ROS 2 TSC Contribution Report 2023-11-16

Monthly contribution self-reporting

Guidelines

● Each TSC representative: Please fill in your organization’s section with the engineering activities and other contributions that your organisation has made to ROS 2.
● Please fill your section prior to our next meeting on 2023-11-16.
● This report covers work done since the previous TSC meeting: 2023-10-12 - 2023-11-16. Don't include work done earlier or planned for the future.
● Contributions may come from you, your colleagues, and/or external collaborators that you’re funding to do the work that's reported.
● Each package to which you're contributing should be included on the list of ROS 2 Common Packages.
● When possible, provide links to your contributions (e.g., pull requests).
● Provide enough detail for everyone to understand what was done.
●
● These reports will be included in the published meeting minutes.
● Example:
  ○ foo_org/bar_pkg
    ■ Implemented the whizbang feature (PR)
    ■ Investigated and reported on the superbad bug (comment)

Reports

● Amazon: Aaron Blasdel
  ○
● Apex.AI: Lyle Johnson
  ○
● Bosch: Christian Henkel
  ○ ros2_documentation/PR3944 Updates Deliberation WG
  ○ WIP: Performance rclpy
  ○ WIP: New features ros/diagnostics
● Canonical: Jeremie Deray
  ○
● eProsima: Jaime Martin Losa
  ○ WIP: Fast DDS XTypes Refactor
  ○ Testing some scenarios involving Kubernetes & Nav2 in real-robots.
  ○ Released Fast DDS 2.12.0
● Foxglove: Adrian Macneil
  ○ foxglove/cdr
    ■ Version 3.2.0 for lengthcode support - Sam Nosenzo (merged 2023-11-16)
- **Expose read/write lengthcode for CDR2 emheaders** - Sam Nosenzo (merged 2023-11-16)
  - foxglove/mcap
    - **Fix metadata rendering issue** - Nathanael Tehilla Gunawan (merged 2023-11-16)
    - **Bump mcap-protobuf-support to 0.4.1** - Hans-Joachim Krauch (merged 2023-11-16)
    - **Relax version restrictions of protobuf dependency** - Hans-Joachim Krauch (merged 2023-11-16)
    - **Add h264 recording support to mcap.dev demo** - Jacob Bandes-Storch (merged 2023-11-16)
    - **Update TypeScript, Prettier, and other dev deps** - Jacob Bandes-Storch (merged 2023-11-16)
  - cpp: add build-time flags to make compression dependencies optional - jame-rms (merged 2023-11-14)
  - cli: fix segfault bug when using filter args - James-rms (merged 2023-11-08)
  - Add subcommand for sorting a file - Wyatt Alt (merged 2023-11-03)
  - go/cli: Coalesce identical channels by default - Hans-Joachim Krauch (merged 2023-11-02)
  - Include metadata in mcap merge - Wyatt Alt (merged 2023-11-02)
  - do not render hz if no messages - James-rms (merged 2023-11-01)
  - Update Cargo.toml - Roman Shylyman (merged 2023-11-01)
  - Update README.md - Esther S. Weon (merged 2023-10-25)
  - mcap-ros2-support: bump version to 0.5.3 - Jacob Bandes-Storch (merged 2023-10-23)
  - @foxglove/omqidl-serialization v1.0.2 - Sam Nosenzo (merged 2023-11-16)
  - Use lengthCode to determine whether to read sequenceLength again - Sam Nosenzo (merged 2023-11-16)
  - foxglove/ros-foxglove-bridge
    - **Fix delayed notification of clients about client published topic [ROS 1]** - Hans-Joachim Krauch (merged 2023-11-14)
    - **Add iron release badge to readme** - Hans-Joachim Krauch (merged 2023-11-06)
    - 0.7.3 - Hans-Joachim Krauch (merged 2023-10-25)
    - Fix `<code>asset_uri_whitelist</code>` regex backtracking issue, add more extensions - Hans-Joachim Krauch (merged 2023-10-25)
    - Fix callback accessing invalid reference to promise - Hans-Joachim Krauch (merged 2023-10-23)
  - foxglove/rosmsg
    - v5.0.2 - Hans-Joachim Krauch (merged 2023-11-13)
    - Fix `<code>Header</code>` not being resolved to `<code>std_msgs/Header</code>` - Hans-Joachim Krauch (merged 2023-11-13)
    - v5.0.1 - Hans-Joachim Krauch (merged 2023-10-25)
- **Fix message parsing not taking into account type namespace** - Hans-Joachim Krauch (merged 2023-10-25)
  - foxglove/rosmsg2-serialization
    - **Fix incorrect serialization of fixed-length arrays** - Hans-Joachim Krauch (merged 2023-11-09)
    - **bump cdr version** - Sam Nosenzo (merged 2023-10-24)
  - foxglove/studio
- **Intel: Harold Yang**
  - 76 commits
- **Intrinsic: Chris Lalancette**
  - 93 contributions to the ament, catkin, colcon, ros, ros-drivers, ros-drivers-gbp, ros-gbp, ros-geographic-info, ros-infrastructure, ros-perception, ros-planning, ros-simulation, ros-tooling, ros-visualization, ros2, and ros2-gbp repositories
  - Continued work on rmw_zenoh
    - Working towards getting the graph cache actually working
    - Combining code with the old https://github.com/atolabs/rmw_zenoh
      - Whole thing moved to https://github.com/ros2/rmw_zenoh, development streams merged together
  - Initial work on determining changes necessary for Ubuntu 24.04
- **iRobot: Alberto Soragna**
  -
- **Microsoft: Lou Amadio**
  - Visual Studio Code v0.9.6 released to prerelease
    - Fixes for Collada Rendering
    - Improved Container and Codespace work
    - http://aka.ms/ros/vscode
  - Investigation of Generating Console Events appears to be a container/host mismatch; but unable to replicate.
- **PickNik: Henning Kayser**
  - ros-planning/moveit2
    - **Consolidate RobotState benchmarks in single file** - Mario Prats (merged 2023-11-15)
    - **add rsl depend to moveit_core** - Alex Moriarty (merged 2023-11-15)
    - **[Servo] Change planning frame to base frame of active joint subgroup** - Sebastian Castro (merged 2023-11-13)
    - **Fix threading issue for collision velocity scaling in MoveIt Servo** - Erik Holum (merged 2023-11-09)
    - **Use node logging in moveit_ros** - Tyler Weaver (merged 2023-10-27)
    - **Avoid calling static node's destructor** - Nacho Mellado (merged 2023-11-07)
    - **Factor out path joint-space jump check** - Mario Prats (merged 2023-11-07)
    - **Add distance to servo collision checker requests** - Sebastian Castro (merged 2023-11-06)
    - **Add new clang-tidy style rules** - Sebastian Jahr (merged 2023-10-27)
    - **Finally fix errors building new RobotTrajectory Python bindings docs** - Sebastian Castro (merged 2023-10-25)
- [**More fixes to Python bindings docstrings**](#) - Sebastian Castro (merged 2023-10-24)
- [**Use default initializers in collision_common.h**](#) - Mario Prats (merged 2023-10-24)
- [**Node logger through singleton (warehouse)**](#) - Tyler Weaver (merged 2023-10-24)
- [**Use constraint distance instead of bool validity in STOMP cost function**](#) - Henning Kayser (merged 2023-10-24)
- [**Fix docstring indentation in newly added trajectory Python bindings**](#) - Sebastian Castro (merged 2023-10-24)
- [**Fix typo in bullet function name**](#) - Stephanie Eng (merged 2023-10-24)
- [**Rename tutorial docker**](#) - Tyler Weaver (merged 2023-10-13)
- [**CI job for building docker images for tutorial on main**](#) - Tyler Weaver (merged 2023-10-13)
- [**Use node logging in warehouse broadcast**](#) - Tyler Weaver (merged 2023-10-12)

**ros-planning/moveit2_tutorials**
- [**Remove recommendation for Cyclone due to FastDDS issues**](#) - Henning Kayser (merged 2023-10-30)
- [**Add changes necessary to address clang tidy API breakages**](#) - Sebastian Jahr (merged 2023-10-27)
- [**Fix broken URLs in tutorials docs**](#) - Sebastian Castro (merged 2023-10-25)
- [**Update instructions for Pilz tutorial**](#) - Sebastian Castro (merged 2023-10-24)

**ros-planning/moveit_msgs**
- [**Add error message string to MoveItErrorCode msg**](#) - Abishalini Sivaraman (merged 2023-11-14)
- [**Define UNDEFINED**](#) - Sebastian Jahr (merged 2023-11-14)
- [**Add PipelineState message**](#) - Sebastian Jahr (merged 2023-11-06)

**ros-planning/moveit_resources**
- [**Fix Panda demo launch for MoveIt 2 tutorials**](#) - Sebastian Castro (merged 2023-10-24)

**ros-planning/moveit_task_constructor**
- [**Update to the more recent JumpThreshold API**](#) - Mario Prats (merged 2023-11-10)
- [**Revert implicit trajectory info property inheritance**](#) - Sebastian Jahr (merged 2023-11-03)
- [**[ros2] Add Stage property to assign a list of controllers to use when executing the planned trajectory**](#) - Joseph Schornak (merged 2023-11-02)
- [**Run goalcallback asynchronously**](#) - Sebastian Jahr (merged 2023-10-27)
- [**Add random pose generator stage (ros2)**](#) - Sebastian Jahr (merged 2023-10-24)
- [**Reset joint values in scene diff for execution**](#) - Sebastian Jahr (merged 2023-10-24)

**ros2/rcutils**
- [**memmove for overlapping memory**](#) - Tyler Weaver (merged 2023-11-04)
- **ROBOTIS: Will Son**
- **ROS Industrial: Matt Robinson**
- **Sony: Tomoya Fujita**
  - ros2/rcl
    - "a rosout publisher of a node might not exist" | Chen Lihui | https://github.com/ros2/rcl/pull/1115 (merged 2023-11-15)
  - ros2/rclcpp
    - "rclcpp::Time::max() clock type support." | Tomoya Fujita | https://github.com/ros2/rclcpp/pull/2352 (merged 2023-11-04)
    - "align with rcl that a rosout publisher of a node might not exist" | Chen Lihui | https://github.com/ros2/rclcpp/pull/2357 (merged 2023-11-15)
    - "address rate related flaky tests." | Tomoya Fujita | https://github.com/ros2/rclcpp/pull/2329 (merged 2023-10-26)
  - ros2/rclpy
    - "align with rcl that a rosout publisher of a node might not exist" | Chen Lihui | https://github.com/ros2/rclpy/pull/1196 (merged 2023-11-15)
    - "call ok() to see if rclpy and context is initialized." | Tomoya Fujita | https://github.com/ros2/rclpy/pull/1198 (merged 2023-10-13)
    - "Fix conflicts for mergify/bp/humble/pr-1165" | Barry Xu | https://github.com/ros2/rclpy/pull/1187 (merged 2023-10-13)
    - "Fix conflicts for mergify/bp/iron/pr-1165" | Barry Xu | https://github.com/ros2/rclpy/pull/1186 (merged 2023-10-13)
  - ros2/rmw
    - "definition of local means being in the same context." | Tomoya Fujita | https://github.com/ros2/rmw/pull/359 (merged 2023-11-03)
  - ros2/rmw_connextdds
    - "avoid using dds common public mutex directly" | Chen Lihui | https://github.com/ros2/rmw_connextdds/pull/134 (merged 2023-11-03)
  - ros2/rmw_cyclonedds
    - "avoid using dds common public mutex directly" | Chen Lihui | https://github.com/ros2/rmw_cyclonedds/pull/474 (merged 2023-11-03)
  - ros2/rmw_dds_common
    - "make a new private mutex and add updating graph methods" | Chen Lihui | https://github.com/ros2/rmw_dds_common/pull/73 (merged 2023-11-03)
  - ros2/rmw_fastrtps
    - "avoid using dds common public mutex directly" | Chen Lihui | https://github.com/ros2/rmw_fastrtps/pull/725 (merged 2023-11-03)
  - ros2/ros2_documentation
  - ros2/ros2cli
- "flake8: DeprecationWarning: SelectableGroups dict interface is deprecated..." | Tomoya Fujita | https://github.com/ros2/ros2cli/pull/868 (merged 2023-11-03)
- "Warning: get_parameter_value() is deprecated." | Tomoya Fujita | https://github.com/ros2/ros2cli/pull/866 (merged 2023-11-03)

  - ros2/rosbag2

- **GVSC: Jerry Towler (SwRI)**
  - https://github.com/ros/rosdistro/pull/38853
  - https://github.com/ros/rosdistro/pull/38852
  - https://github.com/ros/rosdistro/pull/38850
  - https://github.com/swri-robotics/gps_umd/pull/89
  - https://github.com/swri-robotics/marti_common/pull/727
  - https://github.com/swri-robotics/marti_messages/pull/131
  - https://github.com/swri-robotics/marti_messages/pull/132
  - https://github.com/swri-robotics/gps_umd/issues/90
  - GVSC will continue to contribute to GPS and radar driver efforts

- **Toyota Research Institute: Ian McMahon**
  - ros2/rosbag2
    - ros2/rosbag2#1496
      - Link and compile against rosbag2_storage_mcap: Fixed issue 1492 (in review)
  - ros2/rviz
    - ros2/rviz#726
      - Fix potential leak / seg fault (in review)
    - ros2/rviz#1008
      - Added point_cloud_transport (in review)
    - ros2/rviz#1032
      - Added regex filter field for TF display (in review)
    - ros2/rviz#1038
      - Fix image display wrapping (merged)
    - ros2/rviz#1064
      - Include MeshShape class (merged)
    - ros2/rviz#1093
      - Fixed screw display (in review)

- **Wind River: Andrei Kholodnyi**
  - Updated meta-ros to support latest valid combinations
    - https://github.com/ros/meta-ros#supported-combinations
  - Updated VxWorks ROS2 tp the latest VxWorks release 23.09
    - https://github.com/Wind-River/vxworks7-layer-for-ros2/tree/humble-release-23.09

- **ZettaScale: Angelo Corsaro**
  - Cyclone DDS
    - A double-free for FreeRTOS on getting the process name
- Incorrect handling of “operator==” for some unions without a “default” case
- Redundant networking mode sending ACKs as multicast in addition to sending N unicast messages
- Asynchronous publishing mode not always sending a single message

- Zenoh
  - Liveliness API exposed in C/C++ API
  - PR on InfluxDB2 Connector
  - Finalised Android support on Kotlin API
  - Added Android demo (based on Zenoh’s Kotlin API) for piloting any TurtleBot robot
  - Added support for custom headers
  - Added support for replying queries out of context.