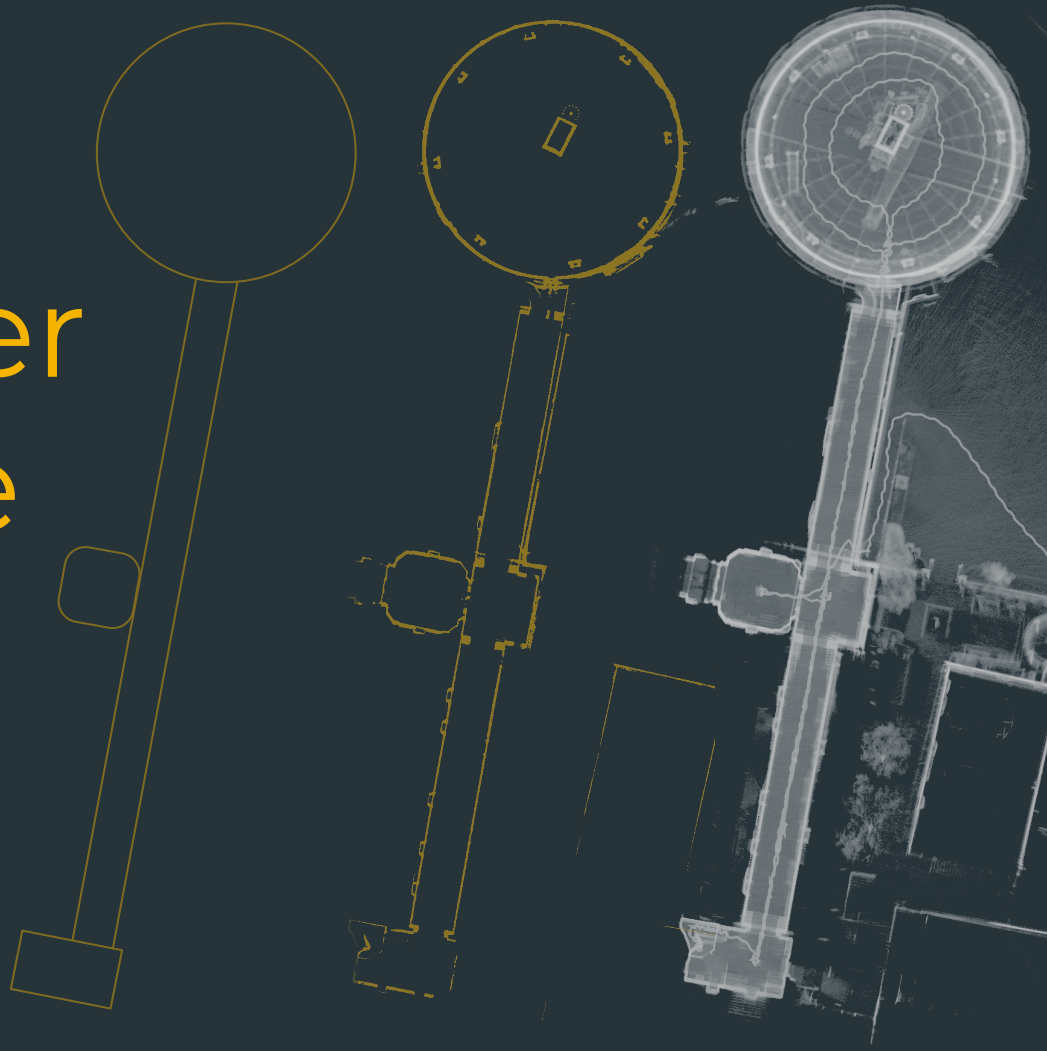


# 21st Cartographer Open House

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

[Cartographer 1.0.0 release branch](#)

## 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](mailto:cschuet@google.com)

