21st Cartographer Open House

2018-06-07
Release 1.0

Cartographer 1.0.0 release branch

Cartographer

- Add maintainers and authors to package.xml (#1170)
- Release 1.0 ( #1177)

Cartographer ROS

- Message dependency fixup (#882)
- Add maintainers and authors to package.xml (#886)
- Release 1.0 ( #889)
Serialization

Introduced SerializationHeader message and an interface for parsing serialized states, independent of the serialization format (RFC).

Cartographer

- Defining new serialization proto (#1165)
- Mapping state serialization (#1166)
- Migration tool for serialization format (#1167)
- Mapping state deserializer (#1171)
- Using new serialization format. (#1174)
- Making a test nicer: procrastination and nits. (#1175)
- Fix LoadState gRPC (#1179)
- Adding LOG output to migration tool (#1180)
- Adding short description of pbstream migration tool (#1181)

Cartographer ROS

- Follow googlecartographer/cartographer#1174 (#883)
Global SLAM Result Callback

Added a GlobalSlamResultCallback which is invoked whenever the optimization problem has been solved (RFC).

Cartographer

- Add SetGlobalSlamOptimizationCallback() (#1164)
- Implement receive_global_slam_optimizations_handler (#1169)

Cartographer ROS

- Follow googlecartographer/cartographer#1164 (#877)
Provide local trajectory node poses

Give the `pose_uploader` access to the local poses.

**Cartographer**

- Provide local poses via `GetTrajectoryNodePoses()` (#1172)

**Cartographer ROS**

- Follow googlecartographer/cartographer#1172 (#881)
Tweaks & fixes

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Cartographer

- Fixing "Optimizing: -nan%" issue (#1183)
- Skip the Collator for the landmark data (#1184)
- Writing probability grid as proto with probability grid points processor (#1069)

Cartographer ROS

- Sanitize node memory consumption with a smaller TF buffer size (#879)
- Add ROS melodic to CI (#870)
- Add warning on pure_localization submap resolutions (#858)
- Assets writer (ROS map) urdf typo fix (#875)
- Fix the 'load_frozen_state' flag in visualize_pbstream.launch (#863)
Current work

- Pose Graph Refactoring
- Evaluation
- Using intensities to improve Scan Matching
- TSDF experiments
Placeholder for other status reports
Thanks.

Next Open House:
June 21st, 5pm CET

If you would like to present anything next meeting, please reach out to cschuet@google.com