

Open ADKit Working Group Meeting

09/05/2024 #4705

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



oguzkaganozt on May 9

Maintainer

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Administrative

[Open AD Kit Project Board](#)

[Latest Open AD Kit Documentation - updating](#)

[Team List - WiP](#)

[Call for Participation - Step-by-step ROS Node Configuration Task](#)

Attendees

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

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Agenda

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

- Impressions on new containers/suggestions.
- Modular containers:
 - Issue: [Provide modular images for openadkit: planning, simulator, visualizer #4538](#)
 - PR is now live: [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 [@youtalk](#) 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

Category



Working group meetings

Labels

meeting:openadkit-...

1 participant



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 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 individuals 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 Kit
 - 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 - [🕒 More Strict Dependency Control for ROS Nodes #4599](#)
 - Discussions on making this the next DevOps Dojo
- [Example of the motivation](#)

AWSIM Integration and Testing (Oguz, Mitsudome-san, Kasper)

- [🕒 Docker container for AWSIM tier4/AWSIM#7](#)
- [🕒 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 platform.
- 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

1 comment · 2 replies

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oguzkaganozt on May 9

Maintainer

Author

- ping [@ambroise-arm](#), [@drwnz](#) about to perception workloads

↑ 1

👍 1

2 replies



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- Create WebRTC issue



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- 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](#)