Evaluation pipeline

Kubernetes pipeline to evaluate Cartographer’s performance

Infrastructure

- Docker files for evaluation pipeline (#18)
- Adding python script for creating k8s jobs (#19)
- Chunking up writes to big query (#21)
Abseil

Removed common/mutex.h with common::MutexLocker.
Reused absl::Substitute.

Cartographer

- Use absl::Mutex instead of custom implementation (#1356)
- [ABSL] Purge common/mutex.h. (#1369)
- [ABSL] Use absl::Substitute in rigid_transform debug messages. (#1373)

Cartographer ROS

- [ABSL] Use absl::Mutex. (#969)
[Timed]RangefinderPoint

Introduce [Timed]RangefinderPoint to be used throughout Cartographer instead of using Eigen::Vector3/4 directly (RFC)

Cartographer

- Introduce [Timed]RangefinderPoint. (#1357)

Cartographer ROS

- Follow cartographer#1357 (#964)
Generic Pose Graph

Added local parameterization support.

Cartographer

- [GenericPoseGraph] Add parameterization. (#1385)
- [GenericPoseGraph] Add a macro to find nodes. (#1382)
- [GenericPoseGraph] Move functions that add param blocks
Tweaks and fixes

Removed common/mutex.h with common::MutexLocker. Reused absl::Substitute.

Cartographer

- Use sourceforge mirrors for boost. (#1378)
- Various Bazel improvements (#1390)
- Move tools/bazel.rc to prepare for bazel 0.17 (#1375)
- Rename submap finished flags (#1384)
- Replace CHECK() by a warning in MapBuilderStub::SerializeState() (#1377)
- Remove noisy logging from AddSensorDataBatchHandler (#1366)
- Skip constraint search against unfinished submaps. (#1362)
- Use Huber loss for landmark cost functions. (#1377)
- Graceful LocalTrajectoryUploader (#1381)

Cartographer ROS

- Adding option to launch without rviz, similar to 2d case (#972)
- Add include_unfinished_submaps parameter to SerializeState() (#966)
Current work

- Generic Pose Graph
- TSDF
- Robust gRPC uplink
Placeholder for other status reports
Thanks.

Next Open House:
August 30th, 5pm CEST

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