

# Autonomy Software WG Meeting 2022/08/16 #2789

BonoloAWF started this conversation in **Working group meetings**



BonoloAWF on Aug 10, 2022

edited ▾

## Administrative

- [Previous Meeting Minutes](#)

## Common Resources

- Bus ODD [software architecture proposal](#)
- Bus ODD [architecture design discussions](#)
- Bus ODD [candidate simulator comparisons](#)
- Bus ODD [milestone development plan](#)
- Autware [contributors list](#)

## Announcements

- Zhijie (George) joined the Autware Foundation as a software developer based at the Autware Centre of Excellence (USA)
- Haoru is leaving Autware Foundation at the end of this month

## Autware.Universe

- ☒ Bus ODD [July-Aug Milestone](#)
- ☒ Bus ODD [Project Board](#)
- ☐ PRs [waiting for review](#)
- ☒ Bus ODD [high priority issues](#) not in the current milestone
- ☒ Autware.Universe reported [bugs](#)
- ☐ Autware [design discussions](#) and [demos](#)

## Discussion topics

### Bus ODD feature set

The scope of the bus ODD feature set has been finalised. Meeting minutes are available here: [autwarefoundation/autware.universe#1468](#)

Everyone to please review this issue regarding the upcoming demonstrations.

### Category



Working group meetings

### Labels

meeting:software-wg

### 4 participants



## Improving NDT Localiser performance on AArch64

An update on the testing procedure has been provided

<https://gitlab.com/autowarefoundation/autoware.auto/AutowareAuto/-/issues/1479>

## Bus ODD progress updates:

### ITRI bus integration update (In meetings with 7am UTC time slot)

- See presentation slides in the comments for details
- In lab integration is on track for completion by the end of August
- The lidar perception IPC was upgraded to Ubuntu 20.04 but there are CPU overload issues. The pointcloud is sometimes freezing during visualization. Possible solutions include adjusting the decay time for pointcloud msg in rviz, using a longer rosbag or real-time data, clicking the reset button in rviz, or unchecking the pointcloud topic to clear the data then rechecking it again.
- Velocity planner was modified to incorporate a scene register checker
- Behaviour planner is crashing when encountering a specific stop line - see [🔗 Behavior Planner Crash when encounter more than one STOP Line #2791](#)

### LeoDrive bus integration update

- See presentation slides in the comments for details
- Localisation problem with EKF shift in time was solved by creating a 3D vehicle model and geo-referencing the pointcloud map. The base\_link orientation was corrected which improved the results.
- PR to publish visualisation of vehicle polygon is ready for review: [🔗 feat\(surround\\_obstacle\\_checker\): add vehicle footprint with offset autoware.universe#1577](#)
- Bus doors can be controlled automatically
- During testing it was observed that the planner showed a route that was off-road and offset from the lanes in the map - this issue will be investigated further.

## Action Items

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- ☐ [@HaoruXue](#) to set up meetings with Zhijie (George) and [@mitsudome-r](#) to handover his tasks

## Review of Issues and Discussions

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The following Discussions and Issues were highlighted:

- [📌 Image messages have latency or dropped autoware.universe#1228](#)  
- Fatih to share rosbag files
- [📌 Run Lidar Centerpoint with TVM autoware.universe#908](#) - in progress

- [Add TVM inference capability](#) autoware.universe#628 - PR waiting for review
- [Evaluate control modules in Universe](#) autoware.universe#567 - findings will be shared in the next meeting
- [Finalize the field type for pointcloud](#) autoware.universe#563 - ongoing
- [Implement sensor drivers for ROS 2](#) autoware.universe#551 - radar and GNSS drivers outstanding
- [Positioning error in wrong zone when NDT starts](#) autoware.universe#1421 - fix by publishing initial pose multiple times
- [Help needed in matching a PCD map created within a simulator with a Lanelet2 data created in real-world](#) autoware.universe#1496 - suggestions were provided
- [Bus ODD specific features](#) autoware.universe#1468 - update on bus ODD feature scope
- [Feature: Vehicle Interface](#) autoware.universe#1451 - no update
- [Speed profile in incorrect in slopes](#) autoware.universe#1420 - closed
- [ray\\_ground\\_filter can not remove ground points](#) autoware.universe#1384 - Fatih will look into this
- [planning mode doesn't change if lane change path can't be executed in behavior path planner](#) autoware.universe#1328 - map updates required
- [Map Based Prediction Incorrect Predictions](#) autoware.universe#494 - ongoing
- [bug scenario\\_test\\_runner speed limit doesn't work](#) autoware.universe#1524 - closed
- [StepPolygon of obstacle\\_stop\\_planner is instable when changing the params of avoidance\\_module](#) autoware.universe#1499 - not started
- [feat\(behavior\\_velocity\\_planner\): add speed bump module](#) autoware.universe#647 - changes from review are underway

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3 comments

Oldest

Newest

Top



MertClk on Aug 16, 2022

Collaborator

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Leo Drive Bus Project Update: [Presentation](#)

Vehicle Footprint PR: [#1577](#)

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hueirutseng on Aug 16, 2022

Collaborator

edited ▼

ITRI Bus Update: [Presentation](#)

Issue Report: Behavior Planner Crash when encounter more than one STOP Line

<https://github.com/orgs/autowarefoundation/discussions/2791>

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**xmfcx** on Aug 16, 2022

Maintainer

[@brkay54](#) to share control evaluation findings next week:

[autowarefoundation/autoware.universe#567](https://autowarefoundation.github.io/autoware.universe/#567)

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