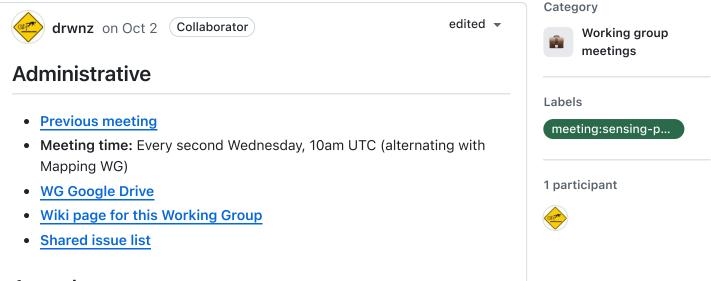


Autoware Sensing Perception Working Group Meeting 2024/10/02 #5297

drwnz started this conversation in Working group meetings



Attendees

- ▼ Chaired by David
 - Ryohsuke
 - Kenzo
 - Fatih
 - David Walmroth
 - Vansh
 - Yoshi Ri
 - Vivid
 - Max
 - Samet

Agenda

- Introduction of new attendees
- Review of Issue List and assignment
- · Review of Project Board and assignment
- Universal radar message proposal by Kenzo: https://github.com/orgs/autowarefoundation/discussions/5264

Discussion topics

- Announcements
- Mitsudome: discussion about version control for universe
 - Currently just the main branch and no tagging and control
 - Looking at version control for Universe not using major releases, but some kind of version control

https://github.com/orgs/autowarefoundation/discussions/5292

- Max: concrete CI check would be a launch test
- Max: we can't fix ROS tooling issues though
- Jazzy support: Software Working Group still has this as a low priority, but seeking opinions
- o AWSIM: 1.5.1 release
 - https://youtube.com/playlist?list=PL97OXOB9UAh9s7it2phbsBA1RDQjM2oP&si=Di3AAI-lc4XeuUjE
 - AWSIM labs activities do not require a Unity license, but new feature requests on the AWSIM Labs page: https://github.com/autowarefoundation/AWSIM-Labs/issues
 - Amadeusz: is intensity supported? Not sure yet.
 - Fatih: Ring outlier filter configuration file changes
 - If we make changes to sensor kit changes, also test on AWSIM Labs sensor kit
 - Could also consider functional/smoke tests
- Universal radar message proposal by Kenzo: https://github.com/orgs/autowarefoundation/discussions/5264
 - Fatih: main concern is the dynamic fields like covariances. Float32 dynamic arrays: how do you know which shape is being used?
 - Has to be checked against the info topic
 - Serializing and parsing looks hard
 - Armagan: why do we need so many radars? There are a lot of comments on how hard it is to integrate. Maybe it will lack some performance in the effort to be compatible
 - To avoid the case where we lose information, we tried to cover all the known cases
 - Fatih: How about making use of the covariances in geometry messages for position, velocity, acceleration? And solid primitive msg shape?
 - Would be possible, will investigate. For shape, primitive shape is overly complex but will consider.
 - Fatih: replication for example, multiple parameters have min and max. Maybe make another primitive message type?
 - Good idea:)
- CUDA update suggestion from Amadeusz
 - Links:
 - https://developer.nvidia.com/embedded/jetpack
 - build: update to CUDA 12.3 #3956 (comment)
 - O Update deprecated TensorRT 8.5 codes for ROS2 humble autoware.universe#2330
 - TensorRT 10.0 is required for lots of new features, Autoware supports 8.xx
 - To update, we need to update TensorRT and TensorRT API in Autoware packages
 - Backwwards compatible so no major issue to update
 - Question is- which version to update?
 - Fatih: Supporting the latest JetPack is enough
- Kenzo's CUDA implementation for pointcloud preprocessor

- Fatih: Harder to implement and test features if all added at once, but could be added feature by feature to make it simpler
- Blackboard: is similar concept to Nvidia NITROS: https://github.com/NVIDIA-ISAAC-ROS/isaac_ros_nitros

Action items

• []



0 comments