TECHNICAL GOVERNANCE COMMITTEE

MEETING MINUTES

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22 MAY 2025 / 22:00-23:30 UTC / VIRTUAL VIA ZOOM

ATTENDEES

OSRF:

- Geoff Biggs (TGC Chair)
- Kat Scott (Developer Advocate)
- Vanessa Yamzon Orsi (TGC Vice-Chair/Secretary)
- VM (Vicky) Brasseur (OSRA Governance Advisor)
- Yuki Nakagawa (OSRF Board Member)

OSRA Delegates/TGC Reps:

- Alejandro Cordero (ROS PMC Rep, Honu Robotics)
- Clara Berendsen (Infrastructure PMC Rep, Ekumen)
- Christian Henkel (Gold Rep, Bosch)
- David Lu!! (Individual Rep, Metro Robots)
- Hemal Shah (Platinum Rep, NVIDIA)
- Maria Vergo (Silver Rep, ROS-Industrial)
- Michael Carroll (ROS PMC Interim Lead, Intrinsic)
- Michael Grey (Open-RMF PMC Lead, Intrinsic)
- Mirko Ferrati (Platinum Rep, Canonical)
- Sai Kishor (ros-controls Delegate, PAL Robotics)
- Steve Peters (Gazebo PMC Rep, Intrinsic)
- Tully Foote (Platinum Rep, Intrinsic)
- Yadu Vijay (Open-RMF PMC Rep, Intrinsic)

OSRA Observers

- Tom Panzarella (Org Rep, Seegrid)

AGENDA

Geoff Biggs, TGC Chair, called the meeting to order at 22:03 on 22 May 2025 UTC.

Existing Business

1. Confirmation of minutes of meeting TGC-20250424-Regular
    - **Approved by consensus**

2. Project reports
    - Project update: ROS (Presented by Michael Carroll, PMC Lead)
        - ROS 2 Kilted Kaiju - T-12 hrs
            - We had 210 contributors of pull requests over the last year, and even more contributors to review and comments on those PRs
            - We created 563 issues for the tutorial testing party to ask the community to smoke test various configurations for the release. We had 30 contributors close 400 issues.
            - We received really good feedback and participation from many new contributors.
        - Added Ubuntu Jammy as a Tier 3 platform for Jazzy
        - Emerson Knapp of Polymath Robotics has been made a full PMC member, mentored by Christophe Bedard from Apex.AI.
        - L-Turtle roadmap planning
            - Roadmap and ROSCon talk planning ongoing
            - Looking into incorporating the concept of all nodes as lifecycle nodes
            - Improving quality of pixi workflow
            - More standardization around some common service messages, originated out of the simulation interfaces work by Robotec and NVIDIA
        - Noetic going EOL on May 31, the end of ROS 1 in terms of PMC maintainership

    - Project update: Gazebo (Presented by Steve Peters, PMC Member, on behalf of the Project Lead)
        - Roadmap updates
            - Migration from Qt5 to Qt6 completed
            - Using Zenoh in gz-transport - finding Zenoh, pub/subn and pub/sub graph cache merged, currently working on aysnc req/resp. CI support is mostly completed for all platforms. On track for completion before Jetty feature freeze
            - Command line: use binaries instead of shared libraries completed; remaining work in gazebosim/gz-tools#7
            - Support Bazel for all Gazebo libraries
                - Goal: Migrate Bazel workspace to bzlmod - ongoing
            - Removing version number from package names
                - Just completed! Original proposal in gazebo-tooling/release-tools#1244
                - Trade-off: future versions will not be side-by-side installable
        - Other updates
            - Infrastructure
                - Auto-releasing Gazebo libs: Prototyping how to include changelogs and version bumps in PRs
                - Jenkins Windows agents updated
            - Gz Fuel/Sdformat emergency plan
                - The plan has been created with a group of volunteers. Working on playbooks

        - ROSCon Gazebo brainstorming session this week
        - OSRA Gazebo brainstorming session this week
        - GSoC
            - Started! We have two projects:
                - https://summerofcode.withgoogle.com/programs/2025/projects/d2fAACfv
                - https://summerofcode.withgoogle.com/programs/2025/projects/5l83pXn9
        - April Community meeting

- Project update: Open-RMF (Presented by Michael Grey, PMC Lead)

    - Kilted release updates:
        - Release of new Open-RMF features into Kilted is underway
        - Features included in the release:
            - Dynamic Events - use action clients to direct a robot's task during runtime
            - (community contribution) Emergency signal that can target specific fleets in the system
            - (community contribution) Task estimation API to support integrating third-party task planners into an Open-RMF system
        - Fixes/improvements included in the release:
            - 90% reduction in the memory utilization of the traffic schedule node
            - API to periodically clear the planner cache to prevent it from ballooning for large deployments
            - More efficient communication for elevator interactions
        - In review but not finalized yet:
            - Emergency return-to-charger behavior when tasks run for much longer than originally estimated
            - Option to issue a navigation command to have the robot face the first target position along a path that is being managed by Open-RMF
    - Next-generation planning
        - Added substantial documentation and examples for async execution in rclrs
        - Updating the site editor and bevy_impulse to use Bevy 0.16 (the latest Bevy release)
        - Examining ReactFlow as a potential framework for developing a FOSS front-end diagram editor for bevy_impulse workflows

- Project update: ROS Controls (Presented by Sai Kishor, PMC Member, on behalf of the PMC Lead)

    - Preliminary meeting with our GSoC candidate is done, initial plan drafted and follow-ups planned.
    - Post GSoC selection process there are a couple of dangling PRs.

        - For the ROSCon UK and ROSCon Singapore workshops, proposals have been submitted.
        - Started scoping work for micro-ros and socketcan support
        - We have observed that when multiple spawners are spawned at startup, some are frozen time to time and resulting in their controllers no being spawned
            - Upon debugging, we found that creating multiple spawner nodes is causing the issue, we fixed it using the `filelock` to make the spawners wait and spawn sequentially
        - Adopt topic-based-ros2-control package and add 2 new committers -- They are doing a minor refactor and once it is done, it is good to be moved to ros-controls repositories
        - We have branched for Jazzy in all ros-controls repositories

        - Regarding the urdfdom and urdfdom_header PRs, what could be the next step?
            - Standardize how the joint limits are defined in the URDF
                - Single source of information
                - MoveIt and other frameworks are maintaining these limits in a separate yaml
            - Using Acceleration and jerk limits can help in the integration of state-of-the-art interpolators like Ruckig directly into the framework
            - Have the joint limits enforced respectively in ros2_control framework

    - Project update: Infrastructure (Presented by Clara Berendsen, PMC Member, on behalf of the PMC Lead)
        - In the previous month, the PMC has been focusing on Delta support
        - Kilted release
            - Most work on the snapshot repository is completed. Migration is ready to go.
            - Book repository and development work is in progress, almost completed.
        - Gazebo farm migration work also began, targeting migration by the end of July, coordinating with the Gazebo PMC to avoid disruption of the Jetty workflow.
        - Working heavily on ROS archive clearing, changing the name depending on the platform, this package is intended to be a new way of installing the repository configuration and keys, and will allow us to update the keys more frequently with fewer disruptions.
        - Windows Server update - nightlies have been running and will have constant information on regressions.
        - Doing dynamic agent scaling and testing for Gazebo to remove agents during weekends and save costs.
        - Json project working on a revamp of vcstool with newer python support.

3. Other Existing Business Matters

    - Status of SIGs/TCs
        - Technical Committee on Enhancement Proposal Processes
            - Goal: Upgrade and improvements over REP
            - Chair: Geoff Biggs
            - Members: PMC Leads
            - Update:
                - The document is undergoing heavy review by the TGC and PMC members. The TC is working on reviewing, resolving, and incorporating comments.
                - Planning to have this be completed by the June TGC meeting.
        - SIG on Interoperability
            - Chair: Michael Grey
            - Update: No meeting due to the planned date falling on a holiday.
    - Discussion on communications and processes in the TGC
        - Discourse reorganization - Geoff Biggs discussed updates to Discourse and the planned reorganization of the platform. All project forums to be merged under Open Robotics Discourse, work to begin in June. The community has been informed, and there has generally been positive feedback from the community. Migration costs to be incurred from merging Gazebo Discourse with ROS Discourse.
        - TGC chat platform - There are ongoing concerns with using matrix, more research needs to be done.
        - Updates on TGC async comms, and how we can continue to improve async discussions amongst the group.
    - Follow-up on project funding
        - Reviewed condensed 2025 timeline, the OSRF board and management's fiscal policies on asset reserves, and responsible management of the Foundation's responsibilities to the ROS community and ecosystem, including the ability to withstand extended financial downturns and fundraising challenges due to various factors globally and economically.
        - OSRA membership is not yet at steady state, but has exceeded its ramp-up expectations for Year 1.
        - The 2025 OSRA funding cycle for project-specific requests is now in progress. The PMCs are currently working on funding proposals, which will then be iterated on with the TGC before proceeding to deliberation and allocation.

        - Final voting for the 2025 funding cycle is planned for the July 20 TGC meeting. The 2026 funding cycle is scheduled to begin in late Q3 2025.
    - L-Turtle planning
        - Plans for soliciting community feedback
        - Plans to follow up with various OSRA members who have offered contributions in various forms
        - Emphasized OSRA TGC members' invitations to participate in PMC meetings

New Business

- TGC SIG Proposal: ROS HAL Standardization for Enabling Physical AI
    - Background: Robotics is at the cusp of its GPT moment with several AI researchers, startups, and industry practitioners actively working on developing foundation models and tools to enable data collection and training. Large datasets of robots performing various tasks are aggregated through simulation and real-world teleoperation. The performance of these models is strongly correlated with diversity in the dataset, ie, collecting data from different embodiments, i.e.varying combinations of robots, cameras, grippers etc. A key challenge in this space lies in acquiring data from and sending commands to diverse hardware, encompassing both real and simulated systems. A related hurdle is the lack of standardized conventions and nomenclature for describing robotic embodiments. These are precisely the challenges that ROS has effectively addressed. Consequently, we believe that by leveraging ROS, we have a significant opportunity to advance cutting-edge robotics research and propel the entire field forward. We are at a pivotal moment, and it is crucial that we capitalize on the existing momentum within the robotics community.
    - The proposers shared a plan for the Special Interest Group (SIG) focus areas, existing standards to leverage on, goals, and process.
    - **Action:** It was agreed that the TGC will continue to review and discuss the proposal async, and vote on it in the June 2025 TGC meeting.
- Report on hosting web services with Oregon State University's Open Source Lab
    - The OSU OSL's funding and continuity concern has been resolved, so there is no longer an imminent challenge to the part of Open Robotics infrastructure that is hosted at OSU OSL.
    - A debrief was held to walk through considerations and mitigation strategies in the event of another similar matter arising.

Other Items

- Announced and welcomed new OSRA members:
    - PAL Robotics - Supporting Organisation

    - Canonical - Platinum member
- ROSCon 2025 updates - invitations and proposal deadlines
- New L-Turtle name official: Lyrical Luth

Adjournment - Geoff Biggs adjourned the meeting at 24:26 UTC.

ACTION ITEMS

1. The meeting minutes will be circulated to the TGC for review and approval before the next meeting by the TGC Chair.
2. The OSRF team will share further updates on the funding request and communication guidelines.
3. ROS HAL Standardization for Enabling Physical AI to begin feedback stage of proposal.
