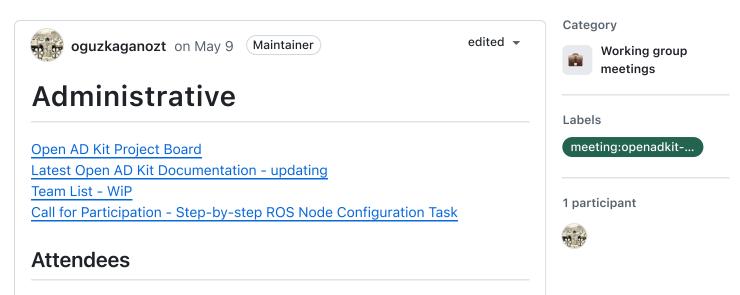


Open ADKit Working Group Meeting 09/05/2024 #4705

oguzkaganozt started this conversation in Working group meetings



Agenda

▶ Click to expand

DevOps Dojos: Build/Run - Modular Images (Oguz)

Chaired by David Walmroth (PIX Moving) and Oğuz Öztürk (Leo Drive)

- Impressions on new containers/suggestions.
- Modular containers:
 - Issue: Provide modular images for openadkit: planning, simulator, visualizer #4538
 - PR is now live: \$\frac{1}{6} \frac{1}{6} \frac{1}{6} \text{feat(docker): provide modular images for openadkit planning simulator visualizer #4629
 - Branch:
 https://github.com/autowarefoundation/autoware/tree/4538-provide-modular-images-for-openadkit-planning-simulator-visualizer
 - A documentation bug has reported -https://github.com/orgs/autowarefoundation/discussions/4695
 - A new discussion from <u>@youtalk</u> about containerization https://github.com/orgs/autowarefoundation/discussions/4661
- @mitsudome-r and @xmfcx will be assigned as reviewers
- @samet-kutuk will bring a documentation draft for Open AD Kit v3.0 on next week

DevOps Dojos: Ros Node Configuration Updates (Kasper)

Spreadsheet for node updates

DevOps Dashboard

Call for volunteers

Step-by-step Documentation

Step-by-step Video Tutorial

- Great increase (approx. 15) in nodes assigned from efforts of William He and UDel as well as Alex Carballo and Gifu U.
- Campaigning for additional ROS node update support and and consideration of a bounty/reward program may be scaled back due to an envisioned path to completion with existing resources. (Oz).
- We're seeking collaborators from AWF members and non-AWF member organizations: (Samet)
 - EduTech: an email thread is ongoing
 - ELM Company: had several meetings, waiting on feedback
 - CoE members: a few members proposed a handful contributors.
 Conversations are ongoing
 - Leads from social media: we continue to engage with invididuals who shown interest

/	Reach out to Vignesh
	Reach out to Rahul (CoE) for his reposting
	Reach out to the F1Tenth organization through Slack
	Do a repost of Call for Participation on announcement

Perception Containerization Discussion (Kasper, Oguz, David, CJ..)

- Issue Perception Containerization #4646
- Branch https://github.com/autowarefoundation/autoware/tree/4646-perception-containerization
- Testing ORIN for perception running with x86 on PIX chassis (Mark, David)
- Assess the rosbag sent by TIER IV and feedback
- Retrieve and assess the rosbag from Robeff
- Reach out to @drwnz for feedback and initial consult

RViz Visualization by using WebRTC (Oguz, Esteve, Kasper)

- Assess the strengths and weaknesses of using Ros bridge and rvizweb
- https://github.com/aiortc/aiortc
- Jeremy from Amazon has shown interest in the subject with AWS Kinesis
- Reconnect with Jeremy (AWS) to help us bootstrap this

Active pursuit to find more collaborators for the Open AD Kit WG (Samet, Oğuz, Kasper, David)

- Outreach to external collaborators
 - Talking to VicOne (a member) on a use case to incorporate their IDPS (Intrusion Detection and Prevention System) with the Open AD
 - Talking to EPAM Systems on the general architectures of SDV and understanding load balancing of automotive workloads in heterogeneous computing.
 - Talking to TUM on their PoC work on massive Autoware containerization
 - They are open-sourcing their study and work (performance analysis of containerized Autoware workloads)
 - They will be able to present their work soon at the Open AD Kit
 WG

More Strict Dependency Control for ROS Nodes (Oguz, Dogan)

- Re-working dependencies to reduce the size of the containers and for making maintenance easier
- The list of Top 25 ROS nodes that includes most <depend> tags
- A new task added to Build/Run Dojo for refining ros nodes dependencies - <a>O <a>More Strict Dependency Control for ROS <a>Nodes #4599
 - Discussions on making this the next DevOps Dojo
- Example of the motivation

AWSIM Integration and Testing (Oguz, Mitsudomesan, Kasper)

- O Docker container for AWSIM tier4/AWSIM#7
- O how to gui for unity3d in docker? mviereck/x11docker#186
- Validating new Open AD containers on the AWSIM environment
- Running AWSIM on x86 and Autoware on ARM

2024 Demo Planning and Activities

- ICRA 2024 (May 13-17): a setup with PIXKit 3.0 will be demonstrated. Storyboard is expected from @alexandrx
- AutoSens 2024 (May 21-23) Static vehicle display, potentially live sensors, PIX RoboBus platfrom.
- AutoTech Detroit (June 5-6): Challenges with AADP availability and lead times. Implications and alternatives are being discussed, updates envisioned in Friday meeting.
- (Potential) AVTE California / Aug 28-29
- (Potential) IEEE ITSC / Sep 24-27

- (Potential) IROS 2024 / Oct 14-18
- (Potential) ROSCon / Oct 21-23

Open AD Kit Hardware Availability

- ADLINK presented their autonomy HW lineup in Ref. Des. WG. BSP does not yet support Yocto(?).
- AADP: Allocating all available units around the world
- 7Starlake: we heard that some eval units can be made available for testing
- Reach out to Joe Speed for 7starlake eval units (BSP/Yocto question pending).



1 comment ⋅ 2 replies

Oldest Newest Top



oguzkaganozt on May 9 (Maintainer) (Author)

• ping @ambroise-arm, @drwnz about to perception workloads



2 replies



oguzkaganozt on May 9 (Maintainer) (Author

• Create WebRTC issue



oguzkaganozt on May 9 (Maintainer) (Author)

 Issue from autoware.universe - Planned trajectory is not aligned with the vehicle's heading when the car is initialized at the intersection. autoware.universe#6443