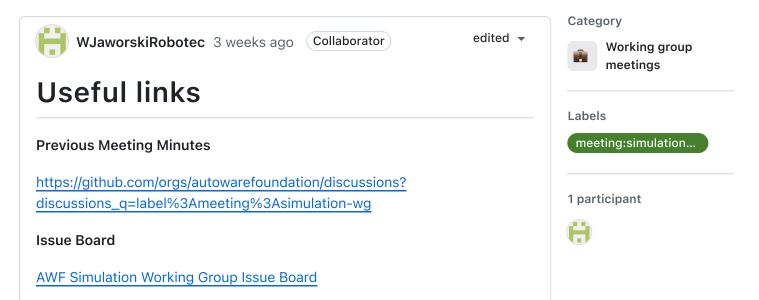


2024-10-30 Simulation Working group Meeting #5386

WJaworskiRobotec started this conversation in Working group meetings



Agenda Summary

Recording from the meeting

Bus ODD E2E Simulator Requirements

Wiki Pages

Not available

AWSIM Labs -> AWSIM merging

Discussion about the features introduced in AWSIM Labs

- https://docs.google.com/presentation/d/1s3J2VGpPYokP23sk6yebnc4FurFtthD1P0TNPwER7_o/edit#slide=id.p21
- Merging AWSIM-Labs into AWSIM autoware-projects#72
- Fatih: Is TierIV specifically interested in any of the feautres:
- Tsutake-san: We are interested in 3 features:
 - o VPP
 - Graphics quality settings
 - Full compatibility with the latest Autoware
- Makino-san: there might be a license issue

- https://assetstore.unity.com/packages/tools/physics/vehiclephysics-pro-community-edition-153556 - it is a free version of VPP
- The problem might occur with Pro version, that TierIV was planning to integrate
- With VPP-CE it might be interesting for TierIV, but looks like only one vehicle can be used in the free version.
- How can we get the data for configuration?
- Fatih: Only one vehicle is not a problem for Autoware, we test only one Ego at the time
- Tsutake-san: We want to create a cluster for distributed simulation (separate machines for sensors), multiple Ego
- Fatih: as a first step we can use default parameters, it will work better than the current solution. Accel-brake map calibration can be performed with Autoware
- Tsutake-san: how can we test VPP in AWSIM
- Fatih: you can just test it following QuickStartDemo of latest AWSIM Labs release
- URP: TierIV had some issues with AWSIM Labs URP version
 - TierIV has not measured the performance of URP vs HDRP, but they created URP version on their own and seems to work better.
- Compatibility with Autoware:
 - Continuous testing with Autoware
- Mitsudome-san: the biggest difference is related to interfaces
- Graphic quality settings:
 - It's related to URP, just changing settings of graphics in real time
 - It can be done in HDRP as well, but it is a separate work
- Mitsudome-san: Can we create PRs with functionaliteis interesting for TierIV? No compatibility issues?
 - Fatih: should not be a problem

Other features:

- Setting pose from RVIZ
 - It is not interesting for TierIV, as we are more focused on Scenario Testing
 - Fatih: it makes it possible to use AWSIM as a sandbox, it was requested by Component team from TierIV
 - Tsutake-san : we will check it with our internal team
 - Mitsudome-san: we should use the same API as in scenariosimulator
 - Maybe we can create additional plugin, for now using the solution used by planning team that is a simple RVIZ message
 - repositioning vehicle from RVIZ:
 - Similar functionality, to quickly use simulator without changing positions in Editor / scenario
 - Our main customer don't need it, so it's not high priority for us.

- Bird-eye view
 - Tsutake-san has this feature in some way, configuration of camera
- Runtime control of sensors
 - requested by sensing team
 - it's useful for testing faults, what happens when sensor stops working
 - Tsutake-san: it can be easily done in Unity Editor
 - Tsutake-san: we have features for modifying / removing pointcloud
 - Fatih : editor is slower
 - Tsutake-san: then user can create a binary
 - AWSIM users should not be required to have Unity license / knowledge
- Scenario Simulator integrated in the same binary
 - In AWSIM lab, scenario simulator is the new map inside the same binary
 - Tsutake-san: we can use separate binary, we don't see a value in it
 - Mitsudome-san: I'm not sure, using different binaries is not convenient for the users in my opinion. Users need to manage many releases.
 - Tsutake-san: we have support for changing vehicles, but we had no requests for changing map
 - Decomposition of scenes was introduced, any vehicle can be introduced on any map
 - The next step is to use Asset Bundles, then vehicles/maps can be loaded to the binary, distribution of assets is much easier
- Fatih: Right now LeoDrive will not work on AWSIM Labs, If requested by TierIV, LeoDrive can provide functionalites / PRs as a service
- We should create Issues for VPP for now, and request AWF to create PRs



0 comments