

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 **18 Feb 2021**.
- This report covers work done since the previous TSC meeting: **22 Jan 2021 - 18 Feb 2021**. 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

- **ADLINK Technology: Joe Speed**
 - Topic Discovery: improvements and bugfixes ([PR #615](#))
 - Adding support for static analysis during compilation using GCC's (>=10) -fanalyzer and MSVC's /analyze options to do ([PR #683](#))
 - Replace Java based IDL compiler ([PR #655](#))
 - **C++11 APIs** (OMG ISO C++ v2)
 - Improved testing of generated code:
github.com/reicheratwork/cyclonedds-cxx/commits/compile-generated
 - Keep C++ API synchronized with developments in IDL parser:
github.com/reicheratwork/cyclonedds-cxx/commits/idl-next-rebuild
 - Work on fully templated code implementation:
github.com/reicheratwork/cyclonedds-cxx/commits/templated_streaming
- **Amazon: Aaron Blasdel**
 - By Authors: mm318, emersonknapp, snehaldb90
 - To Repositories in Organizations: ament, ros-infrastructure, ros-tooling, ros2
 - Merged Since: 2021-01-21
 - This report generated: 2021-02-18
 - Contribution count: 31
 - **#### REP-2005 #### (26 items)**
 - ament/ament_lint
 - [Add TIMEOUT argument to ament_cmake_clang_tidy](#) - M. Mei (merged 2021-02-17)

- [Add multiprocessing support to ament_clang_tidy](#) - M. Mei (merged 2021-01-25)
- ros-infrastructure/rep
 - [Add libstatistics_collector to REP-2005](#) - Emerson Knapp (merged 2021-01-21)
- ros-tooling/cross_compile
 - [Update tutorial to use demo_nodes_cpp on Foxy, instead of now-deleted file_talker on Dashing](#) - Emerson Knapp (merged 2021-02-05)
 - [Add ROS 2 Rolling support](#) - Emerson Knapp (merged 2021-01-28)
- ros-tooling/libstatistics_collector
 - [Update linter to run on rolling+focal](#) - Emerson Knapp (merged 2021-01-21)
- ros-tooling/system_metrics_collector
 - [Run linter on rolling](#) - Emerson Knapp (merged 2021-01-29)
- ros2/rcpputils
 - [Add path equality operators](#) - Emerson Knapp (merged 2021-02-18)
 - [Add create_temp_directory filesystem helper](#) - Emerson Knapp (merged 2021-02-17)
 - [Add stream operator for paths to make it easier to log](#) - Emerson Knapp (merged 2021-01-21)
 - [Path join operator is const](#) - Emerson Knapp (merged 2021-01-21)
- ros2/rosbag2
 - [Remove temporary directory platform-specific logic from test fixture](#) - Emerson Knapp (merged 2021-02-18)
 - [Prepare 0.3.7 Foxy release](#) - Emerson Knapp (merged 2021-02-16)
 - [\[foxy backport\] Zstd should not install internal headers - some of them try include others that aren't installed. We don't use them. Avoid the situation \(#631\)](#) - Emerson Knapp (merged 2021-02-15)
 - [Move zstd compressor to its own package](#) - Emerson Knapp (merged 2021-02-05)
 - [Remove rosbag2_compression test dependencies on zstd implementation in prep for moving it into a separate package](#) - Emerson Knapp (merged 2021-02-05)
 - [Deduplicate SequentialCompressionReader business logic, add fallback to find bagfiles in incorrectly-written metadata](#) - Emerson Knapp (merged 2021-01-25)
 - [Zstd should not install internal headers](#) - Emerson Knapp (merged 2021-02-03)
 - [Prepare bloom release 0.6.0](#) - Emerson Knapp (merged 2021-02-01)
 - [Make compressor implementations into a plugin via pluginlib](#) - Emerson Knapp (merged 2021-01-30)
 - [Fix relative metadata paths in SequentialCompressionWriter](#) - Emerson Knapp (merged 2021-01-27)
 - [Fix deadlock race condition on compression shutdown](#) - Emerson Knapp (merged 2021-01-27)
 - [Remove mjeronomio from CODEOWNERS in favor of having him on the reviewing team](#) - Emerson Knapp (merged 2021-01-25)

- [Fix the tests on cyclonedds by translating qos duration values](#) - Emerson Knapp (merged 2021-01-21)
 - [Add mjeronomo to codeowners to be auto-assigned in the review rotation](#) - Emerson Knapp (merged 2021-01-21)
- ros2/rosbag2_bag_v2
 - [Prepare for bloom release 0.1.0](#) - Emerson Knapp (merged 2021-02-01)
- **#### REP-2005 Pending #### (6 items)**
- ros-tooling/action-ros-ci
 - [Enforce prettier code styling](#) - Emerson Knapp (merged 2021-02-12)
 - [Set CODEOWNERS for package\[-lock\].json to @ghost so that dependabot reviews are not auto-assigned to humans](#) - Emerson Knapp (merged 2021-01-29)
 - [Added retry library for rosdep update](#) - None (merged 2021-01-28)
- ros-tooling/ros-github-scripts
 - [Add ros-ci-for-pr and ros-github-contribution-report scripts](#) - Emerson Knapp (merged 2021-02-15)
- ros-tooling/setup-ros
 - [Do an intermediate upgrade to pip 20 before trying any further, so that xenial can pass and avoid an incompatible version](#) - Emerson Knapp (merged 2021-01-27)
- ros-tooling/setup-ros-docker
 - [Do an intermediate upgrade to pip 20 before trying any further, so that xenial can pass and avoid an incompatible version](#) - Emerson Knapp (merged 2021-01-27)
- **Apex.AI: Dejan Pangercic**
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- **Bosch: Karsten Knese**
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- **Canonical: Kyle Fazzari**
 - eProsimma/Fast-DDS
 - Ongoing: proper security logging to DDS
 - eProsimma/Micro-XRCE-DDS
 - Ongoing: ubuntu core reference device
- **eProsimma: Jaime Martin Losa**
 - [eProsimma Fast DDS 2.2](#)
 - [ZERO-COPY!](#)
- **Intel: Harold Yang**
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- **iRobot: Ori Taka**
 - add support for custom queue policies (e.g. pruning) ; bug fixes <https://github.com/ros2/rclcpp/pull/1416>
 - implement events executor in cyclone DDS https://github.com/ros2/rmw_cyclonedds/pull/256
 - address various PR comments <https://github.com/ros2/rmw/pull/286>
 - extensive testing of events executor on resource constrained platforms (performing real computation opposed to the classic performance framework)
 - Work started:
 - performance evaluation of lifecycle nodes

- experiment with ROS 2 integration in conan
- **LG Electronics: Lokesh Kumar Goel**
 - Update to final eloquent release from 2020-12-14:
<https://github.com/ros/meta-ros/pull/777>
 - and small fix for librealsense2 there:
<https://github.com/ros/meta-ros/pull/797>
 - Support for latest webOS OSE release v2.9.0 build 295:
<https://github.com/ros/meta-ros/pull/789>
 - Support for latest revisions of all current OE releases:
<https://github.com/ros/meta-ros/pull/786>
<https://github.com/ros/meta-ros/pull/787>
<https://github.com/ros/meta-ros/pull/790>
<https://github.com/ros/meta-ros/pull/791>
<https://github.com/ros/meta-ros/pull/792>
<https://github.com/ros/meta-ros/pull/796>
 - Work on adding noetic is ongoing, but still far from finished.
 - Similarly with upgrade to latest releases of ROS2 distributions.
- **Microsoft: Sean Yen**
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- **Open Robotics: Chris Lalancette**
 - Approximately 170 pull requests merged since last meeting
 - Most documentation has been moved to docs.ros.org
 - Fixed prerelease.ros.org
 - Continued work on per-package documentation; repository is
<https://github.com/ros-infrastructure/rosdoc2>
- **PickNik: Dave Coleman**
 - ros-planning/moveit
 - "Fix logic in PlanningScene::clearDiffs() for multiple CollisionDetectors" | AndyZe | <https://github.com/ros-planning/moveit/pull/2497> (merged 2021-02-11)
 - "Refactor Servo velocity bounds enforcement" | Jere Liukkonen | <https://github.com/ros-planning/moveit/pull/2471> (merged 2021-02-04)
 - "Servo: protect paused_flag, for thread safety" | AndyZe | <https://github.com/ros-planning/moveit/pull/2494> (merged 2021-01-22)
 - "Servo: Do not break out of loop -- need to update low pass filters" | AndyZe | <https://github.com/ros-planning/moveit/pull/2496> (merged 2021-01-22)
 - ros-planning/moveit2
 - "OMPL constrained planning" | Boston Cleek | <https://github.com/ros-planning/moveit2/pull/347> (merged 2021-02-15)
 - "port pose tracking" | Abishalini Sivaraman | <https://github.com/ros-planning/moveit2/pull/320> (merged 2021-02-11)
 - "Fix 'start_servo' service topic in demo" | Henning Kayser | <https://github.com/ros-planning/moveit2/pull/358> (merged 2021-02-05)
 - "Unable to load move_group capabilities and controller manager" | Boston Cleek | <https://github.com/ros-planning/moveit2/pull/344> (merged 2021-02-05)
 - "Sync main branch with MoveIt 1" | Jafar Abdi |

- "Pr hybrid planning review" | Henning Kayser |
<https://github.com/ros-planning/moveit2/pull/338> (merged 2021-02-04)
 - "Server timeout set to infinity" | Boston Cleek |
<https://github.com/ros-planning/moveit2/pull/351> (merged 2021-02-01)
 - "Refine local planner component" | Sebastian Jahr |
<https://github.com/ros-planning/moveit2/pull/349> (merged 2021-01-29)
 - "[fix] export cmake library install" | Tyler Weaver |
<https://github.com/ros-planning/moveit2/pull/326> (merged 2021-01-27)
 - "[fix] export cmake library install" | Tyler Weaver |
<https://github.com/ros-planning/moveit2/pull/339> (merged 2021-01-22)
 - "Add fake_joint_driver test_depend" | Boston Cleek |
<https://github.com/ros-planning/moveit2/pull/337> (merged 2021-01-20)
 - ros-planning/moveit_calibration
 - "Initial changelogs" | John Stechschulte |
https://github.com/ros-planning/moveit_calibration/pull/45 (merged 2021-02-01)
 - ros-planning/srdfdom
 - "[fix] export cmake library install" | Tyler Weaver |
<https://github.com/ros-planning/srdfdom/pull/76> (merged 2021-01-21)
 - **ROBOTIS: Will Son**
 - Preparing for the TurtleBot3 SBC upgrade
 - Working on TurtleBot3 RPi3B+ recovery images for each ROS1/ROS2 versions
 - **Rover Robotics: Nick Fragale**
 - In December, Brian, Kat, Tully and I had an email chain about the possibility of a UX working group. We still have interest in creating such a group and so we have started working on various UX related tasks that benefit both us and the community. The main one being creating a report on how companies create robot and sensor drivers, the problems they face, the negative implications of this on UX, and suggestions on how to fix it. The report is still a work in progress but can be found here
https://cdn.shopify.com/s/files/1/0055/0433/5925/files/Work_in_Progress_ROS_REP_Proposal_-_Driver_Structure.pdf?v=1613665739
 - **Samsung: Steven Macenski**
 - Regulated Pure Pursuit controller: completion, unit tests (93%), documentation, and hardware evaluation
 - CI Issues in Nav2: CI completely failed and working on standing it back up.
 - Currently flaky after a few updates, but working if CI is triggered a few times on system-level failures
 - Writing / working on group papers for IROS 2021:
 - Regulated Pure Pursuit - Francisco Martin & Shrijit Singh
 - A mature visual SLAM comparison for integration into Nav2 - Alexey Merzlyakov & TBD
 - Starting conversations with those in industry about support for coverage-style planners. Talking with Greenzie and Nobleo about their implementations and thoughts on this matter for inclusion into a new Planner-Server-style coverage server and behavior tree navigator integrations.
 - Usual review, bug, and community management tasks
 - **Sony: Tomoya Fujita**

- Feature: ContentFilteredTopic
 - Working with RTI new rmw_connextds
 - Bring the contentfilter interfaces up to rmw/rcl/rclcpp with test. (W.I.P, almost done and ready to review)
 - PRs
 - ros2/rcl
 - "Avoid setting error message twice." | Chen Lihui | <https://github.com/ros2/rcl/pull/887> (merged 2021-01-28)
 - ros2/rclcpp
 - "[foxy] Fix runtime error: reference binding to null pointer of type (#1547)" | Tomoya Fujita | <https://github.com/ros2/rclcpp/pull/1548> (merged 2021-02-11)
 - "Avoid 'Resource deadlock avoided` if use intra_process_comms" | Chen Lihui | <https://github.com/ros2/rclcpp/pull/1530> (merged 2021-02-03)
 - "Update for checking correct variable" | Chen Lihui | <https://github.com/ros2/rclcpp/pull/1534> (merged 2021-01-29)
 - "Destroy msg extracted from LoanedMessage." | Chen Lihui | <https://github.com/ros2/rclcpp/pull/1305> (merged 2021-01-26)
 - "Fix runtime error: reference binding to null pointer of type" | Tomoya Fujita | <https://github.com/ros2/rclcpp/pull/1547> (merged 2021-02-10)
 - ros2/rcpputils
 - "Use new noexcept specifier." | Chen Lihui | <https://github.com/ros2/rcpputils/pull/123> (merged 2021-02-02)
 - ros2/ros2_documentation
 - "add ros2-tsc-charter.rst" | Tomoya Fujita | https://github.com/ros2/ros2_documentation/pull/1103 (merged 2021-02-18)
 - ros2/ros2cli
 - "add option to support use_sim_time." | Tomoya Fujita | <https://github.com/ros2/ros2cli/pull/581> (merged 2021-02-17)
 - **GVSC: Jerry Towler (SwRI)**
 - ros2/design
 - Multi-machine systems: <https://github.com/ros2/design/pull/297>
 - Launch refactor: <https://github.com/ros2/design/pull/272>
 - ros2/launch
 - Refactoring ExecuteProcess: <https://github.com/ros2/launch/pull/454>
 - ros2/rosbag2
 - Data recovery: <https://github.com/ros2/rosbag2/pull/641>
 - Play/pause: <https://github.com/ros2/rosbag2/pull/443>
 - **Toyota Research Institute: Ian McMahon**
 - SDFormat 1.8 development (tracking issue <osrf/sdformat#278>)

- Update classes to use ignition::utils::ImplPtr or ignition::utils::UniqueImplPtr [sdformat#474](#) (merged)
- Emit error when inertial elements contain poses with relative_to attributes [sdformat#480](#) (merged)
- Add ParserConfig class to encapsulate file parser settings in a non-global manner [osrf/sdformat#439](#) (merged)
- Fixes precision loss when adding nested models [sdformat#314](#) (merged)
- Add EnforcementPolicy in ParserConfig to enable configurable parsing strictness (eg. when encountering unknown elements) [sdformat#481](#) (merged)
- Fix rendering of special characters on sdformat.org/spec [sdformat#483](#) (merged)
- Constructing nested models for dartsim in ign-physics [ign-physics#189](#) (merged)
- ROS2 development
 - Apples-to-apples comparison of different Python binding generators: [SIP](#), [CPython](#), [CFFI](#), and [Pybind11](#) used to generate [report](#).
 - Pybind11 for rclpy Python Bindings (tracking issue [ros2/rclpy#665](#))
 - Use Pybind11's CMake code [ros2/rclpy#667](#) (merged)
 - Split rclpy module for easier porting to pybind11 [ros2/rclpy#675](#) (in review)
 - Convert each module to use Pybind11 with the existing C to Python API
 - `_rclpy` [ros2/rclpy#675](#) (in review)
 - `_rclpy_action` [ros2/rclpy#678](#) (in review)
 - `_rclpy_handle` [ros2/rclpy#668](#) (in review)
 - `_rclpy_logging` [ros2/rclpy#659](#) (in review)
 - `_rclpy_pycapsule` [ros2/rclpy#652](#) (in review)
 - Decouple rosidl generation pipeline from CMake (tracking issue [ros2/rosidl#560](#))
 - Architecture generalization proposal design [ros2/design#310](#) (In review)
 - Unified code generation CLI (tracking issue [ros2/rosidl#565](#))
 - Add base rosidl CLI [ros2/rosidl#567](#) (in review)
 - Make `ament_python_install_package()` install Python eggs [ament/ament_cmake#316](#) (in review)
 - Expose C code generation via rosidl CLI [ros2/rosidl#569](#) (in review)
 - Expose C++ code generation via rosidl CLI [ros2/rosidl#570](#) (in review)
 - Expose Python code generation via rosidl CLI [ros2/rosidl_python#123](#) (in review)

- Expose C typesupport generation via rosidl CLI
[ros2/rosidl_typesupport#105](#) (in review)
- Expose C++ typesupport generation via rosidl CLI
[ros2/rosidl_typesupport#104](#) (in review)
- Expose introspection C typesupport generation via rosidl CLI
[ros2/rosidl#572](#) (in review)
- Expose introspection C++ typesupport generation via rosidl CLI
[ros2/rosidl#573](#) (in review)
- Expose FastRTPS C typesupport gen via rosidl CLI
[ros2/rosidl_typesupport_fastrtps#65](#) (in review)
- Expose FastRTPS C++ typesupport gen via rosidl CLI
[ros2/rosidl_typesupport_fastrtps#66](#) (in review)
- **Wind River: Andrei Kholodnyi**
 - Aligning VxWorks port to the Foxy release. Update foxy Fast-DDS patches for VxWorks
 - <https://github.com/Wind-River/vxworks7-layer-for-ros2/commit/e798e67388afb3fdb731e58a7c9f2a745145e167>
 - Published Yocto recipes for the meta-ros layer with Wind River Linux.
 - <https://github.com/Wind-River/wr-ros>
 - One of the problems though is the incompleteness of the SPDX licenses, we are in contact with Bosch to figure out how to fix it