

OpenAD Kit Working Group Meeting 27/6/2024 #4927

oguzkaganozt started this conversation in Working group meetings



oguzkaganozt on Jun 27 (Maintainer)

Administrative

Greet New Attendees

Open AD Kit Project Board Latest Open AD Kit Documentation - updating

Attendees

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

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Agenda

DevOps Dojos: Build/Run - Modular Images

- Agenda item maintainers: @oguzkaganozt , @youtalk, @kaspermeck-arm
 - Modular containers PR will bi divided into 3 separated PRs to make it more comfortable to review
 - First PR: feat(docker): fix CUDA compile on devel image and improve run.sh #4849
 - Documentation PR: docs(installation): simplify run.sh commands autoware-documentation#551
- @samet-kutuk will bring a documentation draft for Open AD Kit v3.0 after merging the PR

DevOps Dojos: Ros Node Configuration Updates

- Agenda item maintainers: @kaspermeck-arm

Spreadsheet for node updates

Call for volunteers

Step-by-step Documentation

Step-by-step Video Tutorial

- Planned deadline for this task is 1st July, we need to speed this up with active collaborators and reviewers
- Re-assigning stale in-progress nodes with active collaborators

Category

Working group meetings

Labels

meeting:openadkit-...

2 participants





• Possibility of new code reviewers for stale PRs (@mitsudome-r)

Open AD Kit - UXL Foundation Collabration Introduction

- Agenda item maintainers: @kaspermeck-arm

Technical Optimizations for Container Management

- Agenda item maintainers: @youtalk, @oguzkaganozt
 - Enable docker caching for docker builds
 - 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
 - Last years's huge PR related -> \(\frac{1}{6}\) build: remove unused depend
 in package.xml files autoware.universe#3606
 - Example of the motivation

Node Unifier for fully-defined containers

- Current containers contains all of the universe nodes
- Propose a way to compile modular containers with only necessary nodes
- Launch unifier tool from <a>@xmfcx can be a help

Open AD Kit Bugs & Feature Requests

- Agenda item maintainers: @idorobotics, @oguzkaganozt
 - Assess open-ad-kit related bugs, issues or feature requests from community channels (github, discord, or other platforms)
 - A CUDA bug will be resolved with this PR
 - A documentation <u>bug</u> will be resolved with this <u>PR</u>

2024 Demo Planning and Activities: AutoTech Detroit 2024 Wrap up

- Agenda item maintainers: @HamburgDave, @samet-kutuk
 - AutoTech Detroit (June 5-6):
 https://docs.google.com/presentation/d/1UD_0tlhRgfjmQami1nyKxh5feY
 5TGre4YTOAG1AZWik/edit?usp=sharing
 - (Potential) AVTE California / Aug 28-29
 - (Potential) IEEE ITSC / Sep 24-27
 - (Potential) IROS 2024 / Oct 14-18 (EduTech is investigating participation and sending a PIXKit chassis to Abu Dhabi, UXL demo?)
 - (Potential) ROSCon / Oct 21-23

RViz Visualization by using WebRTC

- Agenda item maintainers: @oguzkaganozt, @kaspermeck-arm, @esteve
 - Assess the strengths and weaknesses of using Ros bridge and rvizweb
 - https://github.com/RobotWebTools/webrtc_ros
 - https://github.com/pgaston/teleopros2/tree/main
 - 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

Testing modular containers with Reaction Analyzer Tool

- Agenda item maintainers: <u>@batuhanbeytekin</u>, <u>@oguzkaganozt</u>, <u>@brkay54</u>,
 - Reaction analyzer can be used to measure latency tests while developing ideal containerization
 - Issue: https://github.com/autowarefoundation/autoware.universe/blob/3eed12c 36903a3763f0ccd73f7bdce75c0bb3622/tools/reaction_analyzer/READ ME.md#L4

Active pursuit to find more collaborators for the Open AD Kit WG

- Agenda item maintainers: @samet-kutuk, @HamburgDave
 - · 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

Open AD Kit Hardware Availability

- Agenda item maintainers: @HamburgDave, @samet-kutuk
 - 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 • Tannaka-san mentioned possible HW options for U Penn/Go Kart. Possible OAD Kit demo platform? Reach out to Joe Speed for 7starlake eval units (BSP/Yocto question pending). **1** Oldest Newest Top

1 comment

