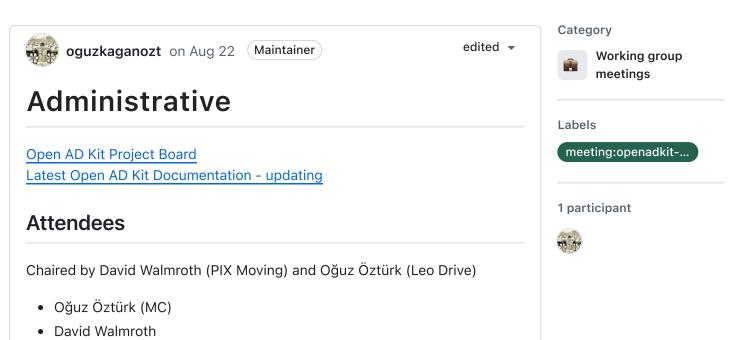


Open ADKit Working Group Meeting 22/08/2024 #5119

oguzkaganozt started this conversation in Working group meetings



Agenda

Ryohsuke Mitsudome

Esteve Fernandez

Samet Kütük

Hiroshi IgataAlex CarballoYutaka Kondo

Bonolo

DevOps Dojos: Build/Run: Open AD Kit Modular Images

- Agenda item maintainers: @oguzkaganozt , @youtalk
 - Refinement of devcontainer according to https://containers.dev/overview
 - Modular containers base image proposal
 - Performance Analysis of Modular Containers

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

Release of Open AD Kit Demo Archives

- Open AD Kit demo repos and artifacts will be published and showcased by specific forks within the Autoware project
- https://github.com/autowarefoundation/openadkit_demo.autoware
- https://github.com/autowarefoundation/openadkit_demo.autoware.universe
- https://github.com/autowarefoundation/openadkit_demo.autoware.launc
 h
- https://github.com/autowarefoundation/openadkit_demo.simulator

Autoware Actuation Service - Mixed Criticality, Safety Island, Virtual Hardware

- Agenda item maintainers: @kaspermeck-arm, @oguzkaganozt

Remote RViz Visualization

- Agenda item maintainers: @oguzkaganozt, @kaspermeck-arm

Discussion: https://github.com/orgs/autowarefoundation/discussions/5099 **Related idea:** RobotWebTools/rosbridge_suite#757

Given the benefits of modern web technologies and the need for flexibility, **WebRTC with rosbridge(ROS Web Tools)** with the help of <u>aiortc</u> would be the ideal choice.

Aspect	X11 Forwarding	VNC	X2Go	<u>Wel</u>
Primary Function	Remote application visualization	Full desktop remote access	High- performance remote desktop	Real-t media data strear
Protocol	X11 over SSH	RFB (Remote Framebuffer Protocol)	NX protocol	WebR (Peer- peer)
Compression	Minimal (SSH encryption overhead)	Various (e.g., Tight, H.264)	Advanced compression and caching	High- efficie comp
Bi-Directional ROS Messaging	No	No	No	Yes

Aspect	X11 Forwarding	VNC	<u>X2Go</u>	Wel
Platform Independence	Limited	Limited	Limited	High
Ease of Setup	Low	Moderate	Moderate to High	High
Security	Integrated with SSH	Requires secure tunnel (e.g., SSH)	Built-in secure connection	Requi securi (DTLS
Performance	Slow- Moderate	Moderate	High	High

Technical Optimizations for Container Management

- Agenda item maintainers: @youtalk, @oguzkaganozt
 - O 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 -> \(\frac{1}{6} \) 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 successfully 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_0tlhRgfjmQami1nyKxh5feY
 5TGre4YTOAG1AZWik/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



0 comments