

Open ADKit Working Group Meeting

15/08/2024 #5098

oguzkaganozt started this conversation in Working group meetings



oguzkaganozt on Aug 15

Maintainer

edited ▼

Administrative

[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: Open AD Kit Modular Images

- Agenda item maintainers: [@oguzkaganozt](#), [@youtalk](#)

- [Explanation of docker build stages](#)
- [🔧 feat\(docker\): refine devel image #5045](#)
- [Performance Analysis of Modular Containers](#)
- [Modular containers discussion](#)

DevOps Dojos: Ros Node Configuration Updates

- Agenda item maintainers: [@kaspermeck-arm](#)

[Call for volunteers](#)

[Step-by-step Documentation](#)

[Step-by-step Video Tutorial](#)

- [Spreadsheet for node updates](#)

Remote RViz Visualization

- Agenda item maintainers: [@oguzkaganozt](#), [@kaspermeck-arm](#)

- <https://github.com/orgs/autowarefoundation/discussions/5099>

Category



Working group meetings

Labels

meeting:openadkit-...

1 participant



Given the benefits of modern web technologies and the need for flexibility, WebRTC with rosbridge(ROS Web Tools) with the help of [aiortc](#) would be the ideal choice.

Related idea: [RobotWebTools/rosbridge_suite#757](#)

Related past issues and discussions:

- <https://github.com/orgs/autowarefoundation/discussions/2545> & [🔗 feat\(tier4_autoware_api_launch\): add rosbridge](#) [autoware.universe#779](#)
- <https://github.com/orgs/autowarefoundation/discussions/2664>

Some reference projects related to use WebRTC&Websockets with ROS 2:

- https://github.com/RobotWebTools/rosbridge_suite
- <https://github.com/foxglove/ros-foxglove-bridge>
- <https://github.com/pgaston/teleopros2>
- https://github.com/abizovnuralem/go2_ros2_sdk
- <https://github.com/jdgalviss/jetbot-ros2/tree/main>
- <https://github.com/introlab/opentera-webrtc> & <https://github.com/introlab/opentera-webrtc-ros>
- <https://github.com/v-kiniv/rws>
- X2GO

Aspect	X11 Forwarding	VNC	NoMachine	WebRTC
Primary Function	Remote application visualization	Full desktop remote access	High-performance remote desktop	Real-time media data stream
Protocol	X11 over SSH	RFB (Remote Framebuffer Protocol)	NX protocol	WebRTC (Peer-peer)
Compression	Minimal (SSH encryption overhead)	Various (e.g., Tight, H.264)	Advanced compression and caching	High-efficiency compression
Bi-Directional ROS Messaging	No	No	No	Yes
Platform Independence	Limited	Limited	Limited	High
Ease of Setup	Low	Moderate	Moderate to High	High
Security	Integrated with SSH	Requires secure	Built-in secure	Requires secure

Aspect	X11 Forwarding	VNC	NoMachine	Well
		tunnel (e.g., SSH)	connection	(DTLS
Performance	Moderate	Moderate	High	High

Technical Optimizations for Container Management

- Agenda item maintainers: [@youtalk](#), [@oguzkaganozt](#)

- [More Strict Dependency Control for ROS Nodes #4599](#)
 - The [list](#) of Top 25 ROS nodes that includes most `<depend>` tags
 - Last years's huge PR related -> [🔗 build: remove unused <depend> in package.xml files](#) [autoware.universe#3606](#)
 - [Example of the motivation](#)

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)

Open AD Kit Hardware Availability

- Agenda item maintainers: [@HamburgDave](#), [@samet-kutuk](#)

- ORIN: Recently succesfully [tested](#)
 - <https://github.com/futurenowx/autoware>
- AADP: Being used on various demos
- ADLINK presented their autonomy HW lineup in Ref. Des. WG. BSP does not yet support Yocto(?).
- 7Starlake: we heard that some eval units can be made available for testing

2024 Demo Planning and Activities

- Agenda item maintainers: [@HamburgDave](#), [@samet-kutuk](#)

- AutoTech Detroit (June 5-6):
https://docs.google.com/presentation/d/1UD_0tIhRgfjmQami1nyKxh5feY5TGre4YTOAG1AZWik/edit?usp=sharing
- (Potential) AVTE California / Aug 28-29
- (Potential) IEEE ITSC / Sep 24-27
- (Potential) IROS 2024 / Oct 14-18
- (Potential) ROSCon / Oct 21-23

Active pursuit to find more collaborators

- Agenda item maintainers: [@samet-kutuk](#), [@HamburgDave](#)
- Outreach to external collaborators needed to further increase the WG's productivity

↑ 1

3 comments

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Newest

Top



oguzkaganozt

on Aug 15

Maintainer

Author

- <https://github.com/tier4/caret>

↑ 1

0 replies



oguzkaganozt

on Aug 15

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Author

- Enable access to modular container branch for demos

↑ 1

0 replies



oguzkaganozt

on Aug 15

Maintainer

Author

<https://autowarefoundation.github.io/autoware-documentation/main/contributing/pull-request-guidelines/code-owners/#faq>

↑ 1

0 replies