above named merge requests as version 0.9. Tuan will take care of the release process.

Potential Vulnerabilities

- Protobuf:
A critical vulnerability has been detected in Protobuf (<https://github.com/protocolbuffers/protobuf/security/advisories/GHSA-wrvw-hg22-4m67/>). Currently, openPASS uses Protobuf versions between 3.12 and 3.17; As the vulnerability only affects Java, Kotlin and Ruby but not CPP, there is no need for further action.
- Qt Source Packages:
Qt 5.15.5 was approved by Volkswagen and is already the recommended version according to v0.8. No further action needed.

Update of openPASS slide set

A reworked slide set has been presented by Thomas. The slides will be sent around for further edits and usage. Tuan will upload the slides on the website, once the final changes have been made.

Documentation of Requirement Refinement Meetings

List of requirement refinement meetings since last AC meeting:

- 17.02.2022 Synchro meeting on current developments of OpenSCENARIO Engine / API
- 03.03.2022 Synchro meeting on current developments of OpenSCENARIO Engine / API
Map API: LaneLet2 (<https://github.com/fzi-forschungszentrum-informatik/Lanelet2>) offers some interesting approaches regarding map representation and querying. A deeper discussion on LaneLet is planned for the next meeting.
- 17.03.2022 Presentation and discussion on LaneLet2.
- 24.03.2022 Synchro meeting on current developments of OpenSCENARIO Engine / API
An update of the parser for OpenSCENARIO 1.1 provided by RA Consulting (OSC API) has been finalized and is available on Github. The update to OpenSCENARIO 1.2 is currently in the planning phase.

Presentation and discussion on pull request regarding "Logical Lanes" in OSI (<https://github.com/OpenSimulationInterface/open-simulation-interface/pull/599>)
Logical Lanes introduces lanes on a crossing. The main focus is on agent models that rely on structures similar to OpenDRIVE for behavior planning and execution. Logical Lanes are defined through sampled linear intervals along the reference Line. Neighboring relations and overlaps are represented. Other map formats like NDS have been considered during the developments. An object can be assigned to multiple lanes.

LaneLet and OSI Logical Lanes offer interesting concepts and might even support each other. A differentiation between data representation and programming interface might be useful during the discussion.

Rough collection of requirements for a programming interface:

- Mapping of world and lane positions
- Calculations of and along routes
- Localization

Next steps: Collection of requirements from driver perspective (To do: Mercedes) and environment simulator (To do: BMW, in-tech)

- 31.03.2022 Synchro meeting on current developments of OpenSCENARIO Engine / API
Consolidation of requirements from driver and environment simulator.
 - Open question: are junctions needed and what information is required?
 - How to determine turn directions, i.e. what is left or right and what to do if there are multiple left turning options?
 - There is no road centerline defined in NDS
- 07.04.2022 Synchro meeting on current developments of OpenSCENARIO Engine / API
PR https://gitlab.eclipse.org/eclipse/simopenpass/openscenario1_engine/-/merge_requests/277: Entities follow the lane and centerline but do not keep a constant offset with the default controller right now. The PR proposes to assign a route controller with empty road. It has been discussed, that the environment simulator is responsible of implementing this fallback instead of the scenario engine (Reason: Another scenario engine might not implement a route Controller, but an environment simulator would still be required to handle this case).

Default route strategies need to be defined in the next OpenSCENARIO project.

StandardGeometryLibrary: helper functions for geometrical calculations are needed among all scenario engine, environment simulator and Map API. Thus a central component might be provided through the Mantle API. Further discussions and solution possibilities will follow.

If you plan to attend one of the following meetings, contact one of the attendees to forward you the meeting or approach Arun Das.