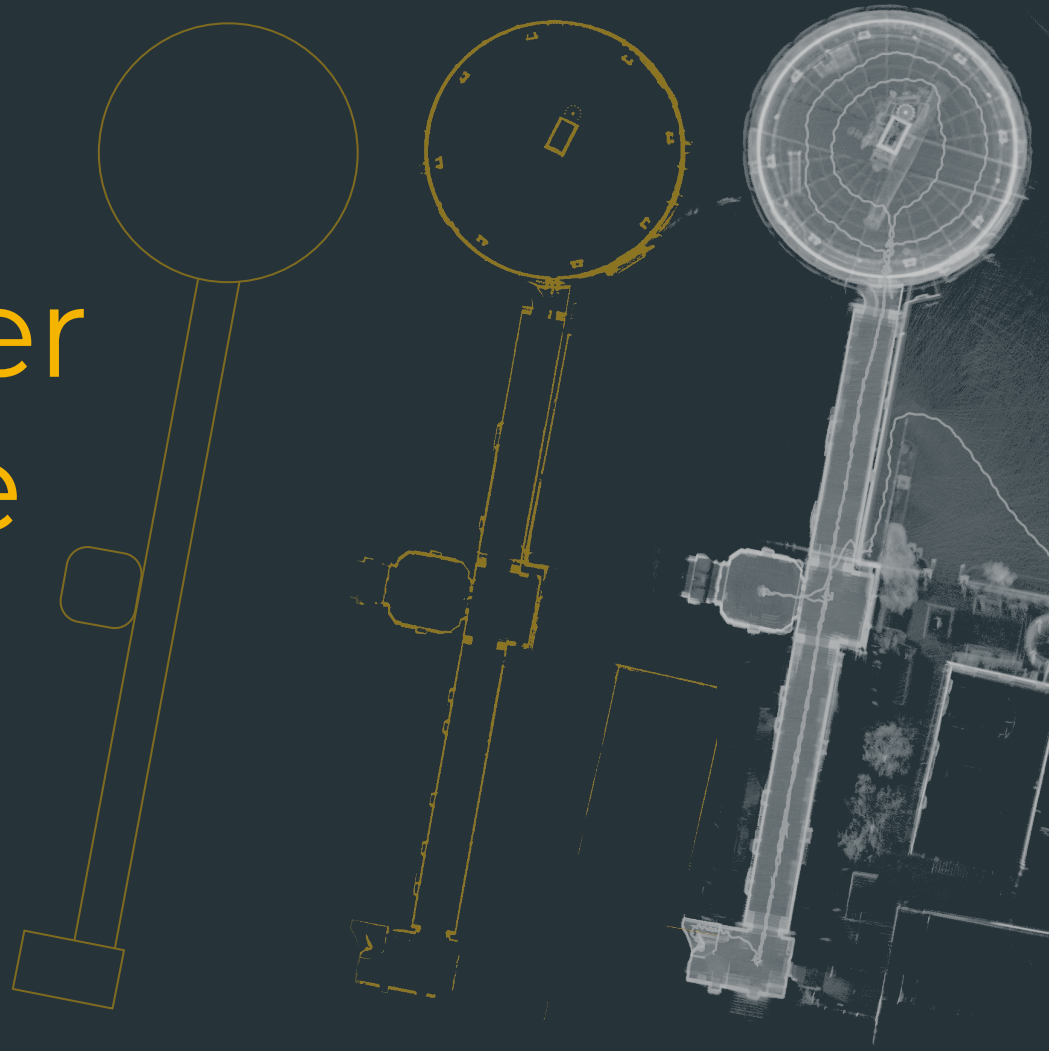


23rd Cartographer Open House

18-5-7



Grpc and DeleteTrajectory fixes

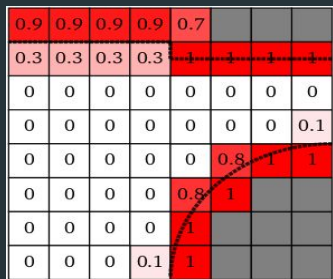
A caller can load a new frozen map, wait for global SLAM to process it (and re-localize in the new map), and delete the old frozen map ([RFC](#)).

Cartographer

- Handle invalid requests. (#1222)
- Avoid uninitialized NodeId, SubmapId (#1223)
- Add further tests for MapById (#1226)
- Fix serialization for deleted trajectories. (#1214)



Truncated Signed Distance Functions



Occupancy Grid



Truncated Signed Distance Field

Cartographer

- Add TSDF2D Grid (#1209)
- Add Normal Estimation (#1213)
- Separate raycast and grid update (#1216)



Parameter for Pure Localization

Cartographer

- Add `max_submaps_with_pure_localization` parameter (#1141)
- Make old pbstreams compatible with the new `pure_localization_trimmer`

Cartographer ROS

- Use new pure localization trimmer options. (#918)



ROS Services for Metrics and TrajectoryState

Cartographer ROS

- Use PoseGraphInterface::TrajectoryState from libcartographer (#910)
- Add internal metric families. (#914)
- Register internal metrics and provide a public interface. (#917)



Tweaks and Fixes

Cartographer

- Fix the local SLAM latency metric. (#1231)
- Add options to (not)collate fixed-frame/landmarks data. (#1224)
- Add `use_online_imu_extrinsics_in_3d` parameter and set it to true
- Extract ground truth generation into a library. (#1215)

Cartographer ROS

- Improve internal naming of local SLAM data. (#908)
- Discard proto data in `pbstream_map_publisher` via RAII. (#912)
- Allow to ignore (un-)frozen submaps in the occupancy grid node. (#899)



Current work

- Generic Pose Graph Design
- Correct DeleteTrajectory to replace maps at run-time
- TSDF
- Robust gRPC client and server



Placeholder for other status reports



Thanks.

Next Open House:
August 2nd, 5pm CEST

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

