# OpenTelemetry C++ SIG

Time: alternates between Monday at 13:00 PT and Wednesday at 09:00 PT, refer to The

OpenTelemetry C++ Client

**Repo:** <a href="https://github.com/open-telemetry/opentelemetry-cpp">https://github.com/open-telemetry/opentelemetry-cpp</a> **Slack:** <a href="https://cloud-native.slack.com/archives/C01N3AT62SJ">https://cloud-native.slack.com/archives/C01N3AT62SJ</a>

#### **Next Meetings**

- Dec 1, 2025
- Dec 10, 2025
- Dec 15, 2025
- Dec 24, 2024 (cancelled)
- Dec 29, 2025 (cancelled)
- Jan 7, 2026

# Meeting template

#### Attendee:

XXX

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - o Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Next meeting: Nov 26, 2025 (Cancelled, Thanksgiving, no attendance)

#### Attendee:

• Marc Alff (Oracle)

#### Agenda:

- Upstream
  - o Spec
  - Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] clang-tidy cleanup
      - Tooling PR from Doug
      - Lot of cleanup required
    - [Marc] Spec compliance matrix out of date
    - [Marc] ABI compatibility tooling
    - [Marc] Meeting dates
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Nov 17, 2025 (Cancelled, no attendance)

#### Attendee:

Marc Alff (Oracle)

- Upstream
  - Spec
  - o Semantic conventions
  - o Configuration
  - o Proto

- o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Calendar, next meeting dates
    - [Marc] Next release 1.24.0
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Nov 12, 2025

#### Attendee:

- Marc Alff (Oracle) Unable to attend, time conflict.
- XXX

#### Agenda:

- Upstream
  - o Spec
  - o <u>Semantic conventions</u>
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - o Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

### Nov 3, 2025

#### Attendee:

• Marc Alff (Oracle)

#### Agenda:

- Upstream
  - o Spec
    - Deprecate ZIPKIN exporter?
      - To consider, if zipkin accepts OTLP.
  - Semantic conventions
    - Release 1.38, adopted in otel-cpp
  - Configuration
    - Lot of recent activity, converging on 1.0.0 stability
  - o Proto
    - New release 1.9.0, needs upgrade in bcr and otel-cpp
  - o Weaver
    - Release 0.18.0, adopted in otel-cpp
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Plan next release
      - PR for views from Tom
    - [Tom] Clarify/cleanup compile flags dependencies in header files, due to build options. Install config.h ?
      - Related to packaging
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Oct 29, 2025

#### Attendee:

- Marc Alff (Oracle)
- Doug Barker
- Nikhil Bhatia

- Upstream
  - Spec
  - o Semantic conventions
    - No recent release
  - Configuration

- Adopt 1.0.0-rc2 / 1.0.0-rc3
- o Proto
  - Adopt release 1.8.0
- o <u>Weaver</u>
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - [Marc] Plan next release
- Opentelemetry-cpp-contrib
  - Misc
    - [Doug] Improve / update cmake scripts in contrib
- Opentelemetry-cpp-buildtools
  - Misc

# Oct 20, 2025 (Canceled)

#### Attendee:

XXX

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - o Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Oct 15, 2025

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)

#### Nikhil Bhatia

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

### Oct 6, 2025

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)
- Nikhil Bhatia
- Doug Barker

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Status of single opentelemetry-cpp dll build
      - CI coverage
      - OPENTELEMETRY\_EXPORT versus \*.def file
      - Major cleanup needed
- Opentelemetry-cpp-contrib

- Misc
- Opentelemetry/cpp-build-tools
  - Misc
    - [Marc] Please review PR #19
    - [Marc] Make new release, to update format tools

### Oct 1, 2025

#### Attendee:

- Marc Alff (Oracle)
- Nikhil Bhatia
- Doug Barker
- Pawel (Elastic)

- PHP donation
  - Elastic distribution of OpenTelemetry for PHP
    - https://github.com/open-telemetry/community/issues/2846
    - https://docs.google.com/document/d/1LCe1g1yzhwu3qcWZOO9979HuJT e9RGHp3q42ugHYJqM/edit?tab=t.0
  - Next steps ?
    - Define how to process the donation
    - Define opentelemetry-cpp future involvement
      - For the repositories (cpp, cpp-contrib, cpp-build-tools)
      - For the maintainers (become maintainers/contributors in other repositories, like opamp-cpp ?)
    - [Marc] Marc to add notes on the public donation proposal (issue # to link)
- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] DLL build on windows
      - Needs better CI coverage, we should find issues ourselves and not wait for bug reports
      - Needs to support ABI v1 and ABI v2

- Clarify how to export : OPENTELEMETRY\_EXPORT or file input.src (.def) ?
- Singletons are still broken on windows.
- [Marc] Plugable HTTP Authentication
- [Doug] CI workflow cleanup proposal
   https://github.com/open-telemetry/opentelemetry-cpp/issues/3676
- [Doug] Third party release versions update proposal https://github.com/open-telemetry/opentelemetry-cpp/issues/3525

- Opentelemetry-cpp-contrib
  - Misc
    - [Marc] Status of cpp-contrib (broken)
- Opentelemetry-cpp-buildtools
  - Misc

# Sep 22, 2025

#### Attendee:

- Marc Alff (Oracle)
- Nikhil Bhatia
- Tom Tan (Microsoft)
- XXX

- Upstream
  - o Spec
  - Semantic conventions
  - o Configuration
  - o Proto
  - Weaver
  - Elastic distribution of OpenTelemetry for PHP
    - https://github.com/open-telemetry/community/issues/2846
    - https://docs.google.com/document/d/1LCe1g1yzhwu3qcWZOO9979HuJT e9RGHp3q42ugHYJqM/edit?tab=t.0
      - Use otel-otlp for export.
      - opAMP C++ code to the contrib repo.
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc

- Opentelemetry-cpp-buildtools
  - o Misc

### Sep 17th, 2025

#### Attendee:

- Tom Tan (Microsoft), will be absent
- Nikhil Bhatia
- Ehsan

#### Agenda:

- Upstream
  - o <u>Spec</u>
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
  - o Elastic distribution of OpenTelemetry for PHP
    - https://docs.google.com/document/d/1LCe1g1yzhwu3qcWZOO9979HuJT e9RGHp3q42ugHYJqM/edit?tab=t.0
      - Use otel-otlp for export.
      - opAMP C++ code to contrib repo.
- Opentelemetry-cpp
  - Issues 2085 Nikhil would like to work on
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Sep 8, 2025

#### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- XXX

- Upstream
  - o Spec

- o Semantic conventions
- o Configuration
- o <u>Proto</u>
  - Opentelemetry-proto 1.8.0 released
  - Waiting for bazel central repository adoption of it, to build otel-cpp
- o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Q: Extending attribute types in every SIG?
    - [Marc] Plan next release
      - Marc to create an issue for tracking.
    - [Marc] Deprecate OPENTELEMETRY\_HAVE\_WORKING\_REGEX
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc

### Sep 3, 2025

#### Attendee:

- Marc Alff (Oracle)
- Ehsan
- Rafael Roquetto (Grafana)
- Nikhil Bhatia

- Upstream
  - o Spec
  - Semantic conventions
    - Otel-cpp up to date with 1.37.0
  - Configuration
  - o Proto
    - Release 1.8.0 in preparation
  - Weaver
    - Otel-cpp up to date with 0.17.1
- Opentelemetry-cpp
  - Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib

- Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Aug 25, 2025

#### Attendee:

- Marc Alff (Oracle)
- Doug Barker
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

- Upstream
  - o Spec
    - Spec configuration matrix moving to yaml
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 4631
  - Semantic conventions
    - Release 1.37.0 in preparation
      - https://github.com/open-telemetry/semantic-conventions/pull/2681
  - Configuration
    - Still on version 1.0.0-rc.1
    - No ETA for release 1.0.0
  - o Proto
  - o <u>Weaver</u>
    - Release 0.17.1
- Opentelemetry-cpp
  - o Issues
  - o PR
    - File configuration (#2518)
      - Getting very close
      - Need:
        - Bazel support for dependencies (c4core, rapidyaml)
        - o Bazel support
        - CMake support
  - Misc
    - [Marc] CI
      - How to organize CI to latest packages, yet test C++14 / C++17 / etc (related to Doug work on CMake)
    - [Marc] Next release
      - Date, content?

- [Doug] Plan to move to C++17 and drop C++14? This will block upgrading to the latest third-party releases for googletest, benchmark, protobuf, grpc.
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Aug 20, 2025 (Canceled, time conflicts)

#### Attendee:

- Lalit Kumar Bhasin (Microsoft) Absent, time conflict.
- Tom Tan (Microsoft) Absent, time conflict.

## Aug 11, 2025

# Aug 6, 2025

#### Attendee:

- Doug Barker
- Rafael Roquetto
- Pranav Sharma

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Built-in resource detectors
      - Discuss proposal https://github.com/open-telemetry/opentelemetry-cpp/issues/3548

         #issuecomment-3157483119

- Decided to follow Lalit's proposal in the comment above assuming no third party dependencies are added to the detectors.
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# July 28, 2025

#### Attendee:

- Marc Alff (Oracle)
- Doug Barker
- Ehsan

#### Agenda:

- Upstream
  - Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# July 23, 2025

#### Attendee:

Xxx

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto

- o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# July 28, 2025

# July 14, 2025

#### Attendee:

- Doug Barker
- Rafael Roquetto (Grafana)
- Marc Alff (Oracle)

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - [Marc] Clang-tidy
      - Upgrade CI to use the latest version?
    - [Marc] Opentelemetry-cpp release 1.22.0
    - [Marc] Usage of AI (Copilot)
      - Dust settling down, picture getting clearer
      - Only available to maintainers and approvers
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

## July 9, 2025

#### Attendee:

- Marc Alff (Oracle) absent, time conflict
- Doug Barker
- Lalit Kumar Bhasin
- Tom Tan
- Rafael Roquetto (Grafana) -> away

#### Agenda:

- Upstream
  - Spec
    - LogProcessor::OnEmit() support in otel-cpp
    - AnyValue can be heterogeneous list / complex types for span attributes. (OTEP approved, will be added in specs).
  - Semantic conventions
    - Semconv 1.35.0 released, but broken:
      - Please DO NOT release SemConv artifacts based on v1.35.0
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Discuss usage of generative AI (copilot)
      - Concerns about intellectual property for the repo
      - Concerns about licensing, is the generated code compatible with the license for opentelemetry-cpp?
      - EasyCLA for generated code ?
      - Where (URL) / When was this discussed with TC / GC ?
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# June 30, 2025

#### Attendee:

• Marc Alff (Oracle)

- Doug Barker
- XXX

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
    - New release 0.15.3
- Opentelemetry-cpp
  - Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# June 25, 2025

#### Attendee:

- Marc Alff (Oracle)
- Doug Barker
- Rafael Roquetto (Grafana)

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
    - Release 1.0.0-rc.1 last week
  - o Proto
  - Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Next release 1.22.0
    - [Marc] File Configuration reviews
- Opentelemetry-cpp-contrib

- o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# June 16, 2025

#### Attendee:

- Marc Alff (Oracle)
- Rafael Roquetto (Grafana)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Doug Barker

#### Agenda:

- Upstream
  - Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Next release July
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

### June 11, 2025

#### Attendee:

• (template)

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto

- Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Deprecate and remove \*\_PREVIEW flags, promote features to stable
      - We should not keep feature flag forever
      - Mature code (no issues reported) should be promoted to the main code base
      - This will simplify CI and maintenance, reducing the number of combinations
    - [Marc] Declarative configuration (config.yaml)
      - Configuration repo about to mark schema as release candidate.
      - Others SIGs (go, java, php, python) are making progress
      - THIS IS IN DIRE NEED OF CODE REVIEW, the PR for opentelemetry-cpp has been available – and ignored – for way too long.
      - Small PRs for each part submitted for review, expect more to come.
    - [Doug] Effort to enable clang-tidy warnings as errors.
      - This can really help with code review.
      - Should we coordinate to fix warnings in specific folders then enable warnings as errors as we go?
    - [Doug] Seeking feedback on the third party dependency management changes from #3460.
      - Does this seem like the right direction?
      - Any general concerns?
    - [Pranav] Logger enabled EventID vs Event name ? Event ID is not part of the Log and Event Log Record Definition. How to use Event Name for logger enabled ? (Context <u>Issue #2667</u>)
- Opentelemetry-cpp-contrib
  - Misc
    - [Marc] See Trask PR in open-telemetry/admin, for merge privileges.
      - Only maintainers to perform merges, per default otel policies.
- Opentelemetry-cpp-buildtools
  - Misc

### June 2nd, 2025

#### Attendee:

Marc Alff (Oracle)

- Ehsan
- Doug Barker
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Pranav Sharma

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
    - 1.7.0 released
    - Waiting for 1.7.0 support in bazel central repository
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Opentelemetry 1.21.0 released
    - Goals for next release?
    - Review of config.yaml PR (#2518)
    - Performance regression?

      <a href="https://github.com/open-telemetry/opentelemetry-cpp/commit/7a847caafc">https://github.com/open-telemetry/opentelemetry-cpp/commit/7a847caafc</a>
      <a href="https://github.com/open-telemetry/opentelemetry-cpp/commit/7a847caafc">0baaec6de424dc0cda7c76cf871213#commitcomment-158590987</a>

- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# May 28, 2025 (Cancelled, no attendance)

# May 19, 2025

#### Attendee:

- Marc Alff (Oracle) tentative
- Doug Barker
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
    - Release 1.34.0 in preparation.
    - We just upgraded to 1.33.0
  - o Configuration
  - o Proto
    - Release 1.7.0 in preparation, 1.6.0 was broken for profiles.
    - No impact on opentelemetry-cpp (profiles not used yet)
  - o Weaver
- Opentelemetry-cpp
  - o Issues
  - o PR
    - Get consensus on ostream exporter fix (#3147 vs #3417)
  - Misc
    - [Marc] Prepare release 1.21.0
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# May 14, 2025

#### Attendee:

- Marc Alff (Oracle) Absent, time conflict
- Doug Barker
- Pranav Sharma

- Upstream
  - Spec
    - [Logs] Add optional Event Name parameter to Logger.Enabled and LogRecordProcessor.Enabled #4489
      - Impact on opentelemetry-cpp to analyse
      - Need an issue to track discussion
  - Semantic conventions
    - New release 1.33, need to generate semconv
  - Configuration
  - o <u>Proto</u>
    - Need to upgrade to release 1.6
  - Weaver

- New release 0.15
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Doug] build external component feature in cmake should it be opt-in?
    - [Doug] The INSTALL guide lists out the opentelemetry-cpp components now. This is new. Should we mark any as potentially moving to opentelemetry-cpp-contrib?
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# May 5, 2025 (Canceled, low attendance)

# April 30, 2025

#### Attendee:

- Marc Alff (Oracle) Absent, time conflict
- Pranav Sharma (Google)
- Doug Barker
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - o Spec
  - Semantic conventions
  - Configuration
  - o Proto
    - New release 1.16.0
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc

- Opentelemetry-cpp-buildtools
  - o Misc

# April 16, 2025

#### Attendee:

- Marc Alff (Oracle) Absent, time conflict
- Pranav Sharma (Google)
- Doug Barker
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# April 7, 2025

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)

- Upstream
  - Spec
  - o Semantic conventions
    - Release 1.32 : need to generate semconv
  - Configuration
    - Release 0.4.0

- o Proto
- o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] CI / Build cleanup
      - Upgrade CMake requirements to 3.14 or better (See Doug PR)
      - Upgrade abseil / protobuf / grpc dependencies
      - Upgrade to CMake 4.0.0 in github runners
      - Fix tracing-shim CI, blocking CMake 4.0 upgrade
      - Fix type traits vs compilers vs WITH STL, see PR #3337
      - Fix benchmark CI issues, see issue #3350
    - [Marc] ongoing security work to fix OSSF Scorecard reported items
      - Github action hardened links
      - Expect more to come
      - See <a href="https://github.com/open-telemetry/sig-security/issues">https://github.com/open-telemetry/sig-security/issues</a>
    - [Marc] Consider to use renovate, to keep github actions up to date
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# April 2, 2025

#### Attendee:

- Marc Alff (Oracle)
- Doug Barker
- Pranav Sharma (Google)
- Tom Tan (Microsoft)

- Upstream
  - o Spec
  - Semantic conventions
  - Configuration
  - o Proto
  - Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc

- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# March 24, 2025

#### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Prepare release 1.20
      - Need fix for issue #3060
    - [Marc] config.yaml code review
      - Split by smaller blocks or code
    - New approvers in otel-cpp
      - [Marc] Ask Pranav to become an approver
      - [Marc] Ask Doug to become a member (with process)
      - [Marc] Ask Doug to become an approver
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

### March 19, 2025

#### Attendee:

- Tom Tan (Microsoft)
- Pranav Sharma (Google)

• Marc Alff (Oracle)

#### Agenda:

- Opentelemetry-cpp
  - o Issues
  - o PR

# March 10, 2025

#### Attendee:

- Marc Alff (Oracle)
- Ehsan

#### Agenda:

- Admin
  - o USA in summer time (DST) since March 9, 2025
  - o Europe in winter time until March 30, 2025
- Upstream
  - Spec
  - o Semantic conventions
    - Release 1.31.0 in preparation
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Upgrade semconv + weaver
    - [Marc] opentelemetry-cpp 1.20 release
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# March 5, 2025

#### Attendee:

- Marc Alff (Oracle)
- XXX

#### Agenda:

- Upstream
  - o Spec
  - Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Plan new release
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc
    - Please review PR (FOSSA)

### Feb 24, 2025

#### Attendee:

- Marc Alff (Oracle)
- XX

- Upstream
  - o Spec
    - [Marc] Release 1.42 last week
  - Semantic conventions
    - [Marc] Waiting on next release to adopt weaver 0.13.2
  - o Configuration
  - o Proto
  - o Weaver
    - [Marc] Release 0.13.2
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
    - [Marc] How to keep this repo up to date?

- CI is dead for most contribs
- Opentelemetry-cpp-buildtools
  - Misc
    - [Marc] FOSSA badges PR

### Feb 19, 2025

#### Attendee:

- Pranav Sharma (Google)
- Doug Barker
- Lalit Kumar Bhasin (Microsoft)

- Upstream
  - o <u>Spec</u>
  - Semantic conventions
    - [Marc] Waiting on new release with bump to weaver 0.13.2
  - o Configuration
  - o Proto
  - o <u>Weaver</u>
    - [Marc] New release 0.13.2, with stable\_only flag
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - FOSSA badges PR
    - [Lalit] Config priority -
      - env variables
      - compile time
      - Default.
      - Other languages:
        - -> compiletime -> env\_variable -> default
- Opentelemetry-cpp-contrib
  - Misc
    - FOSSA badges PR
- Opentelemetry-cpp-buildtools
  - Misc
    - FOSSA badges PR

# Feb 10, 2025 (Cancelled, time conflicts)

### Feb 5, 2025

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)
- Tom Tan (Microsoft)

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Tracer scope configuration PR merged
    - [Marc] Pinned issues updated
    - [Tom] vcpkg repo updated with opentelemetry-cpp 1.19 release
    - [Marc] Keith updated bazel central for opentelemetry-cpp 1.19 as well
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc
- Opentelemetry-cpp-contrib
  - Setup guide

# Jan 27, 2025

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)
- Ehsan
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

#### Agenda:

- Upstream
  - o Spec
  - Semantic conventions
    - New release 1.30
      - Need to adjust in opentelemetry-cpp
  - Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] 2025 User survey
    - [Marc] Issue #3068 Lists new major tasks (Help wanted)
  - Opentelemetry-cpp-contrib
    - [Marc] Move code to contrib
    - [Marc] Maintainers for contrib in general
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc
- Opentelemetry-cpp-contrib
  - Setup guide

### Jan 22, 2025

#### Attendee:

- Marc Alff (Oracle)
- Ehsan
- Tom Tan (Microsoft)
- Pranav Sharma (Google)
- Doug

- Upstream
  - > Spec
    - New release 1.41.0
      - Impact on EventLogger
      - Handling of 0 timeouts
  - Semantic conventions
  - Configuration

- Repository aiming for stable 1.0.0 release
  - Allows the yaml config pr to reach stability as well
- o <u>Proto</u>
- o <u>Weaver</u>
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Released opentelemetry-cpp 1.19.0
    - [Marc] Plans for general development effort
      - Alignment with specifications?
      - Performance optimizations ?
      - Internal documentation (doxygen) ?
      - User documentation (opentelemetry.io) ?
      - Simplify build and dependencies?
      - Packaging?
      - [Pranav] Examples repository
      - [Doug] Instrumentation of application (how to test, how to document what is instrumented)
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc
- Opentelemetry-cpp-contrib
  - Setup guide

### Jan 13, 2025

#### Attendee:

- Marc Alff (Oracle)
- Ehsan
- Tom Tan (Microsoft)
- Pranav Sharma (Google)

- Upstream
  - Spec
  - Semantic conventions
  - Configuration
  - o Proto
  - o Weaver
- Opentelemetry-cpp

- Issues
- o PR
- Misc
  - Include-what-you-use finally clean
  - Release 1.19
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc
- Opentelemetry-cpp-contrib
  - o Setup guide

### Jan 8, 2025

#### Attendee:

- Richard Chukwu (Outreachy)
- Marc Alff (Oracle)
- Pranav Sharma (Google)

- Happy New Year 2025
- Upstream
  - Spec
  - Semantic conventions
    - Semconv updated to use weaver 0.12
  - o Configuration
  - o Proto
  - Weaver
    - Weaver 0.12 released
      - Waiting on next semconv release to adopt both semconv 1.30 and weaver 0.12
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Plans for C++17 (see issue #3121)
      - Google policies changed to C++17 on 2024-12-17, expect many dependencies to require C++17
      - Upgrade all dependencies to the latest C++14 packages first?
      - Expect new abseil LTS in January 2025
    - [Marc] Release opentelemetry-cpp 1.19
- Opentelemetry-cpp-contrib

- Misc
- Opentelemetry-cpp-buildtools
  - Misc
- Opentelemetry-cpp-contrib
  - Setup guide (Richard)

# Dec 16, 2024

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - Configuration
  - o Proto
    - Release 1.5.0 in preparation
  - o Weaver
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - Ubuntu-latest upgraded to 24.04, broke CI
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Dec 11, 2024 (Canceled – time conflicts)

# Dec 2, 2024

#### Attendee:

Marc Alff (Oracle)

- Upstream
  - o Spec

- o Semantic conventions
  - Release 1.29.0
- Configuration
- o Proto
- o Weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Issue with API singletons on windows (i.e., tracer provider)
      - (Issue #3176) Exporting spans from inside DLL on Windows does not work
      - Blocking, impossible to instrument a DLL with opentelemetry-cpp on windows
      - Need a platform dependent fix
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Nov 27, 2024 (Canceled, Thanksgiving in the USA)

# Nov 18, 2024

#### Attendee:

- Pranav Sharma (Google)
- •

- Upstream
  - o Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
    - Discuss issue #3014
  - o PR
    - https://github.com/open-telemetry/opentelemetry-cpp/pull/3041
       ([EXPORTER] Allow to share gRPC clients between OTLP exporters.)

- Still blocked in code review, needs resolution.
- Misc
  - Next release 1.18.0
- Questions
  - What is maintainer mode?
  - Discuss whether the factory should be replaced with/add a builder?
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

### Nov 13, 2024

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)
- XXX

#### Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Dependency upgrade (protobuf, grpc, abseil, ...)
    - Plans for C++17
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

### Nov 4, 2024

#### Attendee:

Marc Alff (Oracle)

#### Agenda:

- Upstream
  - o Spec
  - Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Weaver migration
      - Got review from weaver maintainer
      - Ready for C++ review
    - Plan for C++17
      - Expecting abseil to require C++17 very soon.
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Oct 30, 2024

#### Attendee:

• (template)

- Upstream
  - o Spec
    - PR <u>#4270</u>
      - Add requirement to allow extending Stable APIs
      - Covered with OPENTELEMETRY\_ABI\_VERSION
  - o Semantic conventions
  - o Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc

- Opentelemetry-cpp-buildtools
  - o Misc

### Oct 21, 2024

#### Attendee:

- Pranav Sharma (Google)
- Marc Alff (Oracle)
- Tom Tan (Microsoft)

#### Agenda:

- GC Elections
  - As of 21 October 2024 00:00 UTC, voting is open for 2024 OpenTelemetry Governance Committee Elections!
  - o Voting will remain open until 23 October 2024 23:59 UTC.
- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - o Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

### Oct 16, 2024

#### Attendee:

- Marc Alff (Oracle)
- Pranav Sharma (Google)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - o Spec

- o Semantic conventions
- Configuration
- o <u>Proto</u>
- Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

## Oct 7, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - Spec
    - [Marc] Review spec-compliance-matrix.md for opentelemetry-cpp
      - File spec PRs to document work done
      - File opentelemetry-cpp issues for work remaining
  - Semantic conventions
    - [Marc] Release 1.28.0 in preparation
  - o <u>Configuration</u>
  - o Proto
  - Build tools
    - [Marc] Semantic convention tooling sunset
      - Need to migrate to weaver
      - https://github.com/open-telemetry/build-tools/issues/322
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Release 1.17.0
    - [Marc] Rapidyaml license, compatibility with Apache v2?
      - Need to ask in the community repository.
- Opentelemetry-cpp-contrib

- Misc
- Opentelemetry-cpp-buildtools
  - o Misc

## Oct 2, 2024

## Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

### Agenda:

- Upstream
  - Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

## Sep 23, 2024

### Attendee:

- Marc Alff (Oracle)
- Punya Biswal (Google)
- Tom Tan (Microsoft)
- Pranav Sharma (Google)

- OpenTelemetry org
  - All teams, (including cpp-maintainers, cpp-contrib-maintainers, etc) got deleted and restored.
  - Need to double check teams membership and privileges (code review, etc)
- Upstream

- o Spec
  - Release 1.37.0
  - [Marc] Review the spec compliance matrix, and:
    - File cpp issues for missing bits
    - File spec pr for parts already done
- o Semantic conventions
  - Still on 1.27.0, otel-cpp is up to date
- o Configuration
  - Release 0.3.0
    - · Config.yaml PR needs to follow up.
- o Proto
  - Still on 1.3.2, otel-cpp is up to date
- Build tools
  - N/A
- o cpp-build-tools
  - Need to make a release after split from build tools.
- Opentelemetry-cpp
  - Issues
  - o PR
    - Need to review Owent's PR on GRPC.
  - Misc
    - Should we prioritize tasks to work on? (chat)
    - [Marc] Prepare next release
    - [Marc] Prepare list of issues, for new contributors
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Sep 18, 2024 - Canceled

# Sep 9, 2024

#### Attendee:

- Lalit Bhasin (Not available)
- Marc Alff (Oracle)
- Ehsan Saei

### Agenda:

Upstream

- o Spec
  - Release 1.37 in preparation
- o Semantic conventions
- o Configuration
- o Proto
- o Build tools
  - Need to plan migration to weaver
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Release 1.16.1 was on July 17, 2024
      - Plan a new release?
    - Discussion on SDK version numbers, SDK ABI stability
    - Need to upgrade CI for gRPC
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# Sep 4, 2024 (Canceled)

# Aug 26, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)

- Upstream
  - o Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - Code Health
      - lwyu cleanup in progress

- Clang-tidy cleanup in progress
- Yaml configuration
  - See how to organize code review.
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc
- Webserver ARM implementation for ARM platform (currently support x64 only)
   Existing PR to start this process

## Aug 21, 2024

## Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Yash Tibrewal (Google)

## Agenda:

- Upstream
  - o Spec
    - New release 1.36.0
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Yaml configuration
      - See how to organize code review.
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# Aug 12, 2024

Attendee:

- Marc Alff (Oracle)
- Yash Tibrewal (Google)

## Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/3000
      - Support for Any data type in attributes
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/1753
      - Optimization Support observing multiple instruments through the same callback
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

## Aug 7, 2024

### Attendee:

- Lalit Kumar Bhasin (Microsoft)
- Ehsan
- Tom Tan (Microsoft)
- Severin Neumann (Cisco)

- Upstream
  - Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR

- Misc
  - Discussion about C++ exceptions handling
    - <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/3013">https://github.com/open-telemetry/opentelemetry-cpp/issues/3013</a>
    - We could start with fixing the issues reported by clang-tidy
  - Lalit: request for supporting synchronous gauge https://github.com/open-telemetry/opentelemetry-cpp/issues/2279
    - Needs design change
  - Exponential histogram support is missing
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/1391
  - [SN] SIG CheckIn
    - the future of opentelemetry discussion during maintainers call
    - <a href="https://github.com/open-telemetry/sig-contributor-experience">https://github.com/open-telemetry/sig-contributor-experience</a>
    - <a href="https://github.com/open-telemetry/sig-developer-experience">https://github.com/open-telemetry/sig-developer-experience</a>
    - Project Infra SIG
      - https://github.com/orgs/open-telemetry/projects/91
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

July 29, 2024 (canceled)

July 24, 2024 (canceled)

July 15, 2024

### Attendee:

- Marc Alff (Oracle)
- Ehsan

- Upstream
  - o Spec
    - New release 1.35
  - Semantic conventions
    - Semconv HEAD now depends on build tools 0.25
    - No planned releases
  - Configuration
  - o Proto

- Proto 1.3.2 added in Bazel Central Repository (BCR) by Keith
- o Build tools
  - New release 0.25
- Opentelemetry-cpp
  - Issues
  - o PR
    - [Marc] Good progress on clang-tidy, new contributor
  - Misc
    - [Marc] Discuss security and SBOM
    - [Marc] Summer time, expect slow responses
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# July 10, 2024 (Canceled, low attendance)

### Attendee:

- Marc Alff (Oracle)
- Ehsan (appeared connected but no activity)

- Upstream
  - Spec
    - Release 1.35 in preparation
  - o Semantic conventions
  - o Configuration
  - o Proto
    - Proto 1.3.2 added in Bazel Central Repository (BCR) by Keith
  - o Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - New dependency in CI to Bazel Central, with bazel modules
    - Github broken on ubuntu image 20240708
    - New clang-tidy cleanup
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# July 1st, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Ehsan Saei

## Agenda:

- Upstream
  - o Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
    - Release 1.3.2, need to upgrade.
  - o Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
    - SPAM
      - [Marc] Closed several issues on June 29, see closed issues (will delete them later)
      - [Marc] Deleted more spam on June 30
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# June 26, 2024 (canceled, low attendance)

## June 17, 2024

## Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Upstream
  - o Spec
  - Semantic conventions
    - https://github.com/open-telemetry/semantic-conventions/issues/1118
      - Current resolution (ignore collision) is ok for now.
      - No longer blocking.
  - o Configuration
  - o Proto
    - Release 1.3.2 in preparation (no changes)
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
    - FYI, discussion in community for opentelemetry-c
      - <a href="https://github.com/open-telemetry/community/issues/2160">https://github.com/open-telemetry/community/issues/2160</a>
    - Release opentelemetry-cpp 1.16.0
      - Marc to prepare release.
- Opentelemetry-cpp-buildtools
  - Misc

## June 12, 2024

### Attendee:

- Marc Alff (Oracle)
- Severin Neumann (Cisco)
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Ehsan Saei

- Upstream
  - Spec
    - Release 1.34.0
    - https://github.com/open-telemetry/opentelemetry-specification/pull/4063
      - New Tracer::Enabled(), Instrument::Enabled() api
  - o Semantic conventions
  - o Configuration
  - o Proto

- Release 1.3.2 in preparation
- Build tools
  - https://github.com/open-telemetry/build-tools/issues/322
    - Build tools to be replaced by weaver
    - No instructions for migration
    - Impacts semantic conventions code generation
  - https://github.com/open-telemetry/semantic-conventions/issues/1118
    - Collision on semantic conventions, when generating code.
    - No resolution yet
    - Blocking
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Packaging
    - Release 1.16.0
    - Doc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

# June 3, 2024

### Attendee:

- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - Spec
  - o Semantic conventions
  - Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc

- Plan release 1.16.0
  - We could wait for <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/2688">https://github.com/open-telemetry/opentelemetry-cpp/issues/2688</a> to be resolved
- Opentelemetry-cpp-contrib
  - o PR
    - Some new contributors with PR.
  - ⊃ Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# May 29, 2024

## Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

### Agenda:

- Upstream
  - o Spec
  - Semantic conventions
    - New release 1.26.0, need to upgrade otel-cpp
  - Configuration
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# May 20, 2024

Canceled, holiday in FR and DE.

# May 15, 2024

## Agenda:

- Discussion with Severin Neumann (GC) SIG C++ status
  - o <a href="https://github.com/open-telemetry/community/blob/main/gc-check-ins.md">https://github.com/open-telemetry/community/blob/main/gc-check-ins.md</a>
    - SIG progress
    - Contributor experience
    - Maintainers experience
- Upstream
  - o Spec
  - o Semantic conventions
  - o <u>Configuration</u>
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - o Misc

# May 6, 2024

### Attendee:

(template)

- Upstream
  - Spec
  - o Semantic conventions
  - o Configuration
  - o Proto
    - Proto release 1.3.0, with profiling signal
    - Need to upgrade opentelemetry-cpp
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR

- o Misc
  - New signal: profiling
    - Create issue, labels, etc
- Opentelemetry-cpp-contrib
  - Misc
    - Make release opentelemetry-cpp-contrib 1.15.0 ?
      - Wait for webserver to upgrade ... or not ? (issue #433)
      - Make release for new loggers
      - · Detail release notes by contrib
- Opentelemetry-cpp-buildtools
  - Misc
    - Clang-format docker image

# May 1st, 2024

### Canceled:

Holiday in FR and DE

# April 22, 2024

#### Attendee:

- Michael van Straten (Mozilla)
- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)

- Upstream
  - Spec
  - Semantic conventions
  - o Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - o Issues
    - [CI] Upgrade to a newer version of clang-format #2578
      - Use clang-format 15?
      - Wait for Utunbu 24.04 release to see which version(s) are available
  - o [michael] Adding opentelemetry-cpp to OSS-Fuzz
    - Finding <u>primary Engineering contact</u> for OSS-Fuzz

- Apply for https://bughunters.google.com/about/rules/5097259337383936/oss-fuzz-r eward-program-rules?
- To discuss in opentelemetry maintainers meeting, for SIG in general
- PR 0

0

[ricardoamaro] Getting started doc improvement

https://github.com/open-telemetry/opentelemetry.io/pull/4309 good to go?



- Yes, please merge.
- Misc
  - Release 1.15.0 2024-04-21
- Opentelemetry-cpp-contrib
  - Misc
- Opentelemetry-cpp-buildtools
  - Misc

## April 17, 2024

### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - **Spec** 
    - Release 1.32.0 last week
    - Impact on cpp to assess
  - o Semantic conventions
  - o Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Breaking change in semconv, to investigate
    - Release 1.15.0

- Opentelemetry-cpp-contrib
  - o PR
- Please review: [CI] Add CI for instrumentation/log4cxx #426
- Misc
  - Release for cpp-contrib, to match cpp 1.15.0?
  - Marc to prepare release
- Opentelemetry-cpp-buildtools
  - Misc

## April 08, 2024

#### Attendee:

- Ehsan Saei
- Marc Alff (Oracle)

- Upstream
  - o Spec
    - Prometheus compatibility: represent Prometheus Info, StateSet and Unknown-typed metrics in OTLP <a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3868">https://github.com/open-telemetry/opentelemetry-specification/pull/3868</a>
      - Ehsan to create issue
  - Semantic conventions
    - Release 1.25.0 <a href="https://github.com/open-telemetry/semantic-conventions/releases/tag/v1.2">https://github.com/open-telemetry/semantic-conventions/releases/tag/v1.2</a>
      <a href="5.0">5.0</a>
      Ehsan to raise the PR
  - o Configuration
    - Spec PR merged https://github.com/open-telemetry/opentelemetry-specification/pull/3948
  - o Proto
    - Release 1.2.0
      <a href="https://github.com/open-telemetry/opentelemetry-proto/releases/tag/v1.2.">https://github.com/open-telemetry/opentelemetry-proto/releases/tag/v1.2.</a>
      <a href="https://github.com/open-telemetry/opentelemetry-proto/releases/tag/v1.2.">https://github.com/open-telemetry/opentelemetry-proto/releases/tag/v1.2.</a>
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Release waiting for semantic PR
    - Marc to make the release
- Opentelemetry-cpp-contrib
  - Issues

- o PR
- Misc
- Opentelemetry-cpp-buildtools
  - Misc

# April 3, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

## Agenda:

- Upstream
  - Spec
  - Semantic conventions
    - Waiting on next release
  - Configuration
    - Waiting for spec PR to be merged
  - o Proto
    - Release 1.2.0 planned.
  - Build tools
    - Release 0.24.0 (March 25, 2024)
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Next release ?
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-buildtools
  - Misc

# March 25, 2024

### Attendee:

- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)

Lalit Bhasin (Microsoft)

- Upstream
  - o Spec
    - Release 1.31.0
      - <a href="https://github.com/open-telemetry/opentelemetry-specification/releases/tag/v1.31.0">https://github.com/open-telemetry/opentelemetry-specification/releases/tag/v1.31.0</a>
    - Accept empty value in log as any
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3853
      - Needs investigation
    - Add simple scope configuration to Tracer, Meter, Logger
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3877
      - To investigate
        - Marc: Only SDK change
        - Ehsan to create issue (PR is not merged yet)
    - Prometheus compatibility: represent Prometheus Info, StateSet and Unknown-typed metrics in OTLP
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3868
      - To investigate
    - Probability Samplers based on W3C Trace Context Level 2
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3910
      - A lot of activity around flags and W3C Trace Context Level 2, also in opentelemetry-proto
      - PR is still draft, we could wait until proto is ready
    - Ehsan to create issue for each item that needs investigation
  - Semantic conventions
    - No new release
    - Ehsan to handle the next release
  - Configuration
  - o Proto
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - Upcoming patch release?
      - Vcpkg requires new release of the main repo
      - minor release unless if otlp file exporter was merged

- Release by the end of March
- Metrics can have callbacks, we can export multiple metrics at once
  - Marc is working on it
- Opentelemetry-cpp-contrib
  - Misc
    - We need to define labels for each subject
- Opentelemetry-cpp-buildtools
  - Misc

# March 20, 2024 (Canceled, low attendance)

## March 11, 2024

### Attendee:

- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Upstream
  - Spec
    - Accept empty value in log as any
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3853
      - Needs investigation
    - Add link is stable now
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3887
      - No need for change
    - Add simple scope configuration to Tracer, Meter, Logger
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3877
      - To investigate
        - Marc: Only SDK change
        - Ehsan to create issue (PR is not merged yet)
    - Prometheus compatibility: represent Prometheus Info, StateSet and Unknown-typed metrics in OTLP
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3868
      - To investigate

- Probability Samplers based on W3C Trace Context Level 2
  - <a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3910">https://github.com/open-telemetry/opentelemetry-specification/pull/3910</a>
  - A lot of activity around flags and W3C Trace Context Level 2, also in opentelemetry-proto
  - PR is still draft, we could wait until proto is ready
- Semantic conventions
  - Metrics yaml is there, but needs check
- Configuration
- Proto
  - A lot of changes related to parent\_span\_is\_remote flags in traces
  - Expect to have some work to adjust, by the next opentelemetry-proto release (W3C Trace Context Level 2).
- Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - We need to plan for changes that needed for the compatibility with specs and prioritize them
    - Stability status has to be checked before the kubecon Europe
    - Signing artifacts not needed as we don't release binaries
    - Need to have static analysis in the CI
      - Ehsan to check cpp-check or clang-tidy
- Opentelemetry-cpp-contrib
  - Misc
    - Labels to be added to each topic (could have a CI for it as well)
- Opentelemetry-cpp-buildtools
  - Misc

## March 06, 2024

### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)

- Github
  - [Marc] Phishing attempt in progress
    - https://github.com/orgs/community/discussions/110604

- Upstream
  - Spec
    - Release 1.31.0 in preparation
    - Specify allowed characters for Baggage keys and values
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3801
      - To investigate, possible adjustments for C++ baggage
    - Fix what can be modified via ReadWriteLogRecord
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3907
      - To investigate, possible adjustments for C++ logs
    - Add simple scope configuration to Tracer, Meter, Logger
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3877
      - To investigate
    - Prometheus compatibility: represent Prometheus Info, StateSet and Unknown-typed metrics in OTLP
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3868
      - To investigate
    - Probability Samplers based on W3C Trace Context Level 2
      - https://github.com/open-telemetry/opentelemetry-specification/pull/ 3910
      - A lot of activity around flags and W3C Trace Context Level 2, also in opentelemetry-proto
  - Semantic conventions
  - Configuration
  - Proto
    - A lot of changes related to parent\_span\_is\_remote flags in traces
    - Expect to have some work to adjust, by the next opentelemetry-proto release (W3C Trace Context Level 2).
  - o Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Warning about DST in USA/Europe
- Opentelemetry-cpp-contrib
  - o Misc
- Opentelemetry-cpp-build-tools
  - Misc
    - [Marc] clang-format version
      - Create issue for discussion

# February 26, 2024

### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)

## Agenda:

- Upstream
  - Spec
    - No change
  - Semantic conventions
  - Configuration
  - Proto
  - Build tools
    - [Marc] C++ build tools to migrate to own repo
      - We could use the repo for storing artifacts and use them in the main repo
- Opentelemetry-cpp
  - Issues
  - o PR
  - o Misc
    - [Marc] Release 1.14.1.
- Opentelemetry-cpp-contrib
  - Misc
    - [Marc] Ehsan to file PR to list as maintainer
      - https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/3 87

# February 21, 2024

### Attendee:

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin (Microsoft)

- Upstream
  - o Spec
    - Release v1.30.0 (2024-02-15)
  - Semantic conventions
  - Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - o Issues
  - o PR
  - o PR#2530 OTLP HTTP/GRPC compression
    - [Marc] Discuss if ENABLE\_COMPRESSION\_PREVIEW is needed or not.
      - Decision: needed, marc to write review comments
  - o Misc
- Opentelemetry-cpp-contrib
  - Misc

# February 12, 2024

### Attendee:

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)

- Upstream
  - o Spec
  - Semantic conventions
  - Configuration
  - o Proto
  - Build tools
- Opentelemetry-cpp
  - Issues
  - o PR
  - Misc
    - [Marc] Release 1.14.0Marc is going to prepare the new release.
    - [Marc] Criteria for introducing a new dependency
    - Calendar update
- Opentelemetry-cpp-contrib
  - Need PR from Ehsan and Tom, to add as maintainer

- Ehsan and Tom will create PR on this.
- o <a href="https://github.com/open-telemetry/community/issues/1934">https://github.com/open-telemetry/community/issues/1934</a>
  - Filed by lalit.
- o [Tom] CI for Contrib repo.

# February 7, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Ehsan Saei

- Upstream
  - Spec
    - https://github.com/open-telemetry/opentelemetry-specification/pull/3820
      - Rework on exemplars, will affect metrics.
      - [Tom] File an issue
    - https://github.com/open-telemetry/opentelemetry-specification/pull/3802
      - Yaml file configuration, custom third party plugins
    - https://github.com/open-telemetry/opentelemetry-specification/issues/386
      - Declare Span::AddLink() stable. C++ is already done.
  - Semantic conventions
  - Configuration
  - Proto
  - Build tools
- Issues
- PR
- Async export (owent), need to complete review.
- Misc
  - Release 1.14.0
    - Last release 1.13.0 on Dec 6, 2023
    - Wait for async export or release now ?
      - Wait
  - Opentelemetry-cpp-contrib
    - Need maintainers privileges
    - Need to approve and merge LOGs related PR

# January 29, 2024

### Attendee:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Ehsan Saei

## Agenda:

- Upstream
  - o Spec
    - https://github.com/open-telemetry/opentelemetry-specification/pull/3802
      - SDK extensions in yaml configuration file
  - Semantic conventions
  - Configuration
  - Proto
  - Build tools
- Issues
- PR
- Misc
  - o [Marc] Release 1.14.0
  - o [Marc] Header only singletons on Windows
    - Current status (not resolved AFAIK)
    - Getting internal reports it is not working
    - Plans to fix this
    - Marc to create issue

# January 24, 2024

### Attendee:

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Ehsan
- Lalit Bhasin (Microsoft)

- Upstream
  - Spec
  - Semantic conventions
  - Configuration
  - o Proto

- Build tools
- Issues
- PR
- Nag about code reviews
- Misc
  - Planning for next release (1.14.0)
  - Community
    - New contributors

# January 15, 2024

### Attendee

- Ehsan
- Marc Alff (Oracle)
- (MLK in the Us)

### Agenda

- Upstream
  - Spec
  - Released 1.29.0
  - Proto
    - Released 1.10.0
- Misc
  - Very short meeting, nothing new that needs attention, and holiday in the US (MLK).

# January 10, 2024

### Attendee

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

- Happy New Year 2024
- Upstream
  - Otep
    - Code maturity, see otep <a href="https://github.com/open-telemetry/oteps/pull/232">https://github.com/open-telemetry/oteps/pull/232</a>
    - Need to clarify code maturity in all C++ components.

- o Semconv
  - Concern about thread.id in C++
  - https://github.com/open-telemetry/semantic-conventions/issues/546#issue
     comment-1820003935
  - Can someone comment?
- Spec
  - Release 1.29.0 in preparation
  - PRs about file configuration
  - New repo: https://github.com/open-telemetry/opentelemetry-configuration
- Proto
  - Release 1.1.0 in preparation
  - Changes to propagation trace flags
  - https://github.com/open-telemetry/opentelemetry-proto/pull/503
  - Upgrade to 1.1.0 before the next opentelemetry-cpp release ?
- Buildtools
  - No changes affecting C++.
- Issues
  - O XX
- PR
- #2407, OTLP GRPC async export (owent)
  - Needs more reviewers
- #2476, Windows build dll (meastp)
  - To discuss
- Misc
  - List desirable issues to fix for the next release.

# December 18, 2023

### Attendee

- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Semconv
  - Release 1.24.0, December 15, 2023
  - See: Use deprecated property instead of stability level #588
  - We need to adjust code generation templates to check for deprecated semconv
- Spec
  - https://github.com/open-telemetry/opentelemetry-specification/pull/3796

- add optional otel\_scope\_info configuration for prometheus exporter
- Collides with PR that was just merged in otel-cpp:
- [EXPORTER] Add option to disable Prometheus otel\_scope\_name and otel\_scope\_version attributes
- Issue
- PR
- Misc
  - [Marc] Commented on <u>https://github.com/open-telemetry/semantic-conventions/issues/551</u>
  - o [Marc] PR to upgrade to semconv 1.24.0

# December 13, 2023

#### Attendee

- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

## Agenda

- Spec
  - Add predicate to MetricReader and MetricProducer (#3566)
    - Experimental
    - SDK change only, API not affected
    - Created otel-cpp issue #2447
- Issue
- PR
- Misc
  - o [Marc] ZPages removal completed
  - o [Marc] 1.13.0 released

## December 4, 2023

### Attendee

- Ehsan Saei
- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

### Agenda

Spec

- exceptions marked as stable.
- Define Event API arguments and mapping to log record
  - https://github.com/open-telemetry/opentelemetry-specification/pull/3772

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- Issue
- PR
- Misc
  - Marc to raise PR for semconv and release

# November 29, 2023

#### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Ehsan Saei

## Agenda

Spec

Issue

- PR
- Misc
  - [Liudmila] Please advise what semconv codegen should generate in C++: https://github.com/open-telemetry/semantic-conventions/issues/551
    - How to group attributes (not by signal)
    - Whether we need stable+preview semconv lib
    - Please comment on the issue or in the otel-semantic-conventions-wg channel, thanks!
    - [Marc] Marc to comment for C++ semconv

## November 20, 2023

#### Attendee

- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)

### Agenda

- Spec
  - No changes
- Issue
  - #2408 Random number generator and fork()
    - Lalit, would it be possible to check?
- PR
- Misc
  - Cl appear broken
    - Many failures with cmake / windows
      - Could be because of a new release. Installation is done <u>here</u>.
        - Tom to check
  - Winter holidays are coming (slow response from the maintainers)
  - Marc to prepare release 1.13.0
    - PR for semantic conventions to be raised by Marc
    - https://github.com/open-telemetry/opentelemetry-cpp/pull/2255

## November 15, 2023

### Attendee

- Ehsan
- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)

### Agenda

- Spec
  - Semconv release 1.23.0 (Nov 3, 2023)
    - Need to generate semconv to adjust
- Issues
- PR
- Misc
  - Time to prepare release 1.13.0 ? (1.12.0 was Oct 16)
    - Marc to prepare next release
  - [Log Level] Configuring max log level/Severity.
    - https://github.com/open-telemetry/opentelemetry-rust/pull/1147
    - File an issue for otel-cpp, to investigate

## November 6, 2023

### Attendee

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

## Agenda

- Spec
  - Spec release 1.27.0 in preparation
    - No known impact for otel-cpp
  - Semconv release 1.23.0 (Nov 3, 2023)
    - Need to generate semconv to adjust
- Issue

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- PR
  - ADMIN
    - All maintainers have admin rights in github
    - Need all maintainers to approve PR #2392
- Misc
  - Lack of link tests for windows DLL
    - Should be covered in examples, to investigate

# November 1, 2023 - canceled (Holiday in FR, DE)

## October 23, 2023

### Attendee

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

## Agenda

- Spec
  - file configuration parse and create operations
    - https://github.com/open-telemetry/opentelemetry-specification/pull/3437
- Issue

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- PR
- . . .
- Misc

- Governance committee election
   <a href="https://github.com/open-telemetry/community/blob/main/elections/2023/governance-committee-election.md">https://github.com/open-telemetry/community/blob/main/elections/2023/governance-committee-election.md</a>
- Kubecon registration (Nov 6 -9)
   (https://docs.google.com/forms/d/1MaUy6i5hASesz7QxAvrdBMQICdJMxGOXKvsi6bWmNPQ/edit). Check with Morgan McLean and Austin Parker for details/discounts.

# October 18, 2023 - canceled (low attendance)

## Agenda

- Spec
  - o Xx
- Issue
  - $\circ$  Xx
- PR
  - $\circ$  Xx
- Misc
  - [Marc] Opentelemetry-cpp 1.12.0 released on Oct 16, 2023
  - o [Marc] Admin
    - Filed an issue for cpp-maintainers to have admin rights.
      - <a href="https://github.com/open-telemetry/community/issues/1727">https://github.com/open-telemetry/community/issues/1727</a>
  - [Marc] Meeting time reminder
    - Europe changes to winter time on October 29, 2023
    - USA changes to winter time on November 5, 2023
    - November 1st meeting affected (9 AM in California, 5 PM in France)

# October 9, 2023

#### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan

- Spec
  - OTEP #232 Framework for defining the maturity of OpenTelemetry and its SIGs
- Issue
  - O XX

- PR
- Support to use different cmake package CONFIG of dependencies. #2263
  - Need either a second review, or decision to merge.
    - Ehsan to review over the week
- Misc
  - [Marc] Release 1.12.0
    - Waiting for 2353, 2354 and 2263
    - Important changes
      - Dropping C++11 support

## October 4, 2023 - canceled

#### Attendee

- Unable to attend Marc Alff (Oracle)
- Lalit Kumar Bhasin Microsoft

< Meeting didn't happen for not enough attendees> Please see comment on agenda item with [LALIT] tag.

## Agenda

No contact.

- [Marc] Github
  - Clang 12 will be removed from Ubuntu 22.04 image on September 25 · Issue #8263 · actions/runner-images · GitHub
    - FYI, CI is not affected, we use clang 14.0.
  - Clang-format
    - Ubuntu 22.04 has clang-format 12.0.1, 13.0.1, 14.0.0 : <a href="https://github.com/actions/runner-images/blob/ubuntu22/20230917.1/images/linux/Ubuntu2204-Readme.md">https://github.com/actions/runner-images/blob/ubuntu22/20230917.1/images/linux/Ubuntu2204-Readme.md</a>
    - Ubuntu 20.04 has clang-format 10.0.0, 11.0.0, 12.0.0 : <a href="https://github.com/actions/runner-images/blob/ubuntu22/20230917.1/images/linux/Ubuntu2004-Readme.md">https://github.com/actions/runner-images/blob/ubuntu22/20230917.1/images/linux/Ubuntu2004-Readme.md</a>
    - We use clang-format 10.0.0 on Ubuntu 20.04, at the very low end of the spectrum of supported versions
    - Time to upgrade clang-format?

[LALIT] - ubuntu 20.04 end of support is April 2025, so Github won't remove this Virtual environment before that. For user convenience, we can provide a ubuntu20.04 docker yaml file with clang-format-10 installed, which can be used to format. Good to upgrade clang-format with ubuntu24.04, the next LTS version.

- Spec
  - OTEP #232 Framework for defining the maturity of OpenTelemetry and its SIGs

- See <a href="https://github.com/open-telemetry/oteps/pull/232">https://github.com/open-telemetry/oteps/pull/232</a>
- Please review, this affects opentelemetry-cpp

[LALIT] - I reviewed it, but let's discuss in next community meeting.

- Issue
  - o XX
- PR
- o xx
- Misc
  - O XX

# Sept 25, 2023

### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

## Agenda

- Spec
  - o XX
- Issue
  - O XX
- PR
  - o A lot of fixes on prometheus
- Misc
  - Plan to release first week of October
    - [Marc] File issue, list bug fixes to include in release

# Sept 20, 2023

### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

- Upstream
  - Spec
    - Spec release 1.25.0
    - upgrading and version management PR: <a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3695">https://github.com/open-telemetry/opentelemetry-specification/pull/3695</a>

- W3C trace flag:
- https://github.com/open-telemetry/opentelemetry-cpp/issues/2283
- Proto
  - Proto changes (trace flags),
     <a href="https://github.com/open-telemetry/opentelemetry-proto/pull/503">https://github.com/open-telemetry/opentelemetry-proto/pull/503</a>
- Build tools
  - Build-tools release 1.21.0 (next semantic conventions will need this)
- Issue
  - O XXX
- PR
- [BUILD] Need fine-grained HAVE\_CPP\_STDLIB #2304
  - Please review
  - Needs to merge this before removing support for C++11, to prevent conflicts
- Multiple prometheus exporter PR
- Misc
  - Logs signal
    - Beside printing logs in a file, what backend can be used for testing (traces: jaeger, metrics: prometheus, logs: ???)
  - Exemplars
    - Possible feature gap, to investigate, see if it can be marked stable

# Sept 11, 2023

### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

- Spec
  - Spec change in metric naming ('/' character) (#3684)
- Issue
  - XX
- PR
- O XX
- Misc
  - Wait to ship next release need more content and fixes

# Sept 6, 2023

### Attendee

- Tom Tan
- Marc Alff (Oracle)
- Xx
- Xx

## Agenda

- Spec
  - $\circ$  XX
- Issue
  - $\circ$  XX
- PR
  - O XX
- Misc
  - Next release?
    - o [Marc] Meter name increase is backward compatible change.

Aug 28, 2023 - canceled (low attendance)

Aug 23, 2023 - canceled (summer vacations)

## Aug 14, 2023

### Attendee

- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei

- Spec
  - o <u>v1.24.0</u> release
  - Increase metric name maximum length from 63 to 255 characters
    - We need to increase the limit
  - Attribute sets not observed during async callbacks are not exported #3242
    - We need to change. We always generate and export
  - o MetricProducer.Produce can include a Resource parameter

- Experimental, we don't support now
  - <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/1831">https://github.com/open-telemetry/opentelemetry-cpp/issues/1831</a>

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- Issue
  - Xx
- PR
  - $\circ$  Xx
- Misc
  - Plan to produce a new release.
    - **1.11.0**
    - Tom to prepare this week

# Aug 9, 2023.

### Attendee

- Ehsan Saei
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

## Agenda

- Misc
  - o Plan to produce a new release.

# July 31, 2023

## Attendee

- Tentative Marc Alff (Oracle)
- Ehsan Saei

- Spec
  - No change
- Issue
  - o Xx
- PR
  - $\circ$  Xx
- Misc
  - Discussion on breaking changes (multiple ABI)

- To continue on PR comments
  - How many last releases should be supported? Lalit to check
- Discussion on Test Fuzzing
  - Ehsan to add more real use scenario examples
- Upgrade cmake to 3.16.3 in CI?
  - Agreed, to fix in PR.
    - Tom to add why we need to upgrade

# July 26, 2023

#### Attendee

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

### Agenda

- Spec
  - Metrics SDK: allow several metric readers to share the same metric exporter
    - URL
    - Filed by Marc.
    - Please comment on desirability in general, and feasibility in opentelemetry-cpp in particular
  - Metrics SDK: allow metric readers to filter Meters during Collect()
    - URL
    - Filed by Marc.
    - Please comment on desirability in general, and feasibility in opentelemetry-cpp in particular.
- Issues

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PR

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- Misc
  - Discussion on breaking changes (multiple ABI)
    - To continue on PR comments
  - Discussion on Test Fuzzing
    - To discuss with Ehsan
  - Planned availability in summer
    - Marc away July 31 Aug 20
  - Upgrade cmake to 3.16.3 in CI?
    - Agreed, to fix in PR.

# July 17, 2023

#### **Attendees**

- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

### Agenda

- Spec
  - semantic-conventions 1.21.0 now released
     <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/2138">https://github.com/open-telemetry/opentelemetry-cpp/issues/2138</a>
  - o releases v1.23.0
- Issues

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- PR
- o <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/2163">https://github.com/open-telemetry/opentelemetry-cpp/pull/2163</a>
  - Braking abi change, abseil issue can be handled in a separate issue
- Misc

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# July 12, 2023

### **Attendees**

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Ehsan Saei

- Spec
  - Spec 1.23.0 about to be released
    - No impact, semconv no longer delivered in the specs
  - Semconv
    - Still waiting on release 1.21.0
- Issues
  - Xx
- PR
- O XXX
- Misc
  - o [Marc] Discuss how to handle breaking changes

- [POC] Deliver ABI breaking changes #2222
- [POC] [Metrics API/SDK] Add InstrumentationScope attributes in MeterProvider::GetMeter() #2224
- [Marc] Deprecate ZPAGES ?
- o [Tom] Mark logs signal as stable?
  - Create spec PR to update the logs status before removing the preview macro.

# June 28, 2023

#### **Attendees**

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin

- Spec
  - Remove jaeger exporter #3567
    - Now time to remove the jaeger exporter from otel-cpp
- Issues
  - O XXX
- PR
- [Metrics SDK] Provide builders to avoid exposing SDK internals
  - URL
  - Ready for review since June 20, 2023
- [TEST] Expand api singleton test to cover explicit dlopen().
  - URL
  - Ready for review since June 5, 2023
- Support protobuf 3.22 or upper
  - URL
  - Review stuck. We need to decide on clear action items, and/or submit smaller agreed to parts, and/or ???, to make some progress.
- [EXPORTER] Add support for client-side cert/key to gRPC exports.
  - <u>URL</u>
  - Good progress from kylepl.
  - Marc to continue to provide comments
- [CI] Upgrade abseil-cpp version from 20220623.1 to 20230125.2
  - URL
  - Draft, and overlaps with owent work on protobuf 3.22
  - Given that the protobuf 3.22 PR is stuck, decide whether to fix abseil independently (this PR) or let owent fix both abseil and protobuf.
- [CI] Upgrade GoogleTest version from 1.12.1 to 1.13.0

- URL
- Recent merge from main, recent review comments provided
- Waiting on cngzhnp to fix CI break and resolve comments.
- o opentelemetry-cpp project CI
  - URL
  - Draft and stale. Either implement or close.
- [REMOVAL] Remove the jaeger exporter
  - URL
  - Ready for review since June 14, 2023.
  - Need approval from Tom (resolution of earlier comments)
- o [RFC] Enable building otel-cpp extensions from main repo
  - URL
  - Need discussion

С

- Misc
  - [Marc] Next meeting is July 3rd, with July 4th a US Holiday.
    - To confirm if the July 3rd meeting is maintained.
    - Canceled.
  - o [Marc] Github permissions on opentelemetry-cpp
    - Ensure all maintainers have access to "code and automation" tools, for example to define which CI workflows are "required" to merge, etc.

## June 19, 2023

#### **Attendees**

- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)
- Lalit Kumar Bhasin (Microsoft)

#### Agenda

- Spec
  - SDK MeterProvider configuration
     (https://github.com/open.tolometry/opentalemetry.com/

(https://github.com/open-telemetry/opentelemetry-specification/pull/3522)

- Configuration (i.e. MetricExporters, MetricReaders and Views) MUST be owned by the MeterProvider.
- Issues
  - [API/SDK] Remove Instruments and Meters
     (<a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/2184">https://github.com/open-telemetry/opentelemetry-cpp/issues/2184</a>)
    - [Marc] Blocking for shared libraries providing metrics.

- PR
  - O XX
- Misc
  - o [Marc] Reviewing, replying to PRs and comments could be faster
    - PRs should be assigned for review. Assignees will talk about the status of PRs in the meetings.

## June 14, 2023

### Attendees

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Ehsan Saei

### Agenda

- Spec
  - O XX
- Issues
  - [API/SDK] Remove Instruments and Meters
     (<a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/2184">https://github.com/open-telemetry/opentelemetry-cpp/issues/2184</a>)
    - [Marc] Blocking for shared libraries providing metrics.
- PR
  - O XX
- Misc
  - XX

# June 5, 2023

#### Attendees

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Spec
  - Opentelemetry-proto
    - Expect release 1.0 (not released yet)
       (https://github.com/open-telemetry/opentelemetry-proto/issues/456)

- Semantic-convention
  - Still waiting on new release
     (https://github.com/open-telemetry/semantic-conventions/issues/37)
- Issues

O XX

- PR
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/2163
    - For latest gRPC uses C++17, needs external abseil or only works with std. Let's not rush. We would still need to support C++14.
    - Lalit to raise an issue with abseil if they need C++17 while they claim they support C++14
  - O XX
- Misc
  - $\circ$  XX

# May 31, 2023

#### Attendees

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Ehsan

- Spec
  - Opentelemetry-proto
    - Expect release 1.0 (https://github.com/open-telemetry/opentelemetry-proto/issues/456)
  - Semantic-convention
    - Still waiting on new release
       (<a href="https://github.com/open-telemetry/semantic-conventions/issues/37">https://github.com/open-telemetry/semantic-conventions/issues/37</a>)
  - O XXX
- Issues
  - O XXX
- PR
- $\circ$  XXX
- Misc
  - [Marc] Release 1.9.1 [May 26, 2023]

- A lot (10) of [BUILD] issues fixed, see release notes
   (<a href="https://github.com/open-telemetry/opentelemetry-cpp/releases/tag/v1.9.1">https://github.com/open-telemetry/opentelemetry-cpp/releases/tag/v1.9.1</a>
- To discuss: why do we have so many, and what can be improved?
  - Test using "user" configuration
- [Marc] Drop C++11 support
  - Announcement done
  - C++11 build added in CI
  - Upgrade to C++14 newer dependencies in progress (see PRs from Cengizhan, see PR from Owent)
- Plan to declare Log API as stable

# May 22, 2023

#### **Attendees**

- Ehsan
- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)

## Agenda

- Spec
  - Clarify how ObservedTimestamp field is set if unspecified <a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3385">https://github.com/open-telemetry/opentelemetry-specification/pull/3385</a>
  - Specify MeterProvider configurable cardinality limits #2960
    - Experimental
    - Possible impact on metrics SDK.
- Issues

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PR

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- Misc
  - [Tom] Plan to declare Log API as stable.
    - Tom create issue to review API compliance with spec
- Ongoing
  - [Marc] to prepare release 1.9.1
  - [Marc] to announce C++11 deprecation (PR)

# May 17, 2023

#### Attendees

- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Ehsan

## Agenda

- Spec
  - SemConv moved to a stand alone repository
    - Marc: No new release from new repo. And code generation scripts need to be modified.
    - This is not the blocker for new release.
- Issues
  - 0
- PR
- Misc
  - [Marc] Drop C++11 support
    - decide drop date and announce it?
    - Announce: Marc to create PR to document this to be deprecated.
      - Drop after 3 months of announcement ( ~ Sept 2023)
    - Next release timeline?
      - Release this (/next?) week 1.9.1.
      - Marc to do the release.
    - o Rotation:
      - Ehsan(Monday), Marc and Tom (Wed)
  - Meeting Agenda: Please add it well before the meeting day.

# May 08, 2023

## Attendees

Canceled because of a lack of attendance.

# May 03, 2023

#### **Attendees**

- Lalit kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

### Agenda:

- [Tom] Logs SDK PR
  - Looking for review comments from Owent.
- PRs pending for review
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/2097
  - Fix inclusion header files and use forward declaration for API by cngzhnp · Pull Request #2124 · open-telemetry/opentelemetry-cpp (github.com)
    - This could be the breaking change for applications, need to have minor version increment.
  - Upgrade GoogleTest version from 1.12.1 to 1.13.0 by cngzhnp · Pull Request #2114 · open-telemetry/opentelemetry-cpp (github.com) - This would break customers building with C++11 flag ( or using gcc 4.8). So can be added once we move to C++14.
- Issues:
  - compile WITH\_OTLP failed · Issue #2095 · open-telemetry/opentelemetry-cpp (github.com) - Need to look further as we should be able to build with C++17 using nostd libraries.

# April 24, 2023

#### Attendees

- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Logging API Change (SDK part) -
  - LogRecord needs to be extended for event Id and event Name.
  - EnabledImplementation needs to be implemented in SDK (?)
  - Exporter will have enabled information, and this needs to be signaled back to SDK/API?
  - Add console exporter for debugging purpose

- Semantic Convention for Event Name/Id.
  - "event\_name" and "event\_id"

## April 19, 2023

#### Attendees:

- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan (Microsoft)

- Spec
  - OTEPS PR#182 Export SpanContext.IsRemote in OTLP
    - expect opentelemetry-proto changes
    - expect trace API+SDK changes
      - Wait for the specs PR.
  - o <u>Issue#2911</u> Move towards Log API/SDK stabilization
    - See Jack-Berg comment
    - Need to review spec issue #3386, PR#3397 and PR#3385
    - Provide feedback for cpp
    - Tom: Will update the Issue with cpp comments.
- Issues
- PR
- Misc
  - [Marc] ABI breaking changes
    - Discuss how to proceed
    - Add comments here https://github.com/open-telemetry/opentelemetry-cpp/issues/1983
  - o [Marc] stackoverflow
    - Discussion, use SO or not.
    - Direct users to ask questions on stackoverflow.
  - o [Tom] Remove option WITH\_OTLP.
    - Breaking change Deprecate with warning.
    - WITH\_OTLP\_GRPC/HTTP are predictable.
  - o [Lalit] Rotation for driving the maintainer's meeting.
    - [Tom] Create an issue to discuss this further.

## April 5, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Karthik
- Josh MacDonald (Lightstep, briefly)

## Agenda:

- Spec
  - Spec release 1.20 in preparation, will need to adjust semconv
  - Support Elastic Common Schema (ECS) in OpenTelemetry (<u>Support Elastic Common Schema (ECS) in OpenTelemetry by AlexanderWert · Pull Request #222 · open-telemetry/oteps (github.com)
    </u>
  - Export SpanContext.IsRemote in OTLP (<u>Export SpanContext.IsRemote in OTLP</u> by axw · Pull Request #182 · open-telemetry/oteps (github.com))
  - Do not add AddLink(), use option to AddEvent() instead (<u>Do not add AddLink()</u>, use option to AddEvent() instead · Issue #3337 · open-telemetry/opentelemetry-specification (github.com))
- Issues
  - Jmacd has there been any discussion here about Envoy/OTel-C++ performance? (Answer: no, Josh will return with more information.)
- PR

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- Misc
  - [Marc] PR Review: Clarify exact number of approvals needed for a PR
    - [Lalit] To create the PR with more clarity.
  - [Marc] Close legacy projects (v1.4.1 release, Metrics SDK implementation)
    - [Lalit] To close these projects.
  - o [Marc] April 10, Easter (Holiday in France, Germany?)
    - Cancel the meeting for April 10th.
  - [Marc] Plan release opentelemetry-cpp 1.9.0 ?
    - [Marc] After HTTP SSL merge, and SemConv changes.
  - [Tom] Working on user facing logging API.
    - [Tom] Will create initial document for review.

## March 27, 2023

#### Attendees:

- (zoom dead no stable connection) Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Ehsan

## Agenda:

- Spec
  - Separate semantic conventions from the specification https://github.com/open-telemetry/oteps/pull/227/files
- Issues
- PR
- Misc
  - [Ehsan], new project created https://github.com/orgs/open-telemetry/projects/47/views/1.
  - o [Tom], new release?
    - Marc to make release after new sem release
    - Lalit we can have beta release for logs.

## March 22, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

### Agenda:

Spec

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- PR
- o Marc as a maintainer.
  - Have a process in terms of
    - project, triaging and prioritization.
    - Merge policy to be properly documented.
  - And then in the next few weeks we can pull Marc as maintainer.
  - Provide required permissions to Marc for maintenance activity.
    - Release management
    - Merging PRs

- Issues
- Misc
  - Logs API/SDK beta release
    - API namespace changes?
  - Using Stackoverflow instead of Github Discussion.

## March 13, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan
- Tom Tan (Microsoft)

## Agenda:

Spec

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- PR
- Marc as maintainer
  - Releases It should be fine to provide the required permission to Marc.
    - Automate the process for release Is it worth doing now that we have one a month release
    - Have rotation for Release management.
  - Merge It should be fine, as long as there are maintainer in different timezone.
  - [Marc] Plan to work in Metrics on future. ABI compliance would be something affecting all the signals.
- Issues
- Misc
  - Vcpkg PR for v1.8.3: <a href="https://github.com/microsoft/vcpkg/pull/30151">https://github.com/microsoft/vcpkg/pull/30151</a>
  - Vcpkg otel-cpp package deployment on Linux Error :

 $\label{eq:grpc_cpp_plugin_executable-notion} \begin{picture}{0.5\textwidth} $\operatorname{program}$ not found or is not executable \end{picture}$ 

## March 8, 2023

#### Attendees:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

### Agenda:

- Spec
  - Declare OTLP stable #3274
     (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3274">https://github.com/open-telemetry/opentelemetry-specification/pull/3274</a>)
  - Allow adding links after span creation #3186 (https://github.com/open-telemetry/opentelemetry-specification/pull/3186)
  - Make sure the current Logs Bridge API/SDK design doesn't prevent future addition of end-user facing log API #3301 (https://github.com/open-telemetry/opentelemetry-specification/issues/3301)
  - Metric units should use UCUM case sensitive variant #3306
     (https://github.com/open-telemetry/opentelemetry-specification/pull/3306/files)
  - Move specification for implementations of the metric API into own specification #3171
- PR
- 0
- Issues
- Misc
  - [Marc] Semantic conventions
    - Code generation for semantic conventions is broken with the latest 1.19.0 spec with build tools 0.17.0.

(https://github.com/open-telemetry/opentelemetry-specification/issues/329 9)

- Can no longer generate semconv until build tools is fixed (<a href="https://github.com/open-telemetry/build-tools/issues/155">https://github.com/open-telemetry/build-tools/issues/155</a>).
- o [Marc] ABI check
  - In progress, tooling seems to work ok, but needs more code for CI.
- [Marc] Discuss PR
   <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/2027">https://github.com/open-telemetry/opentelemetry-cpp/pull/2027</a>
- o [Marc] Warning, DST time change for next meeting.
- [Tom] Separate logging APIs from otel log backend APIs?

# February 27, 2023

#### Attendees:

- (vacation) Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

#### Agenda:

- Spec
- Issues:
- PR
- https://github.com/open-telemetry/opentelemetry-cpp/pull/2000:

  This has a new virtual method added in Exporter::ForceFlush(), so ABI breaking change for SDK. And the application needs to be rebuilt whenever they are going to use the new otel-cpp-sdk as a shared library.
- PR <a href="https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/218/files">https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/218/files</a>
  - [Lalit] Need to make it ready for review.
- Misc
  - [Marc] vacations this week.
  - Next release 3rd March Logging API/SDK changes, DLL support, and Metrics per improvements. (Ehsan/Tom/Lalit) - Minor version upgrade (for ABI breaking change in the SDK)
  - Cleanup for ETW and ElasticSearch exporter
    - ETW (Lalit/Tom to take care).
    - ElasticSearch (Need to find new owner)

# February 22, 2023

## Attendees:

- Lalit Bhasin (Microsoft)
- Marc Alff (Oracle)
- Ehsan Saei

- Spec
  - Add RecordLink for Span. by carlosalberto · Pull Request #3240 · open-telemetry/opentelemetry-specification (github.com)

- Rename Logs API to Logs Bridge API to prevent confusion by tigrannajaryan ·
   Pull Request #3197 · open-telemetry/opentelemetry-specification (github.com)
  - [Lalit] Will create an issue for it.
- Add unit to Instrument selection criteria by asafm · Pull Request #3184 · open-telemetry/opentelemetry-specification (github.com)
  - [Lalit] Will create an issue for it.
- Move specification for implementations of the metric API into own specification (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3171">https://github.com/open-telemetry/opentelemetry-specification/pull/3171</a>)
  - [Marc] Need to check our code for name validation. Lalit to look into this, and create an issue if change is needed.
- Issues
- PR
  - Opentracing Shim

(https://github.com/open-telemetry/opentelemetry-cpp/pull/1909)

- [Marc] LGTM
- [Lalit] To have two approvals before merging. In general, good to go.
- Metrics Performance Improvements
  - [Lalit] Need help in the review.
- Misc
  - o [Marc] ABI check
    - Need tooling to detect ABI changes in CI, instead of relying on code review only
      - [Lalit] Good point, this has been discussed earlier, and Max did some investigation on ABI compliance checker - <u>ABI Compliance</u> <u>Checker (lvc.qithub.io)</u>.
      - [Marc] We can create an issue to track.
    - Need doc/process to define how to extend the API/ABI without breaking existing instrumented code
      - [Lalit] Scope is defined to API/ABI breaking changes for otel-api.
      - [Marc] As per specs, once the API is exposed it should be supported forever.
      - [Lalit] Need more discussion in the next community meeting.
  - [Marc] Vacations next week, expect low activity.

# February 13, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei

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### Agenda:

- Spec
  - OTLP HTTP Server Response Code (<a href="https://github.com/open-telemetry/opentelemetry-specification/issues/3203">https://github.com/open-telemetry/opentelemetry-specification/issues/3203</a>)
  - Add process.cpu.count metric to semantic conventions for OS process metrics.(<a href="https://github.com/open-telemetry/opentelemetry-specification/issues/32">https://github.com/open-telemetry/opentelemetry-specification/issues/32</a>
     00)
  - Does Log API and SDK need a way to enable log level and query for it (<a href="https://github.com/open-telemetry/opentelemetry-specification/issues/3185">https://github.com/open-telemetry/opentelemetry-specification/issues/3185</a>)
  - Mark service and telemetry.sdk resource attributes as stable.(<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3202">https://github.com/open-telemetry/opentelemetry-specification/pull/3202</a>)
  - Move specification for implementations of the metric API into own specification (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3171">https://github.com/open-telemetry/opentelemetry-specification/pull/3171</a>)
    - This may have breaking changes in metrics API if validation of arguments are done there.
- Issues

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PR

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- Misc
  - o ABI breaking changes (once #3186 PR in specs is merged)
    - Tag existing issues for ABI breaking.

## February 8, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei
- Tom Tan (Microsoft)

- Spec
  - Allow adding links after span creation #3186 (<u>Allow adding links after span creation by pyohannes · Pull Request #3186 · open-telemetry/opentelemetry-specification (github.com)</u>
  - Move towards Log API/SDK stabilization #2911 (<u>Move towards Log API/SDK stabilization · Issue #2911 · open-telemetry/opentelemetry-specification (github.com)</u>)
- Issues

- PR:
  - o DLL PR:
    - Marc Need to see how to remove change requested flag
    - Owent has plan to review this.

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- Misc
  - [Marc] Copyright
    - Clarify which form to use (YEAR)
      - We can keep without YEAR to be consistent with other SIGs
    - Enforce in CI (required check)?
      - Need to be in github settings.
    - Third party code in etw/TraceLoggingDynamic.h, MIT license
      - Move to submodules (etw/TraceLoggingDynamic.h). Lalit to raise an issue for this.
  - OTLP HTTP Async
    - Remove compile time flag, and make it configurable at run-time.

# January 30, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei

- Spec
  - add SuppressTracing flag #3103 (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3103">https://github.com/open-telemetry/opentelemetry-specification/pull/3103</a>)
  - Update Zipkin remoteEndpoint preferences #3087
     (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3087">https://github.com/open-telemetry/opentelemetry-specification/pull/3087</a>)
  - Add JaegerRemoteSampler to compliance matrix #3148 (<a href="https://github.com/open-telemetry/opentelemetry-specification/pull/3148">https://github.com/open-telemetry/opentelemetry-specification/pull/3148</a>)
  - Explicitly define metric reader force flush operation #3084 (https://github.com/open-telemetry/opentelemetry-specification/pull/3084)
- PR
  - o DLL
    - [Marc] Some issue to investigate default\_delete for shared\_ptr ad unique\_ptr.
    - [Marc] Do we need one DLL for SDK, and other for Exporter.
  - OpenTracing PR Let's target to review this in coming week.

- CMake Docker Images
  - [Ehsan] The gRPC build is twice the fast/
  - [Lalit] Request all to review the PR.
- Issues
- Misc
  - o Release 1.8.2
    - [Ehsan] Will be done this week.
  - o [Marc] Revise Milestones due dates, post due by 2 months
  - [Lalit] Outreachy <a href="https://www.outreachy.org/communities/cfp/cncf-tracing/">https://www.outreachy.org/communities/cfp/cncf-tracing/</a>
  - Kubecon 2023 (OpenTelemery) April.

# January 25, 2023

#### Attendees:

- Marc Alff (Oracle)
- Tom Tan (Microsoft)
- Ehsan Saei
- Lalit Kumar (Microsoft)

- Spec
  - Will discuss changes next week.
- PR
- [Marc] Discuss deprecation process (PR #1923)
  - [Lalit] Should be fine to have single consolidated markdown DEPRECATED.md with status of all deprecated features.
- o [Marc] Discuss cpp + cpp-contrib build (PR #1937)
  - [Marc] Re-review it with the changes going into separate cmake file.
- o [Marc] Discuss HTTP SSL (PR #1793)
  - How to test in CI
    - [Ehsan] We already have otel-collector in CI without SSL. We can enable SSL in this for testing.
    - [Marc] How to validate if the spans are exported successfully. This would need error log parsing. Use a Custom logger.
  - Merge in 1 block or by pieces
- [Lalit] Logs SDK and API:
  - Using variadic template/template pack at API surface.
  - Keep this open for next meeting, to give enough time for review.
- o [Tom] Windows single DLL build

- Issues
  - o [Lalit] Using otel-cpp trace in multi-threaded, Async application.
    - Creating span in one function/thread, and exporting it from another
    - Parenting Span creating in different thread.
    - Document this better?
    - [Marc] Not using runtime context for multi-threaded applications, keep track of parent span.
      - Or Implement run-time storage which keeps track of the thread.
      - Other issues Threads bound to cpu, named networks.
  - o [Lalit] prometheus Exporter (Issue raised on slack)
    - Duplicate metrics reported.
    - [Ehsan] Not reproducible.
  - O [Lalit] vcpkg to support WITH OTLP HTTP CMake option.
- Misc
  - o [Tom] Add an API to enable/disable logger? Probably for tracer and metrics later?
    - Add a convenience (wrapper) method or macro.
    - [Marc] Setting NoopLoggerProvider/NoopTracerProvider.
    - OTEL SDK DISABLED/ENABLED support.
    - [Tom]: Create a discussion on this.
  - Next release This week.
    - Ehsan will take care of it. Jaeger deprecation to be included.

# January 16, 2023 (Canceled)

# January 11, 2023

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Ehsan Saei
- Tom Tan (Microsoft)

- Spec
  - o [Marc] Spec release 1.17.0 in preparation, need to adjust semconv
  - Further decouple Events API from Logs/Logger https://github.com/open-telemetry/opentelemetry-specification/issues/3086

- Specify default metric view attributes in the API (hints?)
   <a href="https://github.com/open-telemetry/opentelemetry-specification/issues/3061">https://github.com/open-telemetry/opentelemetry-specification/issues/3061</a>
- OpenTelemetry Project Roadmap: https://github.com/open-telemetry/community/pull/1312
- PR
- Issues
- Deprecation
  - [Marc] Marc to propose deprecation process (#1893)
  - [Marc] Jaeger
    - Jaeger SDK is already deprecated, and they have started using OTLP.
    - Document deprecation in Jaeger README
  - [Marc] Drop C++ 11 support
    - Announce in Release notes
    - Remove it from the CI (gcc4.8) eventually
    - Change all the shared\_ptr to `std::` (?)
- Misc
  - o [Marc] TLS version & cipher in OTLP HTTP
    - Issue #2932 + PR #3088 in spec
  - o [Marc] OTEP Internal SDK Metrics
  - [Lalit] Merge policy
  - o [Lalit] 16th Jan is holiday in USA Cancel the meeting.
  - [Lalit] otel-demo otel-cpp build time : Optimize c++ currency service build time : <u>Issue #681 · open-telemetry/opentelemetry-demo (github.com)</u>
  - Next Release.
    - We can incorporate Spec release 1.17.0, and build cleanups done by Marc.
    - **1.8.2**

# January 2nd, 2023

#### Attendees:

- Marc Alff (Oracle)
- Ehsan Saei

- Spec
  - Jaeger deprecation
- PR
- Issues
- Misc
  - [Marc] Happy New Year 2023
  - [Marc] Deprecation process

- [Marc] Not just in the release note, we should keep a list of deprecated features.
- [Marc] use an md file to keep track of the deprecated features.
- Communication and timing.
- [Marc] will propose on https://github.com/open-telemetry/opentelemetry-cpp/issues/1893
- [Marc] OpenTelemetry-cpp internal metrics
  - [Marc] internal metrics like how many spans are exported, discarded,...
  - [Marc] to create an issue
- o [Ehsan] Contrib PR:

https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/252

## December 28, 2022 (Canceled)

## December 19, 2022 (Canceled)

## December 14, 2022

#### Attendees:

- Marc Alff (Oracle)
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Specs
  - Semantic Convention stabilization timelines and process for review
     :https://docs.google.com/document/d/1ghvajKaipiNZso3fDtyNxU7x1zx0\_Eyd02O
     GpMGEpLE/edit#
  - OpenTelemetry project roadmap : <u>https://github.com/open-telemetry/community/pull/1312</u>
  - o Debug/safe mode
  - How to achieve consistent sampling across linked traces
- Issues
- PRs:
- Misc:
  - Updated packages for conan, vcpkg (v1.8.1)

## December 05, 2022

#### Attendees:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

## Agenda:

- Spec
- Issues
  - Allow to build SDK + contrib repo via BUILD CONTRIB build option
    - [Marc] It should be the other way.

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- PR
- Some activity on In Memory metrics exporter (PR#1481)
- Enable generating deb, rpm and nuget package through cmake build 662
- Misc
  - Release 1.8.1 (Thanks Ehsan)
  - Drop C++11 support
    - Make a call early Jan based on the comments on the open issue.
- [Tom]: create separate CI pipeline for grpc and http OTLP?
  - o To test more real-case scenarios.
  - o [Marc] Ensure that the valgrind, and other tests are done for both the pipelines.
- [Holiday]

Lalit: 17th Dec - 25th DecTom: 19th Dec - 30th Dec

Marc: less activityEhsan: less activity

## November 30, 2022

### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Spec
- Issues

- PR
- Misc
  - [Marc] CI build: docker and/or native (Follow up after ubuntu-latest breaks)
    - Latest gcc-11 added new warnings in deprecated code in gRPC and other dependencies.
    - More control with the docker environment.
    - Latency in the test duration?
    - Registry access to push the old pre-built binary / docker images.
    - Docker images for gcc4.8 keep dependencies to the latest.
    - Gtest, abseil and gRPC will not support C++11.
  - [Marc] New features creating new dependencies, and old platforms (For example, how to support SSL from the spec with old CURL, see owent comments on PR#1793).
    - Keep #ifdef ENABLE\_<FEATURE\_FLAG>, making new features optional?
  - o [Marc] Winter break, will take some time off.
    - Cancel meeting for last two weeks for Dec.
  - [Tom] next release?
    - New release : next week to minimize the cmake target.
      - Script to automate the release.

## November 21, 2022

#### Attendee:

- Lalit Kumar Bhasin (Microsoft)
- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)

- Specs changes:
  - Capture policy regarding non-exposure of generated Protobuf structs in the end user API - <u>Issue #437</u>
    - As of now, otel-cpp is distributing proto generated headers files ( due to distributing of recordable headers )
      - Removed here https://github.com/open-telemetry/opentelemetry-cpp/pull/923
      - Added back https://github.com/open-telemetry/opentelemetry-cpp/pull/1365
  - Specify MetricReader configurable limits #2960

- Number of timeseries per instrumentation library scope
- Number of timeseries per instrument.
- Behaviour when no collector/exporter is configured or collection internal is large enough.
- o Make sure it is very clear we are not building a Logging API #2966
- Add ForceFlush to the TracerProvider Trace API specification #2944
- Issues

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- PR
- Misc
  - [Marc] Planned date for next release ? 1.7.1 or 1.8.0 ?
    - [Ehsan] Will be doing a new release this or next week.
  - Vcpkg [Tom] Need to remove deprecated packages.

## November 16, 2022

#### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Spec Changes
  - Logs API decouple Event API from Logs API
- Issues
  - $\circ$  XX
- PR
- legacy gRPC e2e test #1737
  - Build issues with the latest gRPC v1.50.1
  - Race condition with gRPC v1.48.1
  - Prometheus-cpp has stopped supporting C++11
- https://github.com/open-telemetry/opentelemetry-cpp/pull/1729
  - Need to check with the PR owner if he still has issue with CLA, and wants one of the approvers to raise the PR.
- https://github.com/open-telemetry/opentelemetry-cpp/pull/1662
  - There seem to be asks from users for package generation, please review this PR and see if we can merge.
- Misc
  - [Marc] To Clarify in CONTRIBUTING.md: clang-format version to use is 10.0.0?
    - To create an issue for this.

- [Marc] [CI] New break on MacOS compiling external/com\_google\_absl/absl/functional/function\_ref.h, to investigate.
  - Could be related to github virtual environment changes for macos-latest pointing to macos-12
  - [Marc] Raise a github issue internally to track this if the issue is consistent.

# November 7, 2022

#### Attendee:

- Marc Alff (Oracle)
- Lalit Bhasin (Microsoft)
- Ehsan Saei
- Tom Tan (Microsoft)

### Agenda:

- Spec Changes
  - Spec release 1.15.0 planned, will need to align on semantic conventions.
  - Metrics Semantic Conventions not specified as YAML files #2666
  - Clarify configuring aggregations with MetricExporter #2746
  - Is a MetricReader supposed to implement ForceFlush #2924
- Issues
  - Need fine-grained HAVE CPP STDLIB #1071
    - Marc plans to work on this based on the proposal.
  - Remove deprecated experimental semantic conventions #1741
    - Give a heads up in the next release changelog, this would be removed in subsequent (or next to subsequent) release.

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- PR
- [For Discussion] legacy gRPC e2e test #1737
  - Looks good, we can add the CI test with that.
  - The e2e can be added in examples directory.
- Misc
  - [Ehsan] Removing docker file. https://github.com/open-telemetry/opentelemetry-cpp/tree/main/docker
    - [Lalit] Agree, ubuntu14.04 ubuntu20.04 can be removed.

## November 2nd, 2022

#### Attendee:

Marc Alff (Oracle)

- Tom Tan ( Microsoft)
- Lalit Bhasin (Microsoft)
- Ehsan Saei

## Agenda:

- Issues
  - Clarification needed on how values for attributes filtered by a view are used <u>Clarification needed on how values for attributes filtered by a view are used <u>Issue #2905 · open-telemetry/opentelemetry-specification (github.com)</u>
    </u>

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- PR
- Misc
  - [Marc] InMemorySpanExporter and InMemoryMetricsExporter
    - Need to have a clean and stable API. Use the visitor pattern?
    - Related to issue #1698
    - Lalit: We need to ensure that SpanData interface is not changed in future (and is less likely to have change in Traces specs). We can implement a visitor pattern for InMemoryMetrics Exporter.
  - [Marc] Build, bring your own dependency
    - Patch to come for opentelemetry-proto, nlohmann ison
    - Related to issue #1719
  - [Marc] Issue tagging
    - Create "Blocking" and "Blocked" tags, when fix for issue X is blocked by fix for issue Y
    - For example, nlohmann\_json install cleanup (#1448) is blocked by migration of ETW to opentelemetry-cpp-contrib (#1423)
    - Done: created issue:blocking, issue:blocked labels.
  - o [Marc] Metrics GA milestone can be closed now (and congratulations to all)

## October 24th, 2022

#### Attendee:

- Lalit Kumar Bhasin
- Ehsan Saei
- Tom Tan

- Metrics GA :
  - No open issues for GA.
  - Specs compliance metrics is updated.
  - otel.io docs are updated.

- Not mandatory for T.C review.
- Issues:
  - [Lalit] Create issues for
    - Validating instrument name, kind and unit
    - Configuring aggregation at Metric Reader level.
- PRs:
  - PR for multi-arch demo build Support multi-arch builds by austinlparker · Pull Request #536 · open-telemetry/opentelemetry-demo (github.com)

## October 19th, 2022

### Attendee:

- Lalit Kumar Bhasin
- Ehsan Saei
- Marc Alff (Oracle)
- Tom Tan

- 1. Spec Changes
  - a. Deprecate jaeger exporters. #2858
    - i. Once OpenTelemetry officially deprecate the exporter, otel-cpp can mark this as deprecated, and remove it eventually (?).
  - b. xxx
- 2. PR
  - a. [Metrics] Switch to explicit 64 bit integers #1686
    - i. Agree on naming changes, UInt64 and/or Int64, and types.
    - ii. Ok to have different shared\_ptr vs unique\_ptr for sync and async instruments, if needed. Unique\_ptr preferred, if possible.
  - b. xxx
- 3. Issues
  - a. [Ehsan] Pull Metric Exporter
    https://github.com/open-telemetry/opentelemetry-cpp/issues/1561
  - b. xxx
- 4. Misc
  - a. [Marc] Semantic versioning
    - i. Have semver by signal (trace, metric, log) in the API, SDK and exporter?
    - ii. No change at this point.
  - b. [Lalit] Voting for GC

i. Link to vote:

https://vote.heliosvoting.org/helios/elections/76558134-3384-11ed-8688-0287 1af94755/view

ii. Eligibility to vote:

https://github.com/open-telemetry/community/issues/1173

## October 10th, 2022

#### Attendee:

- Lalit Bhasin (Microsoft)
- Marc Alff (Oracle)
- Ehsan Saei
- Tom Tan (Microsoft)

- 1. Spec Changes.
  - a. Opentelemetry-specification release 1.14.
  - b. Metrics Semantic Conventions not specified as YAML files #2666
  - c. Clarification needed on exporter/reader configuration- link
  - d. OTLP Metric exporter configuration extends beyond the scope of its ability link
  - e. [Common] Clarify Attribute support based on stable wire protocol definition of Attributes <a href="link">link</a>
  - f. Logs SDK link
    - i. Owent is on vacation, [Lalit] to create the tasks.
  - g. Support Dynamic logging link
  - h. Structured Stacktrace in Span Attributes/Logs #2839 link
- 2. OpenTelemetry-Demo
  - a. Add Service docs for currencyservice (C++ service) link
- 3. OpenTelemetry-contrib
  - a. Add PrometheusPushExporter link
  - b. Add Instrumentation for process metris link
- 4. PRs
  - a. add e2e test to asan & tsan CI link
  - b. Threading issue between Meter::RegisterSyncMetricStorage and Meter::Collect <a href="link">link</a>
  - c. Enable generating deb and rpm package through cmake build link
  - d.
- 5. Issues.
- 6.

- 7. Misc
  - a. Old Metrics cleanup
    - i. Tom -> Error out in CMakeLists.txt before GA. Full cleanup after GA.

# October 5th, 2022

#### Attendee:

- Lalit Bhasin(Microsoft)
- Ehsan Saei
- Marc Alff (Oracle)
- Owent

## Agenda:

- Spec changes
  - a. Opentelemetry-specification release 1.14.
    - i. [Marc] We need to align on semantic conventions.
  - b. Clarification needed on exporter/reader configuration- link
  - c. OTLP Metric exporter configuration extends beyond the scope of its ability link
  - d. [Common] Clarify Attribute support based on stable wire protocol definition of Attributes link
  - e. Logs SDK link
- 2. PRs
  - a. Warning cleanup Fix more clang and gcc warnings #1658
  - b. Add user agent for OTLP http/grpc client #1657
  - c. [Metrics SDK] Add Metrics ExemplarFilter and ExemplarReservoir #1584
  - d.
- 3. Issues
- 4. Misc
  - a. Meeting time to align with all the members.
  - b. Milestone release date

# September 26th, 2022

#### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin(Microsoft)
- Tom Tan (Microsoft)

## Agenda:

- 5. Spec changes
  - a. Opentelemetry-specification release 1.13 Done.
  - b. Change the default buckets for Explicit Bucket Histogram PR raised.
  - c. OTEL\_EXPERIMENTAL\_SDK\_DISABLED Marc raised an issue for this.
    - i. Lalit Env variables support are optional.
- 6. PR
  - a. bump vcpk to 2022.08.15
    - i. Ehsan OTLP exporter CI tests for windows are only supported through bazel, not cmake.
  - b. Xx
  - c. Xx
- 7. Issues
  - a. Xx
  - b. Xx
  - c. Xx
- 8. Misc
  - a. Compiler warnings -
  - b. Docs generation Sanity tests in CI to catch failures in generating doxygen xml.
    - i. [Marc] Raise an issue for this.
  - c. Marc As one of the approvers.
    - i. Applied to cpp-approvers on Sept 26
    - ii. Filed PR #1635

## September 21th, 2022

### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin ( Microsoft)
- Tom Tan ( Microsoft)

## Agenda:

- 1. Spec changes
  - a. Opentelemetry-specification release 1.13. We need to upgrade semantic conventions.

https://github.com/open-telemetry/opentelemetry-specification/pull/2789

[Marc] - There is change in yaml file, and few more changes. Will look further into this.

[Esigo] - Look into the scope identity, if removing attributes field will have any effect on the current implementation.

b. Change the default buckets for Explicit Bucket Histogram https://github.com/open-telemetry/opentelemetry-specification/pull/2770

Boundaries changed from 0, 5, 10, 25, 50, 75, 100, 250, 500, 1000 -> 0, 5, 10, 25, 50, 75, 100, 250, 500, 1000

[Lalit] - To raise an issue for this, and assign it to Esigo.

- c. Add SpanExporter#ForceFlush as required method https://github.com/open-telemetry/opentelemetry-specification/pull/2654
- d. Make OTEL\_EXPERIMENTAL\_SDK\_DISABLED stable
   https://github.com/open-telemetry/opentelemetry-specification/issues/2667

   [Marc] Moving setter for TracerProvider from api to sdk, also for metrics and logs.
  - [Lalit] To go through the specs if above change in sync with it.
- e. More domain specific attributes added to metrics semantic conventions https://github.com/open-telemetry/opentelemetry-specification/tree/main/specification/metrics/semantic\_conventions
  - [Lalit] Plan to write an instrumentation library to generate CPU / Memory stats as measurements, and exporting metrics to the ingestion system.
- f. Add MetricProducer to allow sdk.MeterProviders to incorporate metric data from third-party sources

(OpenCensus Integration)

https://github.com/open-telemetry/opentelemetry-specification/pull/2722

#### 2. PR

a. add CI test with gRPC latest release

[Ehsan] - to scope this PR, and create an issue for pending changes.

b. Add Metrics ExemplarFilter and ExemplarReservoir

[Lalit] - to review ExemplarReservoir changes.

c. Remove reference of TracerProvider from Tracer

[Lalit] - remove conflict.

- 3. Issues
  - a. Xx
  - b. Xx
  - C. XX
- 4. Misc
  - a. Switch on Werror in the CI (gcc, clang and msvc)
    - We need to find a way to suppress the warnings for external packages.
  - b. New Release this week.

[Marc] - Should align with semantic convention released with otel-specs v1.13.

# September 12th, 2022

#### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit
- Tom

- 1. Spec changes none discussed
- 2. PR
  - a. add CI test with gRPC latest release by esigo · Pull Request #1608 · open-telemetry/opentelemetry-cpp (github.com)
    - i. [Ehsan] Use the latest gRPC version in the mainstream CI tests. ( which uses C++14 as default compile mode)
    - ii. [Ehsan] Have a separate CI test for older gRPC version ( < gRPC 1.46) with C++11 compiler.
    - iii. Existing gcc4.8 CI test with oldest gRPC version( gRPC 1.39)
    - iv. Need to separately investigate the issue with bazel build.
  - b. Singleton (PR #1604) -
    - [Lalit] To review it today. Need one more review before we can merge it.
  - c. Add OTLP Metric Exporter Factory and OtlpGrpcClient
    - i. No action. Will wait for owent reply before merging today.
  - d. Example for OTLP gRPC exporter for Metrics
    - i. [Lalit] To incorporate the changes from #1606 once it is merged.
  - e. [Metrics SDK] Add Metrics ExemplarFilter and ExemplarReservoir
    - i. [Lalit] To review
    - ii. [Ehsan] To resolve the conflict.
- 3. Issues
  - a. Documentation (issue #1589)
    - [Lalit] This was discussed in this week Maintainer's meeting, and doc team would come up with more guidelines and process to be followed across all SIGs.
- 4. Misc
  - a. Confirm time change for Wednesday meeting: 09:00 PT
    - [Lalit] Send a note on slack change for the new timings. Give one week of time if anyone has objection

- 1. Raise a PR to community repo, and update the calendar next monday.
- 5. Plan for stable metrics release?
  - a. Tentative release as Oct 15th. Will revisit it in weekly meetings.

## September 7th, 2022

#### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Lalit Bhasin(Microsoft)

- 1. Spec Changes
  - a. Events and Logs API Events and logs api by scheler · Pull Request #2676 · open-telemetry/opentelemetry-specification (github.com)
  - b. Align log sdk naming with api Align log sdk naming with api by jack-berg · Pull Request #2768 · open-telemetry/opentelemetry-specification (github.com)
  - c. Explicit bucket boundaries <a href="Issue">Issue</a> / <a href="PR">PR</a>
  - d. New feature: Non Periodic MetricReader for OpenTelemetry metrics (New feature: Non Periodic MetricReader for OpenTelemetry metrics · Issue #2767 · open-telemetry/opentelemetry-specification (github.com) )
  - e. Introduce Instrumentation Scope Attributes Introduce Instrumentation Scope

    Attributes by tigrannajaryan · Pull Request #2579 ·
    open-telemetry/opentelemetry-specification (github.com)
- 2. PR
  - a. Singletons, PR#1525 (Marc, V1), PR#1594 (Andrew), PR#1595 (Marc, V2)
    - i. Scope it for gcc/clang, and Windows can be investigated separately.
    - ii. Marc to prepare final PR for gcc/clang.
  - b. gRPC upgrade, https://github.com/open-telemetry/opentelemetry-cpp/pull/1462
  - c. Xxx
- 3. Issues
  - a. Documentation,
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/1589, how to maintain docs between opentelemetry-cpp and opentelemetry-io
      - i. Marc to make a summary of the proposal discussed on 2022-09-07.
  - b. Xxx
- 4. Add a github issue for CI test with C++14, and latest gRPC.
  - a. Ehsan to pick this.
- 5. Wednesday C++ SIG meeting time
  - a. Proposed to advance by 30 min, due to time conflicts.

# Aug 29th, 2022

#### Attendee:

- Marc Alff (Oracle) Can not attend (time conflict)
- Lalit Kumar Bhasin(Microsoft)
- Ehsan Saei
- Tom Tan(Microsoft).

### Agenda:

- 1. Specs Update
  - a. Events and Logs API Events and logs api by scheler · Pull Request #2676 · open-telemetry/opentelemetry-specification (github.com)
  - b. Default boundaries in explicit buckets histograms are not optmized for Latency Default boundaries in explicit buckets histograms are not optmized for Latency · Issue #2759 · open-telemetry/opentelemetry-specification (github.com)
  - c. Do NOT guarantee string enum values backwards compatibility in JSON 
    <u>Prohibit usage of enum value name strings in OTLP/JSON by tigrannajaryan ·

    Pull Request #2758 · open-telemetry/opentelemetry-specification (github.com)</u>
  - d. Histogram Record operation should be explicit about not recording negative values <u>Histogram Record operation should be explicit about not recording negative values · Issue #2757 · open-telemetry/opentelemetry-specification (github.com)</u>
    - i. Lalit To create github issue for this. Although it is in API specs, we need to see if it is supported in API or SDK. Need to be part of GA.
  - e. Clarify configuring aggregations with MetricExporter Clarify configuring aggregations with MetricExporter · Issue #2746 · open-telemetry/opentelemetry-specification (github.com)
    - Lalit otel-cpp supports providing default aggregation both in MetricsExporter and MetricsReader.
  - f. Add MetricProducer to allow MetricReaders to collect from third-party metric sources Add MetricProducer to allow MetricReaders to collect from third-party metric sources by dashpole · Pull Request #2722 · open-telemetry/opentelemetry-specification (github.com)
    - i. Lalit To have the issue created to track this PR once merged.

## 2. Metrics -

- a. Benchmarking
  - i. Instruments Sum, Gauge, Histogram
  - ii. Async Aggregation
  - iii. Sync Aggregation
  - iv. Cumulative and Delta

- b. Still missing the consistent benchmark reporting as part of CI.
- c. Tom For GA, we should be reviewing with TC?
  - i. Lalit We need to see how other teams are doing it, and decide.
- 3. gRPC 1.46.3 and 1.48.0 upgrade Need to discuss once other community members are back next week.

4.

# Aug 24th 2022

#### Attendee:

- Marc Alff (Oracle)
- Ehsan Saei
- Przemek Delewski (SumoLogic)
- Alexander Lopez
- Lalit Kumar Bhasin(Microsoft)
- Tom Tan(Microsoft)

### Agenda:

- 1. [PD] Auto Instrumentation
  - a. [PD]
    - i. Any thoughts on Auto Instrumentation support for otel-cpp C++.
    - ii. Source code/Binary modification at compile time.
    - iii. Already demonstrated for Go.
    - iv. C++ Using client libraries
  - b. [Ehsan] Filtering the methods.
  - c. [Marc] Helpful for a large codebase.
- 2. Specs Update -
  - a. Add OTEL SDK DISABLED env var to disable opentelemetry SDK. #2679
    - i. [Marc] If we can implement this logic in the TraceProvider provided by the SDK which we want to disable.
  - b. Definition of Boolean for Environment Variables #2729
  - c. Add user-agent to the header for OTLP HTTP/gRPC exporter.
     https://github.com/open-telemetry/opentelemetry-specification/pull/2684/files
- Metrics Update:

# Aug 15th, 2022

Attendee:

- Lalit Bhasin(Microsoft)
- Tom Tan (Microsoft)
- Ehsan Saei

- Metrics status
  - a. RC With Current status, it looks good to have a RC today v1.6.0
  - b. GA Need to identify the gaps with the current specs, and create issues targeting GA.
- 2. Header only singleton approach
  - a. [Ehsan] Have a PR for Linux/MacOS.
  - b. Marc to work on the PR further once he is back from vacations.
- 3. Ehsan Old Metrics obsolete.
  - a. We can officially mark this deprecated after RC for metrics.
    - i. Create an issue for announcement of deprecation, and another issue for cleanup. Lalit to create them.
  - b. And cleanup as part of Metrics GA.

# Aug 10th, 2022

#### Attendee:

- Lalit Bhasin(Microsoft)
- Tom Tan (Microsoft)
- Ehsan Saei

#### Agenda:

- 4. Metrics status
  - a. RC on 15th Aug. We can discuss this further on community meeting on that day in case there needs to be any deviation.
- 5. Header only singleton approach
  - a. [Ehsan] Have a PR for Linux/MacOS.
  - b. Marc to work on the PR further once he is back from vacations.
- 6. Tom vcpkg released for v1.5.0
- 7. Ehsan Old Metrics obsolete.
  - a. We can officially mark this deprecated after RC for metrics.
  - b. And cleanup as part of Metrics GA.

# Aug 1st, 2022

#### Attendee:

- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Ehsan
- Lalit Bhasin(Microsoft)

- 1. Metrics Status
  - a. 15th Aug timeline
  - b. Exemplar Need to decide next week if we can include it in RC.
- 2. Header only singleton approach
  - a. DLL support
  - b. Linux shared libraries built with -fvisibility=hidden
  - c. [Marc] We can scope these changes for Linux and MacOS.
  - d. [Tom] MSVC on Windows
  - e. [Lalit] Mingw/GCC on Windows
- 3. [Marc] Would be away for 2 weeks, so won't be available for next couple of meetings.
- 4. [Marc] To be part of opentelemetry Org as member (
  <a href="mailto:community/community-membership.md">community/community-membership.md</a> at main · open-telemetry/community
  <a href="mailto:com">(qithub.com</a>))
  - a. Need to raise a Issue like this- <u>REQUEST: New membership for @jaronoff97 · Issue #1120 · open-telemetry/community (github.com)</u>
  - b. Applied 20220802: <a href="https://github.com/open-telemetry/community/issues/1122">https://github.com/open-telemetry/community/issues/1122</a>
- 5. [Tom] 1.5.0 release is released.
  - a. New vcpkg package for otel-cpp.

# July 27th 2022

#### Attendee

- Lalit Bhasin (Microsoft).
- Marc Alff (Oracle)
- Ehsan Saei

- 1. Specs update -
  - Events and Logs API
  - Add support for partial success in an OTLP export response Once merged, have to raise a PR for OTLP exporter.
  - Split Schema transformation for metrics
  - <u>Periodic exporter env variable as stable</u> OTEL\_METRIC\_EXPORT\_INTERVAL, OTEL\_METRIC\_EXPORT\_TIMEOUT
  - . Clarify configuring aggregations with MetricReaders

- 2. Metrics Update
  - Retrospect the timelines next week based on the current progress.
- 3. Metrics RC release this week?

[Lalit] - as mentioned above.

- 4. Release v1.5.0
  - Async changes.
  - Factory changes in SDK.
  - Semantic convention auto generation.
- 5. (Marc) Versioning policy Need to restrospect later if we need to have separate versioning for API and SDK ( and probably exporter's).
- 6. (Marc) Header only API and singletons (issue #1520)
- 7. (Marc) opentelemetry-demo not using new SDK factory::Create() builders, and new semantic conventions need to make a release for the demo to use?

# July 18th 2022

#### Attendee

- Lalit Bhasin (Microsoft).
- Morgan McLean (Splunk)
- Marc Alff (Oracle)
- Ehsan Saei

- 8. Specs update -
  - Add support for partial success in an OTLP export response Once merged, have to raise a PR for OTLP exporter.
  - Split Schema transformation for metrics
  - <u>Periodic exporter env variable as stable</u> otel\_metric\_export\_interval, otel metric export timeout
  - . Clarify configuring aggregations with MetricReaders
- 9. Metrics Update
  - Retrospect the timelines next week based on the current progress.

# July 13th 2022

## Attendee

- Lalit Bhasin (Microsoft)
- Ehsan
- Yan (Google)

## Agenda

- 1. Specs Update -
  - Add support for partial success in an OTLP export response Once merged, have to raise a PR for OTLP exporter.
  - OTEP Events and Logs API Needs changes in Logs API and SDK.
  - Metrics <u>Clarify configuring aggregations with MetricReaders</u> Still an issue, so no action for now.
- Yan Migrating from OpenCensus to OpenTelemetry. Current timelines.
- 3. Async Changes Merged.
- 4. Metrics Progress
  - a. Issue for Exemplar (Ehsan).
  - b. PR for multiple instrument callbacks (Lalit)
- 5. July release (RC of metrics).
  - a. Async changes.
  - Decide during next week meeting.
- 6. Cleanup for old metrics changes Keep the old version for some more time after new metrics RC. But good to remove it from the CI.

# July 4th 2022

No meeting for Independence Day - Federal holiday in the US.

## June 29th 2022

### Attendee

- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Marc Alff (Oracle)
- Debajit (AppDynamics/CISCO)

- [Debajit] OTel Demo C++ Service
  - Replace the existing JS currency-service with C++ code.
  - Two options -
    - Have C++ gRPC service instrumented with otel-cpp, and have a separate apache/nginx proxy.
    - C++ apache web module instrumented with otel-cpp (mod-cgi)
- [Debajit] Nginx instrumentation ( PR raised, waiting for Sim Kallis to review it).
- Async Changes -
  - Plan to complete the review this week.
  - Ask for Owent to have a sequence/flow diagram, else Lalit will try to document it during review.
  - Need to ensure that existing HTTP Sync flow is not affected. And all Async changes are behind feature flag.
- Metrics Progress -
  - Due date extended to 15th July.
  - [Marc] Old implementation cleanup.
  - [Lalit] We can plan for cleanup after RC for new implementation.
- [Tom] Update InstrumentationLibrary by ScopeSpans.
  - Add InstrumentationScope and deprecate InstrumentationLibrary · Issue
     #1381 · open-telemetry/opentelemetry-cpp (github.com)
  - Owent has plan to work on it once async changes are merged.
- Logs SDK:
  - Cleanup Logname argument from the logger api/sdk. Raised an issue to track.

 LogEmitter change - Owent wants to do it once Async changes are merged. Tom will look into if it can be completed early.

## June 20th 2022

No meeting for Juneteenth - Federal holiday in the US.

# June 15th 2022

### Attendee

- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Github action to close stale issues
  - o [Marc Alff] If we only make it stale, but don't close the issue.
  - [Tom] The rule is copied from specs repo. But it is a good idea to disable closing the issues. Will create the PR to disable it.
- · Release milestone -
  - [Lalit] Milestone for each future release with date, and assign issues to the milestone based on priority of the issue.
- Supporting DLL building -
  - We can continue discussion on the issue/slack channel.
  - Tom to reply to Mats Taraldsvik on slack will connect with him once start working on DLL.
- Async Changes -
  - [Lalit] Let's incorporate specs changes (<u>span exporter concurrency</u>: <u>expand on Export() requirements by tsloughter · Pull Request #2452 · open-telemetry/opentelemetry-specification (github.com)</u> ) in the async PR, and merge it once the specs PR is merged.
  - [Tom] This will ensure we don't have to create another PR later for cleanup, which can be a breaking change if users start taking dependency on the new async export API.
- Metrics Progress

- OTLP gRPC exporter Changes are done, and PR should be ready this week.
- OTLP HTTP exporter owent wants to work on that, this will have dependency on async changes. Let's not keep it as part of RC.

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### Logs SDK:

- Specs Compliant in new release
- Tom: Doing a cleanup for LogName in the next release. Even the deprecated warning can break the build. So the existing users may have to disable the warning.
- Cleanup Logname argument from the logger api/sdk. Raised an issue to track.
- LogEmitter change Owent wants to do it once Async changes are merged. Tom will look into if it can be completed early.

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#### New release

 [Tom] - We can have a patch release this week - ETW exporter, and other small fixes.

# June 6th 2022

### Attendee

- Lalit Kumar Bhasin (Microsoft)
- Tom Tan (Microsoft)

# Agenda

- Supporting DLL building -
  - We can continue discussion on the issue/slack channel.
  - Tom to reply to Mats Taraldsvik on slack will connect with him once start working on DLL.
- Next release v1.5.0 (17th June)
  - Logger Name removal
  - Async changes

### Release v1.6.0 (8th July)

Metrics RC.

- LogEmitter.
- Metrics Progress
  - We are good to have alpha release. -
  - Need to go through the specs and create issues for missing features.
- Interoperability with other languages
  - Need wider discussion on this. Will raise this in the maintainer's meeting.
- Log SDK -
  - Specs Compliant in new release
  - Tom: Doing a cleanup for LogName in the next release. Even the deprecated warning can break the build. So the existing users may have to disable the warning.
  - Cleanup Logname argument from the logger api/sdk. Raised a issue to track.
  - LogEmitter change Owent wants to do it once Async changes are merged. Tom will look into if it can be completed early.

## June 1st 2022

## Attendee

- Lalit Kumar Bhasin (Microsoft)
- Debajit Das
- Tom Tan (Microsoft)

- Supporting DLL building -
  - We can continue discussion on the issue/slack channel.
  - Tom to reply to Mats Taraldsvik on slack will connect with him once start working on DLL.
- Metrics Progress
  - We are good to have alpha release.
  - Need to go through the specs and create issues for missing features.
- Interoperability with other languages

- Need wider discussion on this. Will raise this in the maintainer's meeting.
- Log SDK -
  - Specs Compliant in new release
  - Tom: Doing a cleanup for LogName in the next release. Even the deprecated warning can break the build. So the existing users may have to disable the warning.
  - Cleanup Logname argument from the logger api/sdk. Raised a issue to track.
- Demo micro-service application
  - App Dynamics team are interested to integrate the existing Apache instrumentation with the demo service, and they are open to create a new C++ service for this.
  - [Debajit] To update the PHP github issue, and see if we can host it over http/nginx.
- Cmake version:
  - No plan to upgrade the cmake version.
- Release:
  - Update version.cc (add prefix RELEASE\_ tag) will create a github issues.

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# May 23th 2022

• Meeting canceled.

# May 18th 2022

## Attendee

- Lalit Kumar Bhasin (Microsoft)
- Ehsan

• Tom Tan (Microsoft)

## Agenda

- Ehsan Checksum of the release in the release notes.
- Supporting DLL building -
  - We can continue discussion on the issue/slack channel.
- Metrics Progress
  - We are good to have alpha release.
  - Need to go through the specs and create issues for missing features.
- Interoperability with other languages
  - Need wider discussion on this. Will raise this in the maintainer's meeting.
- Log SDK -
  - Specs Compliant in new release
  - Tom: Doing a cleanup for LogName in the next release. Even the deprecated warning can break the build. So the existing users may have to disable the warning.
- Demo micro-service application
  - App Dynamics team are interested to integrate the existing Apache instrumentation with the demo service, and they are open to create a new C++ service for this.
- Cmake version:

# May 9th 2022

## Attendee

- Lalit Kumar Bhasin (Microsoft)
- Ehsan
- Tom Tan (Microsoft)

- Support DLL building and calling from other languages.
  - Need more discussion.
  - Check with Mats Taraldsvik if he can join the subsequent community meetings for more discussions.
- Metrics Alpha release.

- End to End pipeline is working, so we can plan for the alpha release.
- Tom For next release.
- Log Data Model /Log SDK The specs are stable.
  - Owent has raised a PR for this. Need to review this, and see if this can be included in next release.
- Demo micro-service application
  - New service / replacing existing service. Email server service.
  - Hosting new/existing service through otel-cpp instrumented nginx/apache server.
  - Let python service make a call to a C++ library instrumented using otel-cpp.

# May 4th 2022

## Attendee

- Lalit Kumar Bhasin (Microsoft)
- Ehsan
- Tom Tan (Microsoft)
- Debajit (Cisco)
- Ajay Nagariya
- Siim Kallas (Splunk)

- Ajay Discussion on new nginx module.
  - Debajit presented the new nginx module developed by their team.
  - Siim kallas there are customers using the existing module, and important to deprecate it accordingly. Also important to have feature parity. Also important to support existing directives.
  - Lalit Good to have migration document.
  - Ehsan Performance issue observed? More thorough testing required as per Debiajit.
- Metrics Implementation:
  - Target alpha release for Mid of May.
- Support DLL building and calling from other languages.
  - Need more discussion.
- Log Data Model /Log SDK The specs are stable.
  - Not sufficient bandwidth to make the current experimental implementation compliant with SDK.

- This will be blocker as we wont' be able to upgrade metrics proto files without this.
- Concurrent OTEL HTTP Exporter:
- Ehsan gcc-11 (without flag) compilation issue. (ubuntu-latest).

# Apr 25th 2022

## Attendee

- Tom Tan (Microsoft)
- Ehsan

# Agenda

- CI test run for metrics.
  - o File an issue on this.

# Apr 20th 2022

## Attendee

- Tom Tan (Microsoft)
- Ehsan
- Debajit

## Agenda

• Support DLL building and calling from other languages.

# Apr 11th 2022

## Attendee

- Tom Tan (Microsoft)
- Ehsan

- \* Log Data Model The specs are stable. Review our existing api/sdk implementation if we are compliant. Whether we need to be backward compatible. Can be further discussed as part of Review logger Implementation for the stable log data model. · Issue #1291 · open-telemetry/opentelemetry-cpp (github.com)
  - Instrumentation stability of the otel-cpp-contrib. Add separate section in the README.md for contrib, and the owners of those components can put the status along with version, otel-cpp version.
    - [Lalit] To create a table as separate section in README.md, and communicate to the owners to populate required information.
  - [Debajit] Contrib repo How to do tagging, and adding the CI.
    - [Lalit] For tagging, raise a PR. For CI, go through the existing CI.
    - [Debajit] Stats on number of downloads.
      - [Lalit] Not supported without using new repo.
  - Concurrent OTEL HTTP Exporter.
    - o PR is on review.
    - [Ehsan] Good to have an end to end test part of the CI which can test such significant changes.
    - [Debajit] owent has some more changes in span-processor, we need to track the status of ongoing callbacks.
    - [Tom] Good to have the async functionality under feature flag, and the existing sync api is not affected.
    - [Tom] whether the threads created by SDK interfere with application level thread pool.
    - [Lalit] Let's have separate Batch processor for Async.
  - Metrics Implementation
    - [Lalit] Will be working on Async Aggregation.
    - [Ehsan] Will be working on Exporter, ostream, and Prometheus exporter.
      - Ostream is done.
      - Premetheus exporter is going on.
  - Tom: Decide next week meeting if we plan to have 1.2.1v/1.3.0
    - [Tom] If metrics SDK implementation is completed by March end, we can have a new release by first of April.
    - [Tom]- Will have release this week.
  - Ehsan: Benchmark is getting generated.
    - [Ehsan] Tested on MacOS. Benchmark tests are not consistent ( slower ).
      - The failures are more during PR merge
      - To check if we can run benchmark periodically instead of as part of CI.
      - Tested with cron though results are comparatively better, still spikes are seen. Better to disable the failure.

- [Lalit] If we can use some hosted runners for this. To check this further.
- Meeting Time:
  - Changes the meeting time to 1pm PST, and 9:30am PST.
  - [Tom] prepone Wed meeting to 9.05am PST, as conflict with Log SIG meeting at 10am.

# Apr 6th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan (Microsoft)
- Debajit (Cisco)

- \* Log Data Model The specs are stable. Review our existing api/sdk implementation if we are compliant. Whether we need to be backward compatible. Can be further discussed as part of Review logger Implementation for the stable log data model. · Issue #1291 · open-telemetry/opentelemetry-cpp (github.com)
  - Instrumentation stability of the otel-cpp-contrib. Add separate section in the README.md for contrib, and the owners of those components can put the status along with version, otel-cpp version.
    - [Lalit] To create a table as separate section in README.md, and communicate to the owners to populate required information.
  - [Debajit] Contrib repo How to do tagging, and adding the CI.
    - [Lalit] For tagging, raise a PR. For CI, go through the existing CI.
    - [Debajit] Stats on number of downloads.
      - [Lalit] Not supported without using new repo.
  - Concurrent OTEL HTTP Exporter.
    - o PR is on review.
    - [Ehsan] Good to have an end to end test part of the CI which can test such significant changes.
    - [Debajit] owent has some more changes in span-processor, we need to track the status of ongoing callbacks.

- [Tom] Good to have the async functionality under feature flag, and the existing sync api is not affected.
- [Tom] whether the threads created by SDK interfere with application level thread pool.
- [Lalit] Let's have separate Batch processor for Async.
- Metrics Implementation
  - o [Lalit] Will be working on Async Aggregation.
  - o [Ehsan] Will be working on Exporter, ostream, and Prometheus exporter.
- Tom: Decide next week meeting if we plan to have 1.2.1v/1.3.0
  - [Tom] If metrics SDK implementation is completed by March end, we can have a new release by first of April.
  - o [Tom]- Will have release this week.
- Ehsan: Benchmark is getting generated.
  - [Ehsan] Tested on MacOS. Benchmark tests are not consistent ( slower ).
    - The failures are more during PR merge
    - To check if we can run benchmark periodically instead of as part of CI.
    - Tested with cron though results are comparatively better, still spikes are seen. Better to disable the failure.
    - [Lalit] If we can use some hosted runners for this. To check this further.
- Meeting Time:
  - o Changes the meeting time to 1pm PST, and 9:30am PST.
  - [Tom] prepone Wed meeting to 9.05am PST, as conflict with Log SIG meeting at 10am.

# Mar 28th 2022

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan (Microsoft)

## Agenda

\* Log Data Model - The specs is stable. Review our existing api/sdk implementation if we compliant. Whether we need to be backward compatible. Can be further discussed as part of Review logger Implementation for the stable log data model. · Issue #1291 · open-telemetry/opentelemetry-cpp (github.com)

- Instrumentation stability of the otel-cpp-contrib. Add separate section in the README.md for contrib, and the owners of those components can put the status along with version, otel-cpp version.
  - [Lalit] To create a table as separate section in README.md, and communicate to the owners to populate required information.
- [Debajit] Contrib repo How to do tagging, and adding the CI.
  - o [Lalit] For tagging, raise a PR. For CI, go through the existing CI.
  - [Debajit] Stats on number of downloads.
    - [Lalit] Not supported without using new repo.
- Concurrent OTEL HTTP Exporter.
  - PR is on review.
  - [Ehsan] Good to have an end to end test part of the CI which can test such significant changes.
  - [Debajit] owent has some more changes in span-processor, we need to track the status of ongoing callbacks.
  - [Tom] Good to have the async functionality under feature flag, and the existing sync api is not affected.
- Metrics Implementation
  - [Lalit] Raised PR for sync metric collection, need to be reviewed once collectoror PR is merged. Main changes are in /sync\_metric\_storage.h

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- Tom: Decide next week meeting if we plan to have 1.2.1v
  - [Tom] If metrics SDK implementation is completed by March end, we can have a new release by first of April.
- Ehsan: Benchmark is getting generated.
  - [Ehsan] Tested on MacOS. Benchmark tests are not consistent ( slower ).
    - The failures are more during PR merge
    - To check if we can run benchmark periodically instead of as part of CI.
    - Tested with cron though results are comparatively better, still spikes are seen. Better to disable the failure.
    - [Lalit] If we can use some hosted runners for this. To check this further.
- Meeting Time:
  - Changes the meeting time to 1pm PST, and 9:30am PST.
  - [Tom] prepone Wed meeting to 9.05am PST, as conflict with Log SIG meeting at 10am.

## Mar 23th 2022

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan (Microsoft)
- Debajit (Cisco)
- Ajay (Cisco)

- [Debajit] Contrib repo How to do tagging, and adding the CI.
  - [Lalit] For tagging, raise a PR. For CI, go through the existing CI.
  - [Debajit] Stats on number of downloads.
- Concurrent OTEL HTTP Exporter.
  - o PR is on review.
  - [Ehsan] Good to have an end to end test part of the CI which can test such significant changes.
  - [Debajit] owent has some more changes in span-processor, we need to track the status of ongoing callbacks.
  - [Tom] Good to have the async functionality under feature flag, and the existing sync api is not affected.
- Metrics Implementation
  - [Ehsan] Exemplar ( will need couple of more PRs).
  - [Lalit] Raised PR for sync metric collection, need to be reviewed once collectoror PR is merged. Main changes are in /sync\_metric\_storage.h
- Tom: Decide next week meeting if we plan to have 1.2.1v
  - [Tom] If metrics SDK implementation is completed by March end, we can have a new release by first of April.
- Ehsan: Benchmark is getting generated.
  - o [Ehsan] Tested on MacOS. Benchmark tests are not consistent ( slower ).
    - The failures are more during PR merge
    - To check if we can run benchmark periodically instead of as part of CI.
    - Tested with cron though results are comparatively better, still spikes are seen. Better to disable the failure.
- Meeting Time:
  - Changes the meeting time to 1pm PST, and 9:30am PST.
  - [Tom] prepone Wed meeting to 9.05am PST, as conflict with Log SIG meeting at 10am.

• Approver - owent as the approver.

## Mar 14th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan

## Agenda

- Apache/httpd plugin from Cisco/AppDynamics team Done.
- Concurrent OTEL HTTP Exporter.
  - o PR is on review.
  - [Ehsan] Good to have an end to end test part of the CI which can test such significant changes.
- Metrics Implementation
  - [Ehsan] Exemplar ( will need couple of more PRs).
  - [Lalit] Raised PR for sync metric collection, need to be reviewed once collectoror PR is merged. Main changes are in /sync\_metric\_storage.h
- Tom: Decide next week meeting if we plan to have 1.2.1v
  - [Tom] If metrics SDK implementation is completed by March end, we can have a new release by first of April.
- Ehsan: Benchmark is getting generated.
  - o [Ehsan] Tested on MacOS. Benchmark tests are not consistent ( slower ).
    - The failures are more during PR merge
    - To check if we can run benchmark periodically instead of as part of CI.
- Meeting Time:
  - Changes the meeting time to 1pm PST.

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• Approver - owent as the approver.

## Mar 9th 2022

## Attendee

Lalit Kumar Bhasin ( Microsoft)

- Ehsan
- Ajay Nagariya (Cisco)
- Lakshya Gaba (Cisco)
- Debajit Das (Cisco)
- Kumar Pratyush (Cisco)

- Apache/httpd plugin from Cisco/AppDynamics team
  - The existing apache instrumentation in contrib repo is only for mod proxy.
  - CISCO wants to contribute another module which intercepts traffic for other apache modules ( and this is configurable).
  - [Lalit] Ajay to discuss with owner of existing module at more technical/code level, and see if new module can co-exists or supplement/replacement for existing module.
  - [Ajay] Suggestion to remove the existing module with the new module developed by Cisco.
  - [Debajit] Existing module is only for mod\_proxy. The new module implementation is extesible, and reusable for Nginx.
- Concurrent OTEL HTTP Exporter.
  - Good to have this PR merged once it is compliant to the specs.
  - If we can make it reusable for Zipkin within minimal code duplication.
  - Concurrent tests If we can mock the tests for this?
- Metrics Implementation
  - Aggregation Storage -
    - Measurement Consumption (To raise PR 14th Feb)
    - Metrics Collection (To raise PR 18th Feb)
- Tom: Decide next week meeting if we plan to have 1.2.1v
  - No major changes, we can target next release for second week of March.
- Ehsan: Benchmark is getting generated.
  - We can try if MacOS virtual machines have more stable benchmark numbers.
  - [Ehsan] It's getting more stabilised, and we can observer for some more time.
- Lalit: Discussions ongoing on whether maintainers need to be admin.
- Lalit: Progress in Logs SDK, and good to see it after it becomes stable.

# Feb 28th 2022

## Attendee

Lalit Kumar Bhasin ( Microsoft)

- Ehsan
- Tom Tan ( Microsoft )

- Apache/httpd plugin from Cisco/AppDynamics team
  - The existing apache instrumentation in contrib repo is only for mod\_proxy.
  - CISCO wants to contribute another module which intercepts traffic for other apache modules ( and this is configurable).
  - [Lalit] Ajay to discuss with owner of existing module at more technical/code level, and see if new module can co-exists or supplement/replacement for existing module.
- Dependantbot
  - [Ehsan] We can include this bot to raise PR to update new versions for existing actions used in the CI.
- Concurrent OTEL HTTP Exporter.
  - Good to have this PR merged once it is compliant to the specs.
  - o If we can make it reusable for Zipkin within minimal code duplication.
  - Concurrent tests If we can mock the tests for this?
- Metrics Implementation
  - Aggregation Storage -
    - Measurement Consumption (To raise PR 14th Feb)
    - Metrics Collection (To raise PR 18th Feb)
- Tom: Decide next week meeting if we plan to have 1.2.1v
  - No major changes, we can target next release for second week of March.
- Ehsan: Benchmark is getting generated.
  - We can try if MacOS virtual machines have more stable benchmark numbers.
  - [Ehsan] It's getting more stabilised, and we can observer for some more time.
- Lalit: Discussions ongoing on whether maintainers need to be admin.

## Feb 23th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )
- Ajay Nagariya (Cisco)
- Severin Neumann (Cisco)

- Lakshay Gaba (Cisco)
- Pratyush Kumar (Cisco)

- Apache/httpd plugin from Cisco/AppDynamics team
  - The existing apache instrumentation in contrib repo is only for mod\_proxy.
  - CISCO wants to contribute another module which intercepts traffic for other apache modules ( and this is configurable).
  - [Lalit] Ajay to discuss with owner of existing module at more technical/code level, and see if new module can co-exists or supplement/replacement for existing module.
- Dependabot
  - [Ehsan] We can include this bot to raise PR to update new versions for existing actions used in the CI.
- Concurrent OTEL HTTP Exporter.
  - Good to have this PR merged once it is compliant to the specs.
  - If we can make it reusable for Zipkin within minimal code duplication.
  - Concurrent tests If we can mock the tests for this?
- Metrics Implementation
  - Aggregation Storage -
    - Measurement Consumption (To raise PR 14th Feb)
    - Metrics Collection (To raise PR 18th Feb)
- Tom: Decide next week meeting if we plan to have 1.2.1v
  - No major changes, we can target next release for second week of March.
- Ehsan: gh-pages are active, and benchmark is getting generated.
  - We can try if MacOS virtual machines have more stable benchmark numbers.

## Feb 14th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

- Metrics Implementation
  - Aggregation Storage -
    - Measurement Consumption (To raise PR 14th Feb)
    - Metrics Collection (To raise PR 18th Feb)
- Tom: Decide next week meeting if we plan to have 1.2.1v
- Ehsan: gh-pages are active, and benchmark is getting generated.
  - We can try if MacOS virtual machines have more stable benchmark numbers.

# Feb 9th 2022

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

- Returning shared\_ptr for Span.
  - [Lalit] to send the test code to Ceph team to test further. To send the code this week.
- Metrics Implementation:
  - LALIT Prepare architecture document.
    - To add more description on the flow.
- [Tom] January release v1.2.0, with breaking changes for Logger SDK.
  - o Completed.
- DLL Changes Not considering it based on current implementation.
- gh-pages are not active Lalit to look into this.
- [Lalit]- Prepone Monday meeting at 1pm PT.
  - [Lalit] to change the meeting invite for this.
- [Tom] Benchmark not stable for now.
  - [Ehsan]: Observer for some time to see the tests deviating. And then if required to disable those tests. Or switch to macOS virtual machines.

# Jan 31st 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

## Agenda

- Returning shared\_ptr for Span.
  - [Lalit] to send the test code to Ceph team to test further. To send the code this week.
- Metrics Implementation:
  - LALIT Prepare architecture document. To be discussed in the next community meeting.
- [Tom] January release v1.2.0, with breaking changes for Logger SDK.
- DLL Changes Not considering it based on current implementation.
- gh-pages are not active Lalit to look into this.
- [Lalit]- Prepone Monday meeting at 1pm PT.
  - o [Lalit] to change the meeting invite for this.

# Jan 26th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

- Returning shared\_ptr for Span.
  - Lalit to send the test code to Ceph team to test further.
- Metrics Implementation:
  - LALIT Prepare architecture document. To be discussed in the next community meeting.
- [Tom] January release v1.2.0, with breaking changes for Logger SDK.
- DLL Changes Not considering it based on current implementation.
- gh-pages are not active Lalit to look into this.
- [Lalit]- Prepone Monday meeting at 1pm PT.

## Jan 17th 2022

Holiday in the USA.

# Jan 12th 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

- Returning shared\_ptr for Span.
  - Ceph team had some performance issue with shared\_ptr. Need to check how they tested it.
  - Approach
    - Tracer::StartSpanNonShared new method to return unique\_ptr. And this shouldn't be usable in the Tracer::WithActiveSpan() method.
- DLL Changes

- With current approach, this can't be included in otel-cpp. Need to find more cleaner solution. Also more interest/ask for this feature.
- Next Release
  - Let's plan for Jan last week to incorporate Metrics and Logger changes.

# Jan 3rd 2022

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan ( Microsoft )

## Agenda

- [Meeting reschedule] To discuss in the maintainer's meeting, and offline with reiley. An hour earlier from the current schedule, or if both the meetings can be at 10am PST.
- [DLL changes] No plan to include these changes unless there is more and/or better way to include these changes instead of <include> a source file.
- Benchmark results as part of CI. Lalit to create a issue for this.

## Dec 20 2021

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Vasi (AWS)
- Tom Tan ( Microsoft )

- [Lalit] Review DLL changes mentioned here : <u>Support building DLL for windows · Issue</u> #1105 · open-telemetry/opentelemetry-cpp (github.com)
- [Vasi] Aggregation support status.
- [Ehsan] -> Protect export and shutdown simultaneous calls.
  - [Lalit] Will create issue for this.
- [Tom] New patch release today.

## Dec 15 2021

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Vasi (AWS)
- Tom Tan ( Microsoft )

- [Lalit] Dec release
  - No breaking changes, good to increment patch octet.
  - o Tom Will take care of new release
- [Lalit] Metrics update
  - View implementation targeting to be merged this week.
  - Aggregation impl target for ready for review this week.
- [Vasi] Status of current implementation for prometheus exporter. Alolita wanted to check on the current update.
  - Update PR relative reference to third party release
    - Investigate to see if it is necessary/can be upgraded
  - Suggested to better work on current implementation of metrics
    - Existing exporter is depreciated as its implemented based on old specs
    - Start with issues that are closely related, to understand codebase. To contribute.
    - Any updates about the projected release/updates for implementation here
- [Lalit] Meeting for next two weeks.
  - o [Tom] We can meet on 20th Dec, and then cancel for last week.

# Dec 6 2021

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan
- Tom Tan (Microsoft)

# Agenda

- Lalit: Windows DLL Support for otel-cpp Created an issue, and looking for the interest from the community to provide the support.
  - o To document, and no plan for support this for now.
- Metrics SDK View / Aggregation Pull in Josh or Cijo for reviewing the metrics specs part.
- Tom: December release ?
  - Revisit it next week, and if decided we can plan for end of next week.(17th Dec).
- Lalit: Auto-scan: Should we add the tags which it should skip bug, help-required, good-first-easy.
  - o Tom: Let's rely on "'do-not-stale" label.
- Ehsan: Add more tests for Jaeger exporter. Currently it has only recordable.
  - o Lalit: To create the github issue.
- Ehsan : Support for gRPC protocol for Jaeger exporter ?
  - Lalit: Specs needs one of the support UDP, HTTP or gRPC. Support can be added if there is interest by community.

## Dec 1 2021

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan

#### **Agenda**

• Windows DLL Support for otel-cpp - Created an issue, and looking for the interest from community to provide the support.

- Metrics SDK View / Aggregation Lalit to finish this week to unblock other work on metrics.
- Lalit to merge the Dockerfile, and Ehsan to take this forward.

# Nov 22 2021

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan (Microsoft)
- Ehsan

### Agenda

- Improvements for Logs.
  - Well defined ownership for exporter and processor
  - Resource propagation
  - o Instrumentation Library support.
  - Multiple logger (?).
- Metrics SDK milestone (<u>Metrics SDK prototype Milestone (github.com</u>))
  - More description to define the scope of these tasks within this milestone.
- Ehsan to create the github issue for new membership.
- Enrich CI to test with internal STL, std:: STL, abseil. this will add to the current CI pipeline time. So I need to figure on improvements using cache.
  - Ehsan It should be possible to build on ARM using docker. Will share the code.
- [Lalit] <u>Need fine-grained HAVE\_CPP\_STDLIB · Issue #1071 · open-telemetry/opentelemetry-cpp (github.com)</u> To test the scenario.
- [Ehsan] Providing a container image to build the api/sdk.
  - Lalit to complete the PR for Dockerfile.

## Nov 17 2021

## Attendee

• Lalit Kumar Bhasin ( Microsoft)

#### **Agenda**

None

## Nov 8 2021

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan (Microsoft)

### Agenda:

- **[Tom]** Add log support to our OTLP example?
- **[Tom]** Release plan this month?
  - We can plan for next week (to have one month cadence), and bump minor versions as there is OTLP Log Exporter, Metrics API and metrics breaking changes.
- **[Tom]** Create a bot to automatically close old issues.

#### Issues:

• <u>Different-named tracers got the same tracer\_id if they have overlapped spans in a single thread. · Issue #1054 · open-telemetry/opentelemetry-cpp (github.com)</u> - Change documentation for Span::WithActiveSpan() to reflect what active means. [Lalit]

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# Nov 3 2021

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan (Microsoft)
- Ehsan

- [Lalit] Release summary to provide the versions of dependencies used.
- [Ehsan] Googletest not usable from custom path.
  - [Tom] Change the order of search for googletest search the user installed, followed by submodule.
  - [Ehsan] Need to check once again from non-system path, and confirm if that works.

- [Lalit] Create an issue for downloading opentelemetry-proto during build ( check for specific cmake version ). Ehsan will raise a PR for it.
- [Lalit] Metrics API PR is ready for review.
- [Ehsan] PR for prometheus on review.
- [Tom] OTLP exporter is missing in vcpkg installation.
- [Lalit] Document that vcpkg and conan packages are there, but not officially released by OpenTelemetry.

# Oct 25 2021

### Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan ( Microsoft)

### Agenda:

- Metrics API Implementation:
  - Change the metrics folder name for existing implementation.
     ..../metrics\_legacy/..
     namespace metrics {
     }
  - No changes expected in future for new metrics API.
     namespace metrics {
     }
- OTLP log exporter.
- Current SIG Status:

https://docs.google.com/document/d/1aR44ErKLPfJLBQBiDIolWs8vM2WBpjGxIi5siGj9CcY/edit#

# Oct 20 2021

## Attendee

- Lalit Kumar Bhasin ( Microsoft)
- Ehsan (oblivion)

Ahmad

### Agenda:

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### Agenda:

Next trace release v1.0.1 / v1.1.0 / v1.1.0-alpha ?

## Oct 11 2021

### Attendee

• Lalit Kumar Bhasin ( Microsoft)

### Agenda:

• There were not enough participants.

## Oct 6 2021

### Attendee

- Tom Tan (Microsoft)
- Lalit Kumar Bhasin ( Microsoft)

- [Tom]: Next RC release: We can change the cadence to one month now that we had the first stable release. Tom will take care of
- [Tom]: Release for Contrib. Probably have a README.md update with consolidated information on release status of each component, otel-cpp release. Tom will follow up on this.
- [Lalit] Deletion of stale branches. Lalit will check all other branches, and delete. If required, move it to our clone repo.
- [Lalit] Release announcement in the medium. We will create an article, and get it reviewed for GC. Lalit need to take care of this.
- [Lalit] Need to add information on error/exception handling in below survey:
   https://docs.google.com/document/d/1J09cg5JXO\_D2kL4cYYY0mug5G5bCouO8Opdmr

   8i maQ/edit. Lalit will add the information, and Tom to review.
- Fluentd exporter To be reviewed. Tom will be reviewing.

Metrics work items: Lalit to add estimates for them. And ask for more contributors.

# Sept 27 2021

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan (Microsoft)

### Agenda:

- Metrics API prototype :
  - Metrics API/SDK prototype Milestone (github.com)
    - Tom : estimate missing for individual work items.
    - Lalit: We can add estimate in terms of complexity (t shirt sizing S, M, L).
    - Rough estimate on the milestone date.
    - Existing implementation of Metrics under feature flag.- Let's create a github issue to remove old metrics implementation, and have an announcement in the slack channel.
- Clean up branches in otel-c++ repo.
  - o Tom: No permission to delete the branch.
- Instructions to run and validate program on Mac

# Sept 22 2021:

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft) Won't be joining meeting today
- Tom Tan ( Microsoft ) Won't be joining the meeting today.

### Agenda:

No meeting was held today.

# Sept 16 2021 (1.0.0 Release Planning):

#### Attendee:

• Lalit Lalit Kumar Bhasin ( Microsoft)

• Tom Tan ( Microsoft )

### Agenda:

- TC Review completed by Josh, and has given final approval : [Process] TC Review of 1.0 Trace · Issue #946 · open-telemetry/opentelemetry-cpp (github.com)
- Tom: Remove OPENTELEMETRY\_SDK\_ABI\_VERSION as we don't use it.
- Tom: In Changelog, change description for PR #970 in API and SDK sections.
- Lalit: Will go through the docs folder to see if any changes are required.
- Tom: README.md: extra space in the raw markdown before N/A.
- Tom: CHANGELOG.md: Change the release date.

# Sept 13 2021

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan ( Microsoft )

### Agenda:

- <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/971">https://github.com/open-telemetry/opentelemetry-cpp/issues/971</a> (OTLP Environment variables do not match specification #971)
  - o Tom For OTLP, let us disable env variables through NO\_GETENV macro. Once we add the compliant env variables, we can enable the flag.
  - Lalit Let's break the env variables now.
- Logging API in specs : Not much update in Specs.
  - Fluentd exporter for traces and logs (contrib)
- Metrics API implementation.
  - Lalit: Asked for more long term contributors for metric api implementation from Community.

# Sept 8 2021

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan ( Microsoft )
- Steve Madden

#### Agenda:

<a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/972">https://github.com/open-telemetry/opentelemetry-cpp/issues/972</a> ( detail namespace should be kept compatible or denoted as internal-only usage )

- Tom We can add this information in both header and the Versioning document ( separate bullet point in Release section ).
- <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/971">https://github.com/open-telemetry/opentelemetry-cpp/issues/971</a> (OTLP Environment variables do not match specification #971)
  - Tom Put all env variable parsing logic under the feature-flag, and disable by default.
  - Lalit This would be the breaking change. We can instead add this in the otlp exporter documentation.

#### •

# Aug 30 2021

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft)
- Tom Tan ( Microsoft )

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### Agenda:

- https://github.com/open-telemetry/opentelemetry-cpp/issues/955
  - We are going to change SpanContext to full Context of the parent Span.
- Add opentelementry-cpp in the official vcpkg repo after 1.0.0

# Aug 25 2021

#### Attendee:

- Tom Tan( Microsoft )
- Josh Suereth (Google)

### Agenda:

Reviewed the TODO items for 1.0, thanks Josh.
 [Process] TC Review of 1.0 Trace · Issue #946 · open-telemetry/opentelemetry-cpp · GitHub

# Aug 11 2021

#### Attendee:

- Lalit Bhasin (Microsoft)
- Tom Tan ( Microsoft )

Josh Suereth (Google)

### Agenda:

- [Lalit] <u>v1.0.0-rc4</u> released last week, and proposed as review candidate for otel TC.
   v1.0.0 milestone : <a href="https://github.com/open-telemetry/opentelemetry-cpp/milestone/9">https://github.com/open-telemetry/opentelemetry-cpp/milestone/9</a>
- TC Review Notes
  - Specification 1.0.0 is the target
  - Bazel is not part of 1.0 (bazel support should be documented as experimental for now)
    - E.g. we need to fix this documentation:

      <a href="https://github.com/open-telemetry/opentelemetry-cpp/blob/main/INSTALL.">https://github.com/open-telemetry/opentelemetry-cpp/blob/main/INSTALL.</a>
      md#building-opentelemetry-cpp
  - Logging + Metrics should be marked experimental and aren't ready for eval.
  - Compliance Matrix is up-to-date
  - Adding comments to helper methods about "internal use only"

# Aug 02 2021

#### Attendee:

No meeting was held today.

#### Agenda:

- [Lalit] Proposal for making Tom Tan as a maintainer for this project.
   https://github.com/open-telemetry/opentelemetry-cpp/pull/936

   If there are any concerns, raise it in the community meeting, or in PR comment.
   [Tom] Thanks Lalit. Reiley has approved the PR.
- 3. [Tom] Status of new RC release?

# July 28 2021

### Attendee:

- Lalit Bhasin( Microsoft )
- Tom Tan (Microsoft)

- [Lalit] Meeting schedule we are not going to change it, as discussed with Reiley.
- 2. [Lalit] 1.0.0 Milestone. This is planned for 15th Aug.

[Tom] - We are missing lots of env variable. But shouldn't be a blocker.

[Lalit] -> Error logging, trace schema convention.

[Lalit] -> Will have 1.0.0.rc5 before final release

[Lalit[ -> 1st Aug, we will give the new tag to TC for auditing.

3. Vcpkg -> we would like to focus of availability of vcpkg on official registry as priority. And after we can look into build improvement.

# July 19 2021

### Attendee:

- Max Golovanov ( Microsoft )
- Tom Tan (Microsoft)

[Max]: short meeting to discuss build issues / Bazel build. Stop-gap / workaround for build ALL, recipe for invoking CMake from Bazel: <a href="https://github.com/bazelbuild/rules foreign cc">https://github.com/bazelbuild/rules foreign cc</a> - Build rules for interfacing with "foreign" (non-Bazel) build systems (CMake, configure-make, GNU Make, boost, ninja).

[Tom]: we probably are going to declare that our bazel support is in preview stage, and will not block our 1.0. Contributions are welcome.

# July 14 2021

#### Attendee:

- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)

- Making Monday's meeting the same time as Wednesday for some time.
- Error Handler PR: https://github.com/open-telemetry/opentelemetry-cpp/pull/877
- Extract foo\_library into a common lib? Tom will have a look into this.
- Grpc version upgrade Use conditional selection of correct grpc version to build based on the g++ compiler used during the build. - Lalit will look into this

# July 5th 2021

No meeting was held, as it was a holiday in the USA.

## June 30 2021

#### Attendee:

- Lalit Bhasin ( Microsoft )
- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)

## Agenda:

- gRPC upgrade v1.34.0 -> v.1.38.1
  - The old gRPC do not support legacy compilers and bazel 4.
  - gRPC needs gcc 4.9+(https://grpc.io/docs/), and abseil needs gcc 5.1+ (https://abseil.io/docs/cpp/platforms/platforms).
  - Opentelemetry-cpp supports gcc 4.8+
  - Asked for support from Bazel expert.
  - Max Support gcc4.9 for opentelemetry-cpp release, Most of the latest linux distributions are on gcc8/9. Link to RedHat support matrix:

https://access.redhat.com/solutions/19458

Should be able to declare that min supported is gcc-4.9.

How to install gcc-8.x on RHEL 7.x:

https://developers.redhat.com/HW/gcc-RHEL-7

**Tom** - If we can print the error if older gcc compiler is detected.

- Bazel support completeness for GA.
  - Lalit: Have been discussing need for bazel expert in Community meeting.
  - Max As long as most of the mandatory components are building with bazel, shouldn't be a blocker.

## June 21 2021

#### Attendee:

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)

- Discussed all new open issues
- Discussed all recent PRs
- No other topics

## June 16 2021

#### Attendee:

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)
- Lalit Bhasin (Microsoft)

### Agenda:

- API change for Span and Baggage for removal of `shared\_ptr`
  - [Lalit] No improvement after moving to unique\_ptr.
  - o [Max] If there is no performance benefit, let's park it for now and see later.
  - [Tom] Can we check memory usage.
  - [Max[ Later if customer required, we can provide assignment operator to return Span object value.
  - [Lalit] No benchmark improvement for Baggage propagation too using PIMP.
  - o [Max] Contribute for benchmark for context propagation across threads.
  - [Tom] Can we put benchmarks and tests separate dirs? Single command to run all the tests, can we run similarly for benchmarks too.
  - [Max] As per Josh, it's easy for bazel if we have them in the same dir, but recommended to have different files for benchmark and google tests.

## June 2 2021

#### Attendee:

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)

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### Agenda:

Remove shared\_ptr usage from all the hot-paths within API's surface.
 <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/828">https://github.com/open-telemetry/opentelemetry-cpp/issues/828</a>

[Max]: locking still required, need the actual proof of perf win.

[Tom]: this change breaks the API.

Can we extend the API instead of breaking it?

[Max]: Deliver incremental instead of breaking change.

[Max]: how to avoid memcpy? Streaming exporter requires visitor pattern on the OwnedAttributes. Serialization on user thread,

[Max]: what's the concrete exporter which could benefit from this? Interested to learn the real scenario.

## June 2 2021

#### Attendee:

- Lalit Kumar Bhasin ( Microsoft )
- Max Golovanov ( Microsoft )
- Tomasz Rojek (Splunk)
- Tom Tan (Microsoft)

- •
- [Max]: questions on variant PR:
  - Change to GTest cache variable I can remove that (until we sort it out).
  - const char \* is, unfortunately, needed on API surface to stay compat w/C++17
  - ResourceAttribute uses OwnedAttributeValue → why we also need const char \*
     on that.
  - once merged, I'll set up vs2015 build loop with that.
  - [Johannes] At common::AttributeValue, we can use const char \* as we don;t own the pointer.
  - [Max] We can refactor Resource attributes to use common::AttributeValue, so that we don't need to use `const char \*` at OwnedAttributeValue. Max would look into it.
  - o [Johannes] We should avoid maintaining both abseil and mpark variant.
- 1.0,0 RC Milestone <a href="https://github.com/open-telemetry/opentelemetry-cpp/milestone/8">https://github.com/open-telemetry-cpp/milestone/8</a>
  - [Lalit] Plan to have RC this/next week. Will move the issues for GA under GA milestone
- [Max] Resource ABI compliance it's part of SDK and we don't support ABI stability for it. Max would clarify the use-case from the customer.
- [Max] We should be using absl::span as it's a more complete implementation.

# May 24 2021

#### Attendee:

- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)

## Agenda:

- [Max]: removing MPark variant (PR) :
  - make **absl::variant** default; local header-only snapshot of Abseil (OTABSL\_\*).
  - optimization option to reuse Abseil that comes with gRPC?
  - adding C-string (const char \*) on the API surface. But not adding to OwnedAttributeValue.
  - follow-up: add build loop for vs2015; add build loop [vs2017|vs2019]+stdlib.
  - remove notion of Boost license (all now is Apache License v2)
    - o [Tom] Support VS 2022?
    - [Max] Expect some more warning. We'll fix all the warnings for customers with converring warning as error.
    - o [Max] We still support VS2015 update 2, as we support GCC 4.8.
    - o [Max] VS2017 has variant, but no span. There is gsl span.
    - [Max] Built into DLL, version 1.1, have to support VS2015, absell variant, after GA to support dynamic loading.
    - o [Tom] Was the ask to support dynamic loading for Linux or Windows?
    - o [Max] The ask is for Linux.
    - [Tom] Release binaries will force us to deal with ABI backward compatibility.
    - o [Tom] Add these discussions to the PR comment.
- [Tom]: add license check to CI?
  - o [Max] Format-spdx.
  - o [Max] License is covered by the license file under the root folder.

## May 19 2021

### Attendee:

- Max Golovanov (Microsoft)
- Anthony Mirabella (AWS)
- Tom Tan (Microsoft)
- Lalit Bhasin (Microsoft)
- Tomasz Rojek (Splunk)

- [Max]: Assistance with propagator validation.
  - Max For grpc client-server example, if we can create a templatized code which can be used.

o gRPC/w3c examples, and some validation:

Issue: <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/530">https://github.com/open-telemetry/opentelemetry-cpp/issues/530</a>

PR: <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/729">https://github.com/open-telemetry/opentelemetry-cpp/pull/729</a>

- [Max]: Please provide feedback on PR: <u>https://github.com/open-telemetry/opentelemetry-cpp/pull/714</u> - addressed previous comments from Evgeny. Naming we discussed in the linked issue.
- [Tom]: Build Jaeger with Zipkin in CI?
  - Yes, we should build both Jaeger and Zipkin in CI.
  - o [Lalit] For CI build of linux
    - [Max] github cache, Docker image, ninja over cmake
- [Lalit]: Separate cmake build option for api build.
  - Not sure how to do it for bazel.
- [Lalit]: Spec Validations issues.

## May 10 2021

#### Attendee:

- Evgeny (Bloomberg)
- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)

- [Evgeny]
  - sdk simplification/merge round #2
    - [Evgeny] Export should not be part of the SDK target. We'll have 4 targets after the refactor, API, SDK, ext, exporter.
    - [Max] Use ninja to improve build time.
    - [Evgeny] Remove all existing targets, one target for each folder. Including both headers and compile artifacts. Do the same for ext. Merging exporters into 1 lib?
    - [Tom] Can we keep the current targets and create combined targets?
    - [Evgeny] Rely on the linker to do the optimization.
    - [Max] dynamic loading could need security review.
  - cmake library install targets
    - <a href="https://github.com/open-telemetry/opentelemetry-cpp/blob/main/api/CMak">https://github.com/open-telemetry/opentelemetry-cpp/blob/main/api/CMak</a> eLists.txt#L9
    - <a href="https://github.com/open-telemetry/opentelemetry-cpp/blob/main/api/CMak">https://github.com/open-telemetry/opentelemetry-cpp/blob/main/api/CMak</a> eLists.txt#L16
    - Evgeny will raise an issue to discuss this
  - Should contrib be buildable independently
    - [Evgeny] Is contrib repo required to be overlay on the main repo?
    - [Max] Until the main library is stable, will propose the structure of exporter.
    - [Tom] Contrib repo is for customer code which consumes the OTel package.

- [Max] Main and contrib repro will be built into different folders anyway.
  Could run main tests easily. Impose the same structure in both main and contrib.
- [Tom] Add WITH\_STL and WITH\_ABSEIL to CI build?
  - o [Tom]: history of these 2 options?
  - [Max]: some customer could use higher C++ standard than C++11, so std:: is preferred. With VS2015, nostd will be irrelevant.
  - o [Max]: Visual and VS Code have build combos.
    - [Max]: Would be nice!!
  - [Evgeny]: language standard for Windows build? Does the build fail with STL for
     17
  - o [Max]: we have feature detection so it should be fine.
  - [Max]: Max will fix the unit test unit test failure and add CI for WITH\_STL and WITH\_ABSEIL.

## May 5 2021

### Attendee:

- Lalit ( Microsoft )
- Max Golovanov ( Microsoft)
- Tom Tan (Microsoft)

### Agenda:

• [Evgeny] (if present) Simplify sdk library structure issue

[Max] - That would be easy for end user to utilise. We can have custom filters in the build to create individual targets.

[Tom] - Sizing could be issue,

[Max] = We can first add the optional single sdk build target for cmake ( default still being multiple targets), and based on response can do this for bazel too.

[Max] - Not a GA blocker.

- [Lalit] Compliance metrics validation issues #716 #720 for specs 1.0.0.
- [Lalit] 1.0.0 RC milestone: https://github.com/open-telemetry/opentelemetry-cpp/milestone/8
- [Max] (optional) Extension point in the main repo build to build with vendor contrib exporters, to match the main repo build flags, API (`nostd::` vs `std::` STL, etc.).
  - As part of main repo build, we should be invoke build for contrib repo, to ensure conr
  - https://github.com/open-telemetry/opentelemetry-cpp/issues/713#issuecom ment-832848221

## April 26 2021

#### Attendee:

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)
- Tomasz Rojek (Splunk)
- Johannes Tax (Microsoft)

### Agenda:

- [Tom] TracerProvider::GetTracer returns type as base Tracer instead of derived one from SDK...
  - o [Max]: document the behavior as a single sentence. Provider lifecycle.
  - o [Johannes]: Tracer from API has declared virtual destructor.
  - [Johannes]:
     <a href="https://stackoverflow.com/questions/2571850/why-does-enable-shared-from-this-have-a-non-virtual-destructor">https://stackoverflow.com/questions/2571850/why-does-enable-shared-from-this-have-a-non-virtual-destructor</a>
- [Max]: PR for gRPC upgrade. What to do with Bazel?
   https://github.com/open-telemetry/opentelemetry-cpp/pull/666
  - [Max]: Remove bazel+gcc 4.8 support from CI.
  - o [Max]: Ubuntu-14.04 comes with gcc-4.8.4 (by default), supp until Apr 2022.
  - o [Tom]: gRPC/abseil might require C++ 14, so it is not bazel specific.
  - o [Max]: Will try cmake/gRPC with gcc-4.8.4.
  - o [Max]: If OTLP cannot be used, which protocol do we recommend?
  - [Max]: Ubuntu 16.04 with gcc-7.1.
  - o [Max]: The history of gcc 4.8 CI build.release
  - [Johannes]: We should avoid the situation of dropping support.
- [Tomasz]: opentelemetry-cpp-contib release.
  - o [Max]: Max and Lalit could release in different time zones.
- [Max]: Fluend support fluent forward protocol in messagepack. Share the exporter with the community if interested.
  - o [Tom]: How to handle private extension?
  - [Max]: Private extension for ETW/TraceLoggingDynamic is no longer necessary.
     We made it all opensource!.. Re. custom field names I'll make it "extensible" for the Fluent exporter, i.e. customer can decide on "standard" OTel field names.
  - o [Max]: Proposed integration of Unix domain socket / MsgPack exporter in contrib.

## April 21 2021

#### Attendee:

- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Evgeny Yakimov (Bloomberg)
- Max Golovanov (Microsoft)

- Johannes Tax (Microsoft)
- Tomasz Rojek (Splunk)
- Siim Kallas (Splunk)

### Agenda:

- [Evgeny] Suggestions for doc cleanup
  - o GoogleTest, Library Structure, Contributing
- [Max]- > take into consideration of sizing too.Eg, zipkin is dependent on libcurl.
- [Evgeny] -> We can come up with the end user scenarios for usage, and document
  - o Issue: https://github.com/open-telemetry/opentelemetry-cpp/issues/688
- [Tom] -> Can we release 1.0,0 RC for api as we have stable api.
- [Lalit] -> We still have features in terms of baggage and context propagation missing for api.
- [Max] -> Have a release matrix for each Signal/components.
- [Max]: OSS Licenses issue:

https://github.com/open-telemetry/opentelemetry-cpp/issues/683

- Need confirmation from Tom on other Boost-licensed NEW upcoming code?
   [Tom] We don't need a Boost library for Jaeger unit tests.
   [Tom] Can we add auto-generated files in repo, and add license.
- Prometheus (unstable) Metrics exporter brings <u>a ton of 3rd party deps</u> under various licenses. But it is OFF by default.
- [Max] Need to add a single header for tracelogging either in ETW exporter folder, or as submodule.
- [Tomasz]: opentelemetry-cpp-contrib reviewers & create release permissions
  - o <a href="https://github.com/open-telemetry/opentelemetry-cpp-contrib/issues/11">https://github.com/open-telemetry/opentelemetry-cpp-contrib/issues/11</a>
- [Siim] Closable issues:
  - https://github.com/open-telemetry/opentelemetry-cpp-contrib/issues/15

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- https://github.com/open-telemetry/opentelemetry-cpp/issues/555
- [Tom] Including auto generated files without any license?
- [Lalit]

## April 12 2021

#### Attendee:

- Tom Tan (Microsoft).
- Evgeny Yakimov (Bloomberg)
- Max Golovanov (Microsoft)
- Johannes Tax (Microsoft)

- [Tom] Introduce boost dependency to OpenTelemetry-cpp?
  - o [Max]: Apache only license without Boost.
  - [Max]: List all dependencies.
  - [Evgeny]: Build exporter separately with dependency.
  - [Max]: Include multiple licenses.
  - [Tom]: Do we need to include Boost license as we ask the user to install it?
  - [Max]: Max will create doc with build options for exporters.
  - [Johannes]: why choose to implement thrift over UDP?
  - [Tom]: this is the protocol required by Jaeger agent. Thrift over HTTP and gRPC are for Jaeger agent.
- [Max]: Security, CodeQL, SDL / code scanning tools setup, security-related compiler warnings.
  - [Max] build warnings.
  - [Tom] Is it safe to suppress gRPC build warnings?
  - o [Max] Probably fine to gRPC which we don't own.
- [Evgeny]: Can we wrap up [Google Test Docs
   PR](https://github.com/open-telemetry/opentelemetry-cpp/pull/313)
  - Max will fix the markdown lint error then we could get this PR merged. <- [ DONE ]</li>

•

## April 7 2021

#### Attendee:

- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Siim Kallas (Splunk)
- Josh Suereth (Google)

#### Agenda:

- [Tom] Jaeger exporter planned to be finished this week.
- [Tom] How to get Resource from Span.
  - <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/580">https://github.com/open-telemetry/opentelemetry-cpp/pull/580</a>

#### Tasks:

- 1. TraceContext Josh
- 2. MultiProcessor support Lalit
- 3. Resource / Instrumentation Library integration Tom
- 4. Jaeger exporter Tom
- 5. Global Propagator Lalit
- 6. Semantic Convention ? (Lalit)
- 7. Baggage Nikhil Daliya / Lalit
- 8. Opentracing shim -?

## Mar 29 2021

#### Attendee:

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)
- Johannes Tax (Microsoft)
- Tomasz Rojek (Splunk)

### Agenda:

- [Max]: ETW exporter is in open source.
  - o [Max]: release cadence. When to release the next package?
- [Max]: API spec surface.
  - o [Johannes] If we provide the type, hard to argue it is undefined.
  - Exporters could do the meaningful conversion as workaround.
  - [Max] higher level abstraction wrapper.
  - o [Max] keep parameters in API surface, exporters do its best.
  - [Johannes] Undefined behavior for undocumented types.
  - [Tom] request the spec to support the extra types.
    - [Max]: after GA, hard to change spec.
  - Only support signed 64 bit integers as attribute values · Issue #634 · open-telemetry/opentelemetry-cpp (github.com)
- [Max]: gRPC TLS support is a good start.
  - [Max] Support varies key stores.
- [Tomasz]: https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/7
  - Ready for merging.

## Mar 24 2021

#### Attendee:

- Lalit Bhasin (Microsoft)
- Tomasz Rojek (Splunk)
- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)
- Michael Lee (Microsoft)
- Johannes Tax (Microsoft)
- Josh Suereth (Google)

- •
- Review for otel-cpp-contrib instrumentation for httpd Apache HTTP Server https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/7
- Logging SDK otep https://github.com/open-telemetry/oteps/pull/150

- Getting started doc sync: https://github.com/open-telemetry/opentelemetry.io/issues/472
- [Tom] Add a document about known issues?
- [Josh] Resource, multiple SpanProcessors, threading and others...
  - Interface to support multiple processors in progress
  - Multiple recordables New interface exportable-span, it allows to register recordables on it.
  - Issues related to nginx multiple trace provider, batch processor creating threads.
     [Johannes] Do we need multiple tracer-providers?
  - [Siim] Custom attributes can be used instead of separate resource per virtual domain.
  - [Max] Can we have a task-queue framework instead of thread-model.
  - [Johannes] In case of thousands of exporters configured, we can push driving the performance to exporter instead of sdk.
  - [Max] We should be doing capacity planning, and come up with some numbers ( tracer provides, exporters) supported.
  - o To create 2 issues -
    - Design alternatives to thread-model [ Max ]
    - Existing capacity support. [Lalit]
- [Johannes] Reference documentation is live:
  - Home OpenTelemetry C++ 0.3.0 documentation (opentelemetry-cpp.readthedocs.io)
  - [Johannes] Same steps can be extended for SDK.

## Mar 15 2021

#### Attendee:

• Tom Tan (Microsoft)

#### **Agenda**

No meeting was held because of a lack of attendants.

## Mar 10 2021

#### Attendee:

- Josh Suereth (Google)
- Lalit Bhasin ( Microsoft )
- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)

- TraceContext
  - Multiple Exporters
    - TraceContext can have multiple "Processors/Exports" attached and will handle communication w/ "Span" class instead of directly using `Recordable` in SDK methods.
    - "hiding" processor in rest of SDK
  - Ownership + Lifecycle
    - When a user calls "Shutdown" on a TracerProvider -> What happens and what is safe to perform later if we "Share" things?
      - Clarity missing right now
      - Proposal: Let's leave TraceContext as shared\_ptr between TracerPovider + Tracer.
        - I'll add TODOs for problematic scenarios + open bugs
  - Issues/Things To Fix
    - Attaching multiple Processors/Exporter "pipelines"
    - "sharing an exporter/processor"
      - "Flush"/"Shutdown"
      - 1-Provider owns each Processor
      - 1:1 Processor <-> Exporter
    - Tracer independent from TraceProvider
  - This is like Java's <u>TracerSharedState</u>
- Baggage API
  - o [Josh] Have a hashmap implementation.
- Intermittent build issue on bazel build.

## Mar 1 2021

#### Attendee:

- Max Golovanov (Microsoft)
- Michael Lee (Microsoft)
- Johannes Tax (Microsoft)
- 1. The contrib repo structure:
  - Nginx instrumentation PR merged.
  - Initial layout for contrib PR merged.
- 2. Resource API in SDK: not discussing today, need feedback from Josh on this.
- 3. [Johannes]: documentation Getting started on OpenTelemetry common. Plus API to **readTheDocs**, doxygen code comments, plus automated refresh. Stay with in-code documentation.
- 4. [Max]: ETW CI in Contrib repo (because it is NOT OTLP).

5. [Max]: Visual Studio 2015 - CI support: code works, but lower pri to automate that since customers are gradually moving to 2017.

## Feb 24 2021

#### Attendee:

- Josh Suereth (Google)
- Max Golovanov (Microsoft)
- Tomasz Rojek (Splunk)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Johannes Tax (Microsoft)
- Siim Kallas (Splunk)

### Agenda:

- 1. The contrib repo structure.
  - a. PR raised in contrib: nginx module
  - b. How do we do code ownership/reviews?
    - i. do we need a new PR for each change?
    - ii. Collector Contrib Codeowners
    - iii. Max's PR for ownership
  - c. Codeowners approach
    - i. If codeowers are not active, and the component is not stable, things broken, we should be removing the component from
    - ii. Coding standard:
      - [Johannes] = Coding standard. Should we follow the same coding standard as for main repo. And also the unit tests, as it would be important to run them to ensure they don't break with any changes in code-repo.
      - 2. [Max] = More freedom in coding guidelines, as vendors contributing to repo would like to follow guidelines followed by their company. We can mark the markdown validation.
      - 3. [Tom] Co-owners in the contribution list.
      - 4. Merge If two code owners, or code-owners + repo approver/maintainers, then code owner should be able to merge the PR.
      - 5. [Max] Should be fine to merge the nginx changes, will be contributing a few ETW components in the contrib repo.
      - 6. CopyOright for external contributions should be opentelementry.

#### 2. Resource SDK

- a. Is this the plan?
  - i. Decoupling TracerProvider + Tracer
    - 1. Add a 'TracerContext' that contains
      - a. Sampler
      - b. Processor/Exporter
      - c. Resource?
      - d. TracerContext is MUTABLE and THREADSAFE
    - 2. TracerProvider
      - a. Passes TracerContext to Tracer
    - 3. Tracer is decoupled from TracerProvider
  - ii. Where to hang Resource?
    - 1. Don't push resource into `Recordable`
    - 2. Resource lives on 'Span'
    - 3. INstrumnetationLirbary lives on `Span`
    - 4. Update Exporter interface to take `Span` instead of `Recordable`
  - iii. Should 'Span' have a 'GetMyRecordable' method?
  - iv. [Josh] would have separate PRs for
    - TracerContext
       Moving resources to Span, and integrate with Exporter.
- 3. Documentation:
  - 1. [Johannes] = Working on the API doc, but we still need SDK doc.

## Feb 15 2021

**NOTE:** Today is a holiday in the United States.

Attendee:

Agenda:

## Feb 10 2021

#### Attendee:

- Josh Suereth (Google)
- Max Golovanov (Microsoft)
- Tomasz Rojek (Splunk)
- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Johannes Tax (Microsoft)

### Agenda:

- Resource propagation approach
  - [Josh] Working on PR from processor to exporter. Should be fine even if resource is mutable, as exporters are using references.
  - o [Max] Can resource change later.
- Moving towards Release Candidate (trace and resource).
  - [Max]-Should we have regular cadence. Biweekly or monthly.
  - o [Josh] Most of the SIGs do every month.
  - o [Josh] Working on google exporter. Would like to have more frequent tags.
  - [Johannes] Label in github for release candidate, and group tickets required for the RC label.
  - o [Tom] Milestone for every month.
  - o [Josh] Update the changelog with every new feature.
    - Documentation (Getting Started, Installation (CMake, Bazel).
    - DogFooding Experimentation.
    - Compliance Metrics gaps.
    - Examples (Client Server)

## Feb 1 2021

### Attendee:

- Tom Tan (Microsoft)
- Tomasz Rojek (Splunk)
- Max Golovanov (Microsoft)
- Shmuel Jacobs (AquaSec)

- [Tomasz Rojek] Instrument Apache HTTP server with OpenTelemetry cpp, load it as a dynamic module.
  - o [Max] contributes it to contrib repo.
- [Tom Tan] Abseil requires C++14 now, does opentelemetry-cpp need to upgrade to C++14 as well?
  - [Max] GCC 4.8 test is added by the community with reason, so better don't break
     it
  - o [Max] Provide subset features for VS2015, C++11, GCC 4.8.
  - o [Tom] Log an issue to follow up.
- [Shmuel Jacobs] Release stage of opentelemetry-cpp? Async metrics collection.
  - [Max] Traces and logs will be available in the v0.1, metrics will not be part of version 1.
- [Tomasz Rojek] Is <a href="Implement TextMapPropagator">Implement TextMapPropagator</a> · Issue #536 · open-telemetry/opentelemetry-cpp (github.com) still open? Seems it is ready in

<u>opentelemetry-cpp/http\_text\_format.h at main · open-telemetry/opentelemetry-cpp</u> (github.com).

- [Max] will ping Lalit and update the issue.
- [Max] Add nuget package with opentelemetry-cpp header files.
- [Tomaz Rojek] nostd::string\_vew::npos, link error unresolved symbols.
  - o [Max]: feel free to fix the issue if nostd is not consistent with std lib.
  - [Max]: nostd::string\_view is trying to solve ABI change in std lib across versions.
     Make sure the memory layout of our data structure is compatible with std lib from other compilers.

## Jan 27 2021

#### Attendee:

- Lalit Bhasin ( Microsoft )
- Max Golovanov ( Microsoft )
- Tom Tan (Microsoft)
- Johannes Tax (Microsoft)

### Agenda:

[ Lalit ] - Opentelemetry compliance matrix updated for C++:
 <a href="https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-compliance-matrix.md">https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-compliance-matrix.md</a>

[Johannes] - Can we have github ticket for all the missing features.

[Lalit] - Lalit to create the github ticket for these.

- [Josh Suereth] Let me know when docs for Bazel release usage are needed (Will have to miss meeting today, overbooked).
  - [Max] we need this doc for both CMake and Bazel, and it would be good to have some installation guide.
  - [Max] Good to have end to end example in contrib repo for OTLP exporter along with the build and install instructions.
  - o [Tom] We can move existing OTLP example in main repo to contrib to start with.
- [Tom Tan] Integration with gRPC.
  - https://github.com/open-telemetry/opentelemetry-cpp/issues/530
- C Projection for C++. We can have the initial projection in contrib repo, and later have full C based implementation in separate SIG.
  - o <a href="https://github.com/open-telemetry/opentelemetry-cpp-contrib">https://github.com/open-telemetry/opentelemetry-cpp-contrib</a>
  - Nignx and mysql-proxy would be good candidate to use C based propagation.
- [ Max ] Contrib repo maintainers list? PR: https://github.com/open-telemetry/opentelemetry-cpp-contrib/pull/3

## Jan 18 2021

**NOTE:** Today is a holiday in the United States.

Attendee:

Agenda:

## Jan 13 2021

#### Attendee:

- Lalit Bhasin ( Microsoft ).
- Josh Suereth (Google)
- Johannes ( Microsoft )
- Tom Tan (Microsoft ).

### Agenda:

- [Lalit] Approver/Maintainer list for contrib repo.
  - Who owns Elastic / ETW Exporter in the main repo codeowners ?

[Josh] - If exporter is part of main/contrib repo, approvers/maintainer should be owning it.

Collector-contrib repo follows codeowners based approach:
 <a href="https://github.com/open-telemetry/opentelemetry-collector-contrib/blob/master/.github/CODEOWNERS">https://github.com/open-telemetry/opentelemetry-collector-contrib/blob/master/.github/CODEOWNERS</a>

[Johannes] - How about the versioning for the contrib.

- [Lalit] Discuss PR Merge Guidelines.
  - [Go back to 2 approvers from different company, and use maintainer judgement on merging the PR.
- [Lalit] Trace API/SDK project burndown.
  - [Josh] Do we need baggage here.
  - o [Josh] Benchmark
    - https://open-telemetry.github.io/opentelemetry-python/benchmarks/
    - Specs on benchmark. Josh ready to contribute on it.
  - o [Johannes] We do need high level benchmark.
  - [ Tom ] Do we need part of CI/CD, and will affect code coverage. Will benchmark be affected on underlying VM.

## Jan 4th, 2021

#### Attendee

- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)

- Jodee Varney (New Relic)
- Tomasz Rojek (Splunk)

### Agenda:

- [Tom] Make long running test optional?
  - o <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/499">https://github.com/open-telemetry/opentelemetry-cpp/issues/499</a>
  - o [Tom] Follow up to find a flag to exclude it in developer local run.
- [Max] ETW exporter in the core repo.
  - [Bogdan] Make sure 1 bazel and 1 cmake component to use contrib repo. Go through the experience of consuming the libraries from contrib repo.
     Bazel relies on http\_archive instead of submodule.
  - [Max] Entire ETW exporter is header only.
  - [Bogdan] File an issue to add cmake example to consuming contrib repo.
     Do the same for cmake.
  - [Tom] File 2 issues for bringing up examples for contrib repo. Assign the camke one to Max.
    - <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/500">https://github.com/open-telemetry/opentelemetry-cpp/issues/500</a>
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/501

Dec 30th, 2020

The meeting is cancelled due to holiday.

Dec 21st, 2020

#### Attendee

- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Josh Suereth (Google)
- Max Golovanov (Microsoft)
- Alolita Sharma (AWS)
- Johannes Tax (Microsoft)

## Apologies (not able to join):

Reiley Yang (Microsoft) - on vacation

- [Karen] Batch log processor PR
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/434
    - Merge then file issue to fix both span/log batch processors simultaneously? Yes, ready to merge.
    - o Max can file an issue
- [Mark] Elastic search PR (<a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/444">https://github.com/open-telemetry-cpp/pull/444</a>)
  - Demo for Logging API/SDK project
  - Changed code for Josh's concurrency issue
- [Max]: Bazel + CMake dependencies tracking; plus how are we building `vendor` distro with custom exporters?
  - [Max]: ABI/API compatibility are different.
  - [Max]: short term, but customer SDK.

## Dec 16th, 2020

#### **Attendee**

- Lalit Bhasin ( Microsoft)
- Mark Seufert (AWS)
- Tom Tan (Microsoft)
- Josh Suereth (Google)
- Max Golovanov (Microsoft)
- Karen Xu (AWS)
- Alolita Sharma (AWS)

## Apologies (not able to join):

• Reiley Yang (Microsoft) - on vacation

- 1. [Lalit] Versioning and Stability for API and SDK.
  - a. ABI Checker
  - b. Other ABI Checker
  - c. [Josh] We won't be able to use the ABI checker for our API as it is header only. We need more automated way to check for stability for API using this tool . Create functional test.
  - d. [Max] Create a single API test binary which does ABI stability test for everything, and could be used for release testing.
  - e. [Max] For SDK, we initially provide API stability, ABI not immediately but long goal.
  - f. [Josh] -How to provide stability for the binary package distribution say for debian.
- 2. Status of Logging PRs which ones are ready for approval
  - a. API Overloads
  - b. OStream Exporter

- c. Elasticsearch Exporter
- d. Batch Processor'
- 3. [Tom] how to test example code?
  - [Josh] Conventional way to instrument client and server and test benchmarking.
  - [Max] Possibility to use current http server (used by zpages). Python SIG is investigating performance benchmarking using github action.
  - [Max] Nightly triggered actions to test performance benchmarking.
- 4. Location of ETW and Elastic exporter (main repo or contrib).
- 5. [Mark S, Karen X, Alolita] Logging SDK, ES exporter PRs update, completion deadline

## Dec 7th, 2020

#### **Attendee**

- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Mark Seufert (AWS)
- Jodee Varney (New Relic)
- Max Golovanov (Microsoft)
- Alolita Sharma (AWS)

### Apologies (not able to join):

• Reiley Yang (Microsoft) - on vacation

## Agenda:

- [Tom] Rename spin lock as it is not a simple spin lock?
- [Mark] Logging Library update, list of upcoming PRs (in order):
  - Ostream Exporter + shared\_ptr PR coming tomorrow.
  - SDK Injection PR
  - ElasticSearch PR
- [Mark] Does log record own attribute/resources.
  - [Tom] follow up in the comment thread from Josh.
- [Alolita] Triaged all open PRs.
  - Will triage all issues in the next meeting.
  - Will also take a look at the spec auto-close bot for reuse

## Dec 2nd, 2020

#### Attendee

- Lalit Bhasin (Microsoft)
- Tom Tan (Microsoft)
- Josh Suereth (Google)
- Karen Xu (AWS)

- Mark Seufert (AWS)
- Mishal Shah
- Max Golovanov (Microsoft)

- Logging prototype status update
  - Simple Processor PR waiting to be merged:
     <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/403">https://github.com/open-telemetry/opentelemetry-cpp/pull/403</a>
  - Discussion on support for multiple exporters per processor? Or single exporter per processor?
    - Decision is a potential blocker for:
       <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/337">https://github.com/open-telemetry/opentelemetry-cpp/issues/337</a>
  - Opened up an issue about shared\_ptr performance for log exporter (would implementing a recordable interface similar to traces be a potential solution?) https://github.com/open-telemetry/opentelemetry-cpp/issues/412
  - o [Mark] One more logging api PR for shared ptr
    - [Josh] Overhead in terms of CPU and Memory needs to be bounded.
- Dog-fooding / User-Research
   (https://docs.google.com/document/d/1rXT2eEAniVM7r8KiikzgJJ-r36shOg\_twZP6GPzN\_vao/edit#heading=h.19lsfyhsve8e)
  - o [LALIT] Difficult to have web framework of choice for C++
- ETW tracer exporter PR update
  - [Max] Ready to review. Logging provider is missing, and Mishal will send separate PR for that.
  - [Max] contribution needed in contrib repo. A simple C# agent would be created.
- [Tom]: Timeout support for ForceFlush and Shutdown, std::chrono::microseconds(-1) for infinite?
  - Related:
     https://github.com/open-telemetry/opentelemetry-cpp/pull/403#discussion r529

     887038
  - o [Tom] Infinite is not a good value.
  - [Max] Can we take the backport from <u>abseil</u> (google backport library). Max agreed to take a look on it.
  - [Karen] as per specs, these functions shouldn't block.
  - o [tom] It's not infinite, but long timeout.
- SIG Meetings on 16th Dec and / or 21st Dec.
  - [Tom] Let's keep for now there, and decide based on agenda.
- PR / Issues review
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/403#discussion r529 887038: This is good to merge, with follow up discussions/PRs on timeout and multiple-processors.
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/399: Max suggested to move the scripts under tools directory, and will conditionally approve the PR.

 https://github.com/open-telemetry/opentelemetry-cpp/pull/374: Max plans to add documentation on how to switch from std to nonstd libraries for VS 2019.

### Apologies (not able to join):

• Reiley Yang (Microsoft) - on vacation

### Agenda:

Nov 23th, 2020

#### Attendee

- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)
- Reiley Yang (Microsoft)
- Karen Xu (AWS)
- Mark Seufert (AWS)

- Vacation plan (OpenTelemetry Maintainer's calendar)
  - o Reiley will be gone for the entire Dec.
  - Max will be around (might be away for the entire Apr. next year).
  - Tom will be around during Dec.
  - Reiley would like to propose Josh (from Google) as approver, and Lalit (from Microsoft) as maintainer. - follow up: Reiley to reach out (probably via both a PR and private ping on Gitter).
    - Update (Nov. 30th): Josh is now approver https://github.com/open-telemetry/opentelemetry-cpp/pull/409
    - Update (Nov. 30th): A PR is out to make Lalit a maintainer <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/410">https://github.com/open-telemetry/opentelemetry-cpp/pull/410</a>, needs more feedback.
  - Karen will have three PRs in the next two weeks.
- Logging prototype status update.
  - A new PR is coming tomorrow.
  - Mark is making some changes on the merged PRs (e.g. logger name Max helped to push the spec change, log record on heap instead of stack, s/log/Log/).
  - https://github.com/open-telemetry/opentelemetry-specification/pull/1236
- [Mark] If Josh attends, current progress on Bazel HTTP Curl build
  - [josh] -> Can't attend. I have CURL imported, but failing, just fighting version/define issues
  - Follow up check with Max, this is also needed by the W3C TraceContext test/CI
- [Karen] Processor Shutdown and ForceFlush
  - https://github.com/open-telemetry/opentelemetry-cpp/issues/400

- [Tom] OpenTelemetry-cpp, schedule of the first release? When to fork master? Any restriction to merge new PRs to master before the fork?
  - [Reiley] no strict timeline, but we expect the initial "test" release to happen before end of 2020
  - Fork is out of scope of the current "test" release.
  - Currently there is no document explaining the "release lock-down", we can probably borrow ideas from Python/.NET.
- [Max] contrib repo created
  - [Reiley] ping folks offline and see who would want to be approver/maintainer, work with community SIG to create groups (e.g. similar like what Python is doing <a href="https://github.com/orgs/open-telemetry/teams/opentelemetry-python-contrib-approvers">https://github.com/orgs/open-telemetry/teams/opentelemetry-python-contrib-approvers</a>)

## Nov 18th, 2020

#### Attendee

- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Johannes Tax (New Relic)
- Max Golovanov (Microsoft)
- Lalit Bhasin (Microsoft)
- Mark Seufert (AWS)
- Mishal Shah
- Alolita Sharma (AWS)
- Josh Suereth (Google) <- 15 min

#### Apologies (not able to join):

• Reiley Yang (Microsoft) - have an urgent task popping up, not able to join this time

- [Lalit] initial test release what is the link for this proposal? Where do we provide comments:-)
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/392
  - [Max] Runtime version, so exporter could query.
  - [Alolita] Provider a docker container with sample app.
  - [Max] Utilize gh tool to automate the flow.
  - [Johannes] Create tag after running release script.
  - o [Max]: version string format, with ABI name.
  - [Tom]: create an issue to track the version format which needs to be addressed before the initial release.
- [Tom/Mark/Karen] Logging SDK update
  - o [Mark] Logger, LoggerProvider PR was merged.

- Next items in progress:
- Simple and Batch processor PR
- OStream and Elasticsearch exporters
- [Max]:
  - build tooling: instructions for consumption with vcpkg package manager,

https://github.com/open-telemetry/opentelemetry-cpp/pull/377

[Max] expect to merge this one at first.

[Tom] validate vcpkg ports.

[Lalit] why vcpkg is necessary? [Max] it is popular package manager.

- other build instructions (CMake, bazel, CMake in VS2019, etc.).
- [Mishal]: Bazel/Bazelisk version upgrade?
  - 1.1 in use, latest is 1.7.
  - Create an issue for this and seek feedback on this. Mishal could work on a PR if needed.
- Outstanding PRs

## Nov 9th, 2020

#### Attendee

- Reiley Yang(Microsoft)
- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Josh Suereth (Google)
- Johannes Tax (New Relic)
- Mark Seufert (AWS)
- Jodee Varney (New Relic)
- Richard Anton (AWS)

- [Max] need help from Josh on the Bazel support for stdlib
  - o [Josh] will send a PR over Max's PR
  - FYI Toolchains for bazel solving this issue: https://docs.bazel.build/versions/master/toolchains.html#registering-and-building-with-toolchains
- Logging SDK update
  - [Karen] https://github.com/open-telemetry/opentelemetry-cpp/pull/386
  - Name for logger?:
     https://github.com/open-telemetry/opentelemetry-specification/issues/1215
  - [Josh] what's the timeline? (working, stable)
    - [Reiley] preview by end of 2020, before GA, we have flexibility and most likely will break the APIs for good reasons.
    - [Josh] suggests that we put the initial timeline.

- [Johannes] the timeline will be different based on components (e.g. tracing vs metrics, sdk vs. exporter)
- [Reiley] action item do something similar like .NET milestone.
- [Johannes] have a checklist for trace GA.
- Test release by end of Nov.?
  - o [Reiley]
    - To practice the process (e.g. release process docs, tags, changelog)
    - Get some initial customers (don't have to be lots of customers since we're not ready yet)
  - o [Johannes] could help on the W3C TraceContext. Resource will be out of scope.
  - [Max] what about customers using the current OpenTelemetry C++?

## Nov 4th, 2020

#### **Attendee**

- Reiley Yang(Microsoft)
- Josh Suereth (Google)
- Mark Seufert (AWS)
- Max Golovanov (Microsoft)
- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Lalit Bhasin (Microsoft)
- Mishal Shah

- [tedsuo in absentia] User Research / Dogfooding Guide
  - https://docs.google.com/document/d/1rXT2eEAniVM7r8KiikzgJJ-r36shOg\_twZP6
     GPzNvao/edit
  - Now that the tracing spec is stable, we want to ensure the getting started experience for new users is clear and understandable. I've creates a user research exercise that walks through the basic operations an end user must understand in order to use OpenTelemetry tracing.
  - When C++ is ready for user feedback:
    - Add C++ to the list of languages in the user research guide
    - Please run through the user research exercise, in order to identify where we need to improve the experience. ↓ ↓ ↓
  - Completed studies can be submitted here: <u>https://forms.gle/VrrPnCKpMcL2mBQ6A</u>
  - o [Reiley] proposed two dogfooders.
    - Tom self nominated.
    - Lalit self nominated.

- Josh signed up himself for Java, can also look at C++.
- Reiley signed up himself for .NET <a href="https://github.com/open-telemetry/opentelemetry-dotnet/issues/1444">https://github.com/open-telemetry/opentelemetry-dotnet/issues/1444</a>. Will share the learnings.
- [josh] Bazel vs. CMake
  - What does a C++ release look like, generally
    - [Reiley] source form, via a tag on the main/master branch.
    - [Josh] would prefer a "test" release.
  - What are the expectations from these two systems? Is one "canonical" and another "supported"?
    - [Max] committed to support both, and to keep them on-par
    - [Josh] from Google perspective, Bazel is preferred. From the general C++ perspective, CMake makes sense.
    - [Tom] would it be possible to use CMake, and generate Bazel scripts?
      - [Josh] No, they have different philosophies. (there are so many features in Bazel that are not supported by CMake)
      - [Tom] <a href="https://github.com/google/bazel-to-cmake">https://github.com/google/bazel-to-cmake</a>
    - [Conclusion] Bazel and CMake will cover the same set of configurations/flags. The default Bazel and CMake configuration should provide the same output.
- [Max] C vs. C++
  - o [Josh] probably clarify in the document that we don't support C
  - E.g. <a href="https://github.com/open-telemetry/opentelemetry-cpp#supported-c-versions">https://github.com/open-telemetry/opentelemetry-cpp#supported-c-versions</a> add a note that "C is not supported".
  - [Josh] the C++ SIG is having ⅓ of the contributors comparing to other language SIGs. Suggestion is to focus on C++.
  - [Tom] for projects that require a C-only compiler (no support for C++), the source distribution won't work - they will have to compile it somewhere else (which could be hard due to the lack of a compiler).
  - Conclusion Reiley will update the notes/docs to clarify that we only support C++, no C at this stage.
- Logging update

## Oct 26, 2020

#### Attendee

Reiley Yang(Microsoft)

- Josh Suereth (Google)
- Tom Tan (Microsoft)
- Mark Seufert (AWS)
- Karen Xu (AWS)

### Agenda

- Allow stdlib instead of nostd during compile time.
  - Max is still working on fixing the CI failure.
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/374 is part of the effort
     could split into two PRs? the first PR might cause code coverage issue but
     that shouldn't be a concern.
  - [Josh] need to have clarity (e.g. docs on GCC/Linux/Mac) what you will have and will give up when you switch to stdlib.
- Logging update API part should see PRs coming this week.
  - [Mark] aiming later this week to work on the upstream repo. (currently it is under private review within AWS)
  - [Karen] the PR should be ready by the end of tmr (Oct. 27th) Alolita is doing the final internal review.
- [Tom]: GA gap for trace API/SDK.
  - [Reiley] there is NO commitment to GA OpenTelemetry C++ this year.
    - The goal should be defined by this community.
    - [Josh] what's the scope of the initial release
      - [Reiley] for now source only (tag) for Bazel/Cmake.
    - [Josh] worried about people just taking dependency and the SIG is kidnapped and not able to make breaking changes.
    - [Reiley] based on the experience, we would say HIGH confidence that we should be able to have a stable tracing API (95% sure that we're not going to change any API), logging should be good/stable enough (80%). Metrics is NOT going to have any stability/compatibility promise (e.g. the spec is not locked down yet, the SDK has allocation/contention issues).
  - compat/feature matrix
     https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-c
     ompliance-matrix.md
- [Josh] how do we handle dependency (e.g. version) https://github.com/open-telemetry/opentelemetry-cpp/pull/371#discussion\_r510163372
  - o [Max] consider libevent (or even WinSock2, WinHttp)
  - [Josh] also vote on libevent solely because it has been there longer and has a good track record (than the current header only lib in the PR)

## Oct 21, 2020

## Attendee

- Tom Tan (Microsoft)
- Johannes Tax (New Relic)

- Max Golovanov (Microsoft)
- Lalit Bhasin ( Microsoft )
- Jodee Varney (New Relic)
- Mark Seufert (AWS)
- Mishal Shah
- Karen Xu (AWS)

## Apologies (not able to join):

• Reiley Yang (Microsoft) - have a conflict meeting

### Agenda

- [Mark] Logging API update
- PR status : <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/63">https://github.com/open-telemetry-cpp/pull/63</a>
  - Lalit will follow up and pick up the PR. [Tom]
- Tracer SDK doesn't use libraryname:

https://github.com/open-o11y/opentelemetry-cpp/blob/logs-api/sdk/src/trace/tracer\_provider.cc

[Johannes] library name is not needed in some scenarios.

Http client implementation using cross platform,

https://github.com/open-telemetry/opentelemetry-cpp/pull/371

[Max]Licence issue

[Johannes]Move to 3rd party folder

## Oct 12, 2020

#### **Attendees**

- Reiley Yang (Microsoft)
- Tom Tan (Microsoft)
- Max Golovanov (Microsoft)
- Josh Suereth (Google)
- Karen Xu (AWS)
- Jodee Varney (New Relic)
- Andy Fang

- [Reiley] OpenTelemetry spec SIG update
  - https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-c ompliance-matrix.md
  - RC1 will cover trace and context
  - RC2 will cover baggage and other stuff
- [Josh] Compile using <u>STDLIB PR</u> (from Max Golovanov)?

- [Max] for customers who don't want to nostd version for various reasons security, compliance, perf, binary size (if already have the stdlib dependency).
- [Max] it is a good way to compare std/nostd side-by-side.
- [Reiley] previously we haven't made the decision due to the lack of support from the community.
- Follow up: Max to send the PR link to the gitter channel and see if there is any strong objection.
- [Josh] Dynamic loading (ABI) testing?
  - Tests will be added when it's relevant to have them.
- [Tom] Support of C++ 14 and above?
  - [Tom] want to see if it possible to leverage new language features
  - [Reiley] this has been discussed here
     <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/4">https://github.com/open-telemetry/opentelemetry-cpp/issues/4</a> and the decision was to support C++ 11 and above.
  - [Jodee] New Relic has many customers on C++ 11.
  - Follow up: Reiley to put a support section similar like this <a href="https://github.com/open-telemetry/opentelemetry-dotnet#supported-net-versions">https://github.com/open-telemetry/opentelemetry-dotnet#supported-net-versions</a>
- [Andy Fang] joined as a personal hobby at this moment.

  https://github.com/open-telemetry/community/blob/master/community-membership.md
  - Have been using OpenTracing, want to see how to converge to OpenTelemetry

## Oct 07, 2020

#### **Attendees**

- Reiley Yang (Microsoft)
- Johannes Tax (New Relic)
- Josh Suereth (Google)
- Jodee Varney (New Relic)
- Mark Seufert (AWS)
- Max Golovanov (Microsoft)
- Lalit Kumar Bhasin ( Microsoft )
- Tom Tan (Microsoft)
- Karen Xu (AWS)
- Mishal Shah (CommunityBridge Intern)

- [Karen/Mark/Reiley] Logging API/SDK status
- [Reiley] Getting more Approvers following the guidance here https://github.com/open-telemetry/community/blob/master/community-membership.md#a pprover
  - https://github.com/lalitb

https://github.com/ThomsonTan

- [Tom] Estimation (mostly time) for todo work item here https://github.com/open-telemetry/opentelemetry-cpp/projects/1
- [Josh] join the community
   <a href="https://github.com/open-telemetry/community/blob/master/community-membership.md#">https://github.com/open-telemetry/community/blob/master/community-membership.md#</a>
   member.
  - Proposed by Johannes
     https://github.com/open-telemetry/opentelemetry-cpp/issues/331.
  - https://github.com/open-telemetry/opentelemetry-dotnet/blob/master/src/OpenTelemetry/SimpleExportProcessor.cs
  - <a href="https://github.com/open-telemetry/opentelemetry-dotnet/blob/master/src/OpenTelemetry/ReentrantExportProcessor.cs">https://github.com/open-telemetry/opentelemetry-dotnet/blob/master/src/OpenTelemetry/ReentrantExportProcessor.cs</a>

## Sep 28th, 2020

#### **Attendees**

- Reiley Yang (Microsoft)
- Max Golovanov (Microsoft)
- Johannes Tax (New Relic)
- Karen Xu (AWS Intern)
- Tom Tan (Microsoft)
- Mark Seufert (AWS Intern)
- Mishal Shah (CommunityBridge Aspirant)

#### Agenda

- TODO: Reiley to change the meeting time
- •
- [Reiley] logging prototype <u>https://github.com/open-telemetry/opentelemetry-cpp/issues/337</u>
- Feature Matrix, create issues to track the gap between the C++ SDK and the latest spec
- [Max] <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/309">https://github.com/open-telemetry/opentelemetry-cpp/pull/309</a> Apache2 license is okay. Need Microsoft copyright? (what is recommended from the main OpenTelemetry repo). <a href="https://github.com/open-telemetry/community/issues/113">https://github.com/open-telemetry/community/issues/113</a> and another one quote: "In short preserve copyright notices":
  - https://github.com/open-telemetry/community/issues/475 in Lalit's PR we have to mention Apache License 2 Microsoft, plus OpenTelemetry authors (since we anticipate heavy rework/refactor of the interface and impl).

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- [Johannes] in OpenTelemetry Go the guideline is to make sure everything is copyright to "OpenTelemetry Authors". The concern is that we cannot change the license without all the copyright authors.
- [Reiley] OpenTelemetry .NET also enforces this https://github.com/open-telemetry/opentelemetry-dotnet/blob/master/build/stylecop.json.

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## Sep 21th, 2020

#### **Attendees**

- Reiley Yang (Microsoft)
- Johannes Tax (New Relic)
- Karen Xu (AWS Intern)
- Mark Seufert (AWS Intern)
- Jodee Varney (New Relic)
- Evan Torrie (Verizon Media)
- Tom Tan (Microsoft)

### **Agenda**

- Open PR that needs attention
- Update on the OpenTelemetry overall GA plan
  - https://docs.google.com/document/d/1-tGqaT9fn9Bpuy4roLS1YDfLzIWHodUFfyr BlyJVz9g/edit#
- Current prioritization:
  - Focus on tracing
  - Explore internal logging
  - Metrics is out of scope this year
- [Max] re-add support for VS2015?
- Welcome Evan. (from Verizon Media, formally Yahoo).
  - Interested in integrating OpenTelemetry C++ with Envoy.
- [Max] Node.js customer?
- [Tom] checklist of features required by GA?
  - https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-c ompliance-matrix.md
  - https://github.com/open-telemetry/opentelemetry-cpp/projects

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## Sep 14th, 2020

### Attendees:

 Reiley Yang (Microsoft), Johannes Tax (New Relic), Max Golovanov (Microsoft), Tom Tan (Microsoft), Jodee Varney (New Relic)

### Agenda

- [Reiley] planning / upcoming work
  - Tracing stabilization / feature parity Johannes setup a GH project for this workstream.
    - Header only doesn't require any compilation unit (linkage)
    - Start span without making it active
  - Concurrent export span processor (e.g. <u>https://github.com/open-telemetry/opentelemetry-dotnet/blob/master/src/OpenTelemetry/Trace/ReentrantExportActivityProcessor.cs</u>)
  - ETW exporter
  - Internal troubleshooting logs
    - Logging API?
    - Borrow some existing logging API?
  - Metrics / Prometheus exporter hardening

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## Sep 7th, 2020

Meeting cancelled due to the US Public Holiday.

## August 31th, 2020

#### Attendees:

Reiley Yang (Microsoft), Johannes Tax (New Relic), Max Golovanov (Microsoft), Jodee Varney (New Relic, jodeev on github)

AWS Hosts:

AWS Interns: Eric Hsueh

Google Hosts: Google Interns:

- [reyang] Having an alternative time for the SIG meeting (e.g. 8AM/3PM Monday PST)?
  - C# https://github.com/open-telemetry/community#net-sdk
  - Golang <a href="https://github.com/open-telemewtry/community#golang-sdk">https://github.com/open-telemewtry/community#golang-sdk</a>
  - Okay from Jodee and Johannes
- Prometheus Exporter:
  - o [Eric]
    - PrometheusCollector PR merged
    - Label name PR merged
    - Working on CI issues for PrometheusExporter Class

- Filed 4 PRs for documentation
  - Design Doc
  - README
  - Example
  - Google Test Demo
- Last SIG

## Overall project status

- o [Reiley] OpenTelemetry spec (tracing part) will be stable soon
- o [Jodee] It would be helpful to tag some of the issues/project tracking
- https://github.com/open-telemetry/opentelemetry-specification/blob/master/spec-c ompliance-matrix.md
- [Jodee] explore the GitHub Project for issue tracking https://github.com/open-telemetry/opentelemetry-is/projects
- [Max] exporter matrix
  - o [Reiley] OpenTelemetry will only host a small set of vendor agnostic exporters
  - Follow the registry approach <u>https://github.com/open-telemetry/opentelemetry-dotnet#getting-started</u>
  - https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/library-layout.md
  - https://github.com/open-telemetry/opentelemetry-specification/blob/2208a5250ba c228f681010edac3df893af793096/specification/library-quidelines.md

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## August 24th, 2020

#### Attendees:

Reiley Yang (Microsoft), Jodee Varney (New Relic), Max Golovanov (Microsoft)

**AWS Hosts**:

AWS Interns: Cunjun Wang, Eric Hsueh

Google Hosts: Lia Davitashvili, Dustin Pho, Ilya Kobelevskiy

Google Interns: Janet Vu, Nadia Ciobanu

- Prometheus Exporter:
  - [Cunjun] Working on the CI tests problems.
    - Having a flag to turn on/off the Prometheus integration test.
- OTLP Exporter
  - o [Nadia]
    - Set trace/span ids merged (PR)
    - Exporter configs

- Add config struct, passed into OTLP exporter constructor
- Populate struct using environment variables?
  - Env vars have limitations
- Abstraction layer (interface) for now, define usage later
- Add example using OTLP exporter
  - Automatic instrumentation can cause problems
  - FYI -

https://github.com/open-telemetry/opentelemetry-dotnet/pull/1150

- Benchmark memory
  - Critical for beta or GA, not critical for current state
  - Also have CPU usage
  - Johannes worked a bit on this (valgrind)

### • zPages (TraceZ)

- [Janet]
  - PRs for ext folder restructure [#292], README update [#288]
  - Benchmarks for zPages backend components should be done in a couple of days
  - Youtube channel access?

## August 17th, 2020

#### Attendees:

Reiley Yang (Microsoft), Johannes Tax (New Relic), Jodee Varney (New Relic), Nick Holbrook (Ex-Google Intern), Max Golovanov (Microsoft)

**AWS Hosts:** 

AWS Interns: Cunjun Wang, Eric Hsueh

**Google Hosts**: Aditya Shirodkar, Ilya Kobelevskiy, Ziwei Zhao, Lia Davitashvili, Kirk Kelsey

Google Interns: Tianlin Zhao, Sam Atac, Janet Vu, Nadia Ciobanu, Snehil Chopra

#### Agenda

• Demo from Max? ZPages demo from Janet.

#### • Prometheus Exporter:

 [Cunjun] Going to refactor the PRs we have filed to make sure each PR is buildable.

### • Trace exporters

- o [Nadia]
  - Merged TraceState implementation
  - Working on exporter configuration
  - 2 weeks left
  - Setting IDs

- o [Snehil]
  - Pushed a <u>PR</u> for short term solution for forking support
  - Waiting for draft PR for long-term solution from Max
    - PlatformEventHandler class to be used an abstraction layer for platform-specific events
  - Last SIG meeting!

#### Context API

- [Sam]
  - Merged SpanContext implicit add to context PR
  - Looking at gRPC propagation, specifically at how python and go are doing it
- [Tianlin]
  - PRs for with and without Trace State ready, but has to merge the without version before the with Trace State version -> Debugged Trace State and Trace state now needs an update. Either me or Nadia could bring up the changes to PR.
  - W3C conformance test going steady

### Sampling API and basic samplers

- o [Nick]
  - In Memory Span Exporter and Samplers documentation waiting to be merged
  - [Reiley] PR looks good, please take a look at the CI failures (probably not caused by this PR)
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/238

#### zPages (TraceZ)

- [Janet]
  - zPages live demo today? Need more approval for recording something and posting on Youtube
  - Couple of blocked PRs for the wrapper and example (need CMake build for JSON dependency)
    - will update README after this, OTel zPages spec changes, and zPages recording
    - Create an issue, assign to / tag Max, make sure Bazel build works, Max will help on the CMake part.
  - Github Issues? JSON CMake, HTTP server safety, IDs (Nadia will work on the generation of trace id / span id, and associate parent span id), add events to Tracez, Git submodules
  - 2 more weeks
    - Going to start writing performance tests for the zPages backend components (processor and aggregator)
    - Working on adding zPages to the OTel spec and zPages blog post for OTel
- Intro Jodee from New Relic (currently focusing on C/Go/PHP).

- [Max] compile time warning treat warning as error?
  - o [Reiley] L3 or L4?
  - [Max] L4
  - [Johannes] at minimum the API should be Warning level 3, and need to be enforced by the CI.

# August 10th, 2020

#### Attendees:

Reiley Yang (Microsoft), Johannes Tax (New Relic), Jodee Varney (New Relic),

Max Golovanov (Microsoft)

AWS Hosts:

AWS Interns: Cunjun Wang, Eric Hsueh, Nick Holbrook,

Google Hosts: Ilya Kobelevskiy, Aditya Shirodkar, Lia Davitashvili

Google Interns: Tianlin Zhao, Snehil Chopra, Sam Atac, Nadia Ciobanu, Janet Vu

### **Agenda**

- [Reiley] who will be the mentor for Prometheus exporter? This hasn't been covered in the **Jun 8th**, **2020** meeting.
  - [Reiley] will not have time this week due to the primary on-call duty, will have time next week
  - o [Johannes] will try to help, but hard to promise this week.

#### Prometheus Exporter:

- [Cunjun] Internship ends in three weeks, so hope all PRs get merged by the end of next week.
- Filed all the PRs for implementation and unit tests
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/245
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/250
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/251
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/240
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/261
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/262
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/263
- Working on pipeline tests with Metric SDK and Prometheus.
- Cajun heard back from Alolita, will reach out to AWS devs for help on code review.

#### • Trace exporters

- o [Nadia]
  - Working on implementing trace state (definition is merged)
  - Implemented event attributes and links in SpanData (PR)

- Does anyone know about the <u>OTLP exporter specs</u> status?
  - Can look at .NET
- [Reiley] the spec PR is unlikely to get merged soon (given it is tagged as priority:p3), no need to block on this.
- o [Snehil]
  - Released design doc for forking support of processors and exporters
    - [Reiley] review the PR today
  - Done with implementation and tests of ForkAwareProcessor and ForkAwareExporter
  - Now implementing the handlers for built-in(simple and batch) processors and exporters

#### Context API

- o [Sam]
  - Should the span be stored in the RuntimeContext or the SpanContext?
    - Clarification of the question: can we avoid putting the span in the RuntimeContext (e.g. Context["current span"])
    - In Python we support both scoped way and explicit way of managing Span life/end.
    - with (var span = tracer.start\_as\_current\_span("name")){}
    - var span = tracer.start\_span(); tracer.get\_current\_span() span.end()
  - Blocked on grpc propagation until the SpanContext is finished
- o [Tianlin]
  - HTTP trace context: all done except waiting for trace state implementation
  - Working on w3c conformance testing. Made a client and is currently trying to modify max's server and fit the client into it.
  - Failing to pass the osx\_test, and this seems like a problem a lot of us have

## Sampling API and basic samplers

- o [Nick]
  - InMemorySpanExporter finished, but still having issues with CMake
  - Currently using a workaround using relative imports as suggested by Johannes, but this does not work for bazel tests.
  - Working on getting final documentation merged and finishing up some sampler optimizations
  - This is my last week

### • zPages (TraceZ)

- o [Keshav]
  - zPages wrapper PR #267
  - zPages example PR #268 (wrapper should go in before the example)

- Internship ends this week
- o [Janet]
  - zPages and TraceZ HTTP server merged, need to revisit handling static files
  - Working on adding.updating zPages docs in OTel spec and OTel C++
  - 3 more weeks in internship, pretty much free
  - [Max] consider a demo next week.

## August 3rd, 2020

### Attendees:

Reiley Yang (Microsoft), Max Golovanov (Microsoft), Johannes Tax (New Relic)

AWS Hosts: Alolita Sharma

AWS Interns: Hudson Humphries, Cunjun Wang, Ankit Bhargava, Eric Hsueh, Brandon

Kimberly

Google Hosts: Aditya Shirodkar, Lia Davitashvili

Google Interns: Snehil Chopra, Sam Atac, Janet Vu, Tianlin Zhao

## **Agenda**

- Sampling API and basic samplers
  - o [Nick]
    - Finishing up work with InMemorySpanExporter
      - Ran into issue with CircularBuffer integration but fixed and am finishing up today
      - Next step is to optimize existing samplers.
- Metrics API and implementation
  - [Ankit] All PRs for Metrics API and SDK are filed
    - Will continue to rebase and make edits as guickly as possible
    - Hoping to get as much merged as possible since internships end Friday
    - Reached out to josh for review on #213 (Sketch aggregator)
    - Adding documentation and example usage
  - [Hudson] MetricsProcessor and OStreamMetricsExporters in PRs
    - Haven't been reviewed yet
  - [Ankit] internship will finish by end of this week.
- Trace Exporters (metrics is out of scope) for GCP and OTLP
  - [Snehil] (national holiday for Canada?)
    - Batch Processor PR ready to be merged
      - Example for the same in a separate PR
    - Picked up #62
      - Adding circular buffers to exporter interface
        - Just function overloading for the existing Export method?
      - Forking support for processors and exporters

Not sure on the concept of a streaming exporter?

#### Context API

- [Sam]
  - Planning on submitting a PR for implicitly adding the span to the runtime context upon span creation tomorrow
  - Also starting to take a look at grpc propagation
  - FYI SuppressInstrumentation https://github.com/open-telemetry/opentelemetry-dotnet/pull/960
- o [Tianlin]
  - Going to make the http trace context pass all tests (especially format) and ready for PR review
  - Making the span context closer towards what is currently on the parent branch
  - (Nadia is working on TraceState API is here <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/234">https://github.com/open-telemetry/opentelemetry-cpp/pull/234</a>, implementation is not there yet)
  - Haven't yet started on the W3C TraceContext integration testing yet. Need help here (integrate with the test harness) <a href="https://github.com/w3c/trace-context/tree/master/test#w3c-distributed-tracing-validation-service">https://github.com/w3c/trace-context/tree/master/test#w3c-distributed-tracing-validation-service</a>. Snehil might help here?

## • zPages (TraceZ)

- [Keshav]
  - #227 (Adding copy constructor to recordable, pr:please merge / Reiley updated this to pr:do-not-merge due to newly introduced build breaks) is ready to be merged, it fails a format check (maybe check #233) and osx build which several other PR's are failing, not sure how to fix this. Also up to date with master
  - #220 (Switching of recordables in tracezprocessor, approved) has been approved by Max and is ready to be merged same build failures as the previous PR, up to date with master
  - #185 (data aggregator files, pr:please merge) approved ready to merge once the above two PR's have been merged, will resolve conflicts and ping reviewer
- [Janet]
  - #217 Base HTTP Server approved and rebased, can merge? added file server as an example, only failing osx build
    - Will make PR for:
      - finished zPages and TraceZ HTTP servers once finished
         [blocked by #217] emitted static files as string
      - folder restructure → ext/include/... and ext/src/... to ext/zpages/... and ext/http/server/...
      - README changes

- Demo ready. Working on consolidating more general zPages things into centralized place (info, static files, etc) to make future dev easier
- [Lia] zPages responses from Sergey
  - zPages is like an exporter that works by accumulating some data from other components related components - specialized sampler and processor. (Section 2 in the OTEP is relevant).
  - zPages should be owned by OT. Mentioned here:
     open-telemetry/oteps/z-pages.md#trade-offs-and-mitigations
  - shared static code across languages eventual goal

## • Prometheus Exporter

- o [Eric]
  - Close to finishing implementation
    - Will begin filing PRs within the week (most likely starting tomorrow)
      - Currently finishing data translation from OT to Prometheus, filed an issue regarding quantile samples in the Exact Aggregator
        - https://github.com/open-telemetry/opentelemetry-cp p/issues/237
      - Adding more unit tests for data translation as more is implemented
    - Will begin integration testing soon, with help from the metrics SDK team (Ankit, Brandon, Hudson), before their internships end this Friday
- [Max] FYI .NET RuntimeContext API https://github.com/open-telemetry/opentelemetry-dotnet/pull/948

# July 27th, 2020

#### Attendees:

Reiley Yang (Microsoft), Johannes Tax (New Relic)

AWS Hosts: Alolita Sharma (AWS)

AWS Interns: Hudson Humphries, Ankit Bhargava, Eric Hsueh, Brandon Kimberly, Cunjun Wang

Google Hosts: Lia Davitashvili, Ilya Kobelevskiy, Aditya Shirodkar

Google Interns: Tianlin Zhao, Sam ATac, Snehil Chopra, Nadia Ciobanu, Janet Vu, Nick Holbrook

#### **Agenda**

- Sampling API and basic samplers
  - o [Nick]
    - Progress:

- Moving MockExporter (now called InMemorySpanExporter) to separate class / updating exporter
- Starting optimizations on Samplers
- No blocker, still has 3 weeks (2 extra weeks to help others) before the internship finishes, offering help to other v-teams

### • Metrics API and implementation

- [Brandon]
  - Blocking issue on meter class
    - Posted an issue here
- o [Ankit]
  - Progress:
    - Metric Instruments are complete and ready for reviews (PR #191 and PR #179)
    - Aggregators are either complete or ready to merge (PR #178 and PR #213)
    - Working on Controller class and end to end testing
  - Issues
    - PR #178: Aggregator throws an exception in the SDK, not allowed by Bazel noexcept test
      - Look around the repo, there are examples which show how to throw exceptions only when the user allows them
- o [Hudson]
  - Progress:
    - OStreamMetricsExporter in PR, ready for review (PR 196)
    - Processor in development, aiming for PR by tomorrow.
      - Aggregators can only be merged when they are raw pointers, but we move them around as nostd::shared\_ptr.
         How should we handle this? Have to cast down?
- Trace Exporters (metrics is out of scope) for GCP and OTLP
  - o [Snehil]
    - Progress
      - Batch Processor PR almost ready to be merged
        - Example ready for the same too
        - Will submit the example as a separate PR
      - cLooking for more ways to contribute
        - Maybe Metrics API?
        - Enhancing exporter interface?(<u>issue link</u>)
  - o [Nadia]
    - Merged PRs for updating recordable interface and implementing links and event attributes in OTLP
    - Looking for more work 5 weeks left of internship
      - Going to look at merging Trace State <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/42">https://github.com/open-telemetry/opentelemetry-cpp/pull/42</a>

- use null-terminated string
- Update OTLP exporter to conform to specs when <u>specs PR</u> is merged

#### Context API

- [Sam]
  - Progress:
    - Just a couple of nits left to fix for the Runtime and Threadlocal context. Will fix tonight.
    - After those fixes, will submit another PR with some helper functions for the RuntimeContext
  - Todo
    - Add some examples and instruction about how to use the code
- [Tianlin]
  - Progress:
    - Finished the http\_trace\_context and updated them on PR for review (Note there are compromises with this, see Issues)
  - Issues:
    - Because some of the dependency problems are not resolved, some work-arounds are being developed. But eventually needs fixing:
      - For now, I used std::string in http\_trace\_context for string concatenation. Not sure if it is okay if std::strings are only used within one method and never outputted. (APPROVED)
      - TraceState is now being simplified to a std::map (which is not immutable), with the official one not completed (even only have virtual methods)
      - SpanContext lacks two static instantiating methods, and I have made a simplified version of them to instantiate the class.
    - Span is no longer in use at the current situation it seems. This
      observation is from my purviewing of Sam's code that Span is no
      longer accepted as a value by Context. Not sure if this is intended.
      - Add span back

#### zPages (TraceZ)

- Largely done for TraceZ, thread safe span data #192 blocker for other PRs, TraceZ aggregator PR is next. Will also add a PR that updates the Tracez processor to use that recordable.
- Other upcoming PRs
  - Base HTTP Server working on PR using Max's code
    - Thread safety concerns for base and derived classes?
  - zPages and TraceZ HTTP servers, derived from Max's base

- zPages import/wrapper to add to applications
- Example to demonstrate zPages
- JSON CMake build
- Questions: Javascript standards style/testing needed? Do we need to show span data events?
  - For the intern project, checkin the files directly, no CI required for JS/CSS
- Out-of-proc implementation/shared static file code across languages? Exporter?

#### Prometheus Exporter

- [Cunjun] Export() function is implemented
- Function to translate OpenTelemetry metrics to Prometheus metrics for Counter and Gauge is also implemented and tested
- Collect() function is implemented and under test
- [Max] VS2015 support for CI?
  - Any VC++ compiler > VS2015 should work?
    - [Reiley] need a support policy so we know when we can deprecate this.

## July 20th, 2020

### Attendees:

Reiley Yang (Microsoft), Max Golovanov (Microsoft), Johannes Tax (New Relic)
AWS Interns: Brandon Kimberly, Eric Hsueh, Cunjun Wang, Ankit Bhargava, Hudson
Humphries

AWS Hosts: Alolita Sharma (AWS)

Google Interns: Sam Atac, Tianlin Zhao, Oliver Zhang, Keshav Manghat, Nadia Ciobanu, Snehil Chopra, Janet Vu

Google Hosts: Ilya Kobelevskiy, Ziwei Zhao, Lia Davitashvili, Oulin Yao

#### Agenda

#### Sampling API and basic samplers

- [Oliver] TracerProvider fix merged;
   Comprehensive test waiting to merge;
   Changed sampler description from string to string view. PR under review.
- [Nick] perf test almost done (1 small issue), looking at CI (currently need input from Johannes); need to refactor some of the existing files

#### Metrics API and implementation

- [Ankit] PRs out for multiple API & SDK Components
  - Metric Instruments API ready to merge (PR #161) template changes are done.
  - SDK Aggregators (PR #181, PR #178) making changes
  - Metric Instruments SDK (PR #179) could use reviews
- [Ankit] Is there a data workload or load generator that we could use to test the entire metrics pipeline?
  - Sampling is creating a random load generator which we can use, nothing currently

- [Hudson] StreamExporters
  - StreamSpanExporter in PR (183)
    - Addressed comments, get a second pass through?
  - StreamMetricsExporter ready for PR soon
    - Will open a draft tonight

## Trace Exporters (metrics is out of scope) for GCP and OTLP

- o [Snehil] Batch Processor
  - Will send out a PR for batch span processor hopefully today (worst case tomorrow)
  - Concerns about design inconsistencies in other languages (python, java, go)
    - Better to address them in the PR to get better context
- o [Nadia] OTLP
  - Extended recordable (PR), only links left
  - Wondering what to work on next
    - Conforming to new OTLP specs config and retries
    - Set Span/Trace Ids need this context PR to merge
    - Context: CorrelationContext, DistributedContext
      - Low priority, will be replaced by baggage <a href="https://github.com/w3c/baggage">https://github.com/w3c/baggage</a>

#### Context API

- o [Tianlin] Propagation:
  - Progress:
    - With most dependency problems resolved and a couple of them temporarily bypassed, testing is underway, a bug free version of HttpTraceContext will be rolled out this week.
  - Things Ahead:
    - Clients and Servers
    - Testing Service
  - Stuck Points:
    - Trace State: (PR creator: g-easy) I need constructor and setter for it
    - I need more specification on the objectives of clients and servers.
      - What is the goal of clients and servers? Is it just for tests or for the eventual features of the project as well?
      - Where shall the clients and servers fit into?
    - I have spotted some dependency issues with other people's work which in turn affects my work: span, etc... (not calling the namespace before calling a class)
    - Some definitions of classes turn out to be unacceptable to my http\_text\_format because those classes are virtual and arguments of a function can only be implemented ones. Example: Span (PR#98, which is already approved)

- [Atac] Context Api updated for simplicity and stability
  - Ready to merge

### zPages (TraceZ)

- o [Keshav]
  - PR up for tracez data aggregator waiting on feedback
  - PR up for threadsafe recordable for zpages waiting on feedback
    - allows reading recordable data when looking at running span attributes
  - Working on refactor to use new threadsafe Recordable with zpages
- o [Janet] zPages/TraceZ HTTP Server design doc under review, branch
  - JSON C++ Bazel import working and <u>approved</u>, need to add CMake
  - zPages static <u>files</u> started (HTML, CSS, JS)
  - When requested, <u>server</u> creates and sends mock data as JSON for the frontend to parse for bucket counts (shown) and bucket details
    - need to hook to actual aggregated data once that's finalized
    - extends Max's provided one, which is also a WIP
  - General logic for adding zPages in a <u>background thread</u> consolidated
  - [Reiley] Consider how to prevent live loop (server automatically collects traces/metrics that feedback to the same processor/exporter)
  - [Max] potentially provide the ability to use standard server / lib, not in scope for the intern project though
- [Lia]
  - Two PRs: thread safe aggregator, https://github.com/open-telemetry/opentelemetry-cpp/pull/185

#### Prometheus Exporter

- o [Eric]
  - PR for Prometheus Exporter Design pending review
  - In Progress: Beginning to implement
     PrometheusExporter/PrometheusExporterUtils classes

# July 13th, 2020

#### Attendees:

Reiley Yang (Microsoft), Johannes Tax (New Relic), Max Golovanov (Microsoft) AWS Interns: Ankit Bhargava, Hudson Humphries, Brandon Kimberly, Cunjun Wang, Eric Hsueh

Google Interns: Sam Atac, Snehil Chopra, Keshav Manghat, Tianlin Zhao, Oliver Zhang, Nadia Ciobanu, Nick Holbrook, Janet Vu

Google Hosts: Kirk Kelsey, Lia Davitashvili, Aditya Shirodkar, Ilya Kobelevskiy, Oulin Yao

#### **Agenda**

Sampling API and basic samplers

- [Oliver] Tracer integration PR & Parent-Or-Else PR were merged.
   Start Span PR under review
   Question:
- [Nick] Mock Span Context was merged earlier today. Probability Sampler is ready to be merged. Performance testing in progress.
- FYI <a href="https://github.com/open-telemetry/opentelemetry-dotnet/pull/796">https://github.com/open-telemetry/opentelemetry-dotnet/pull/796</a>

## • Metrics API and implementation

- [Ankit] Open PRs for Meter Provider, Meter, and Metric Instruments as well as a design document for the stdout exporter.
  - Currently waiting for feedback on Meter and Metric Instruments (161,162)
    - Look for more reviewers on 161/162
  - Templating API to reduce code duplication and prevalence of variants
- [Ankit] Currently working on SDK implementation
  - PRs for Aggregators and Accumulator coming later this week
- [Hudson] StdoutSpanExporter PR almost ready for review
  - Reiley to clarify with the spec SIG on Tue.

## • Trace Exporters (metrics is out of scope) for GCP and OTLP

- o [Snehil] GCP
  - Benchmark PR merged
  - Created Design Doc for batch span processor
    - Dispatcher PR is yet to be merged Some checks still failing
- o [Nadia] OTLP
  - Benchmark tests merged (PR)
  - Restructuring directory (PR), working on extending recordable
  - Not sure about next steps ContextPropagation?
    - [Johannes] Take a look at https://github.com/open-telemetry/opentelemetry-cpp/pull/42
  - Timer being used by Batch Processor is depending on https://github.com/open-telemetry/opentelemetry-cpp/pull/63.
    - [Johannes] need some help on the failed test on Windows
    - [Max] will take a look

#### Context API

- o [Tianlin] Propagation:
  - PR(143) updated to enable transforming std::map to templated method to KeyValueIterator for ABI safety.
  - Not sure about the request framework for propagation. HTTP only (no HTTP) simple cross-plat web-server mentioned by Max.
  - Looking at PR#43 for trace\_state and span\_context & adjustments due to the difference to be made
  - Work on Propagator
  - Some sample tests are being made, but I don't know if they look good for a complex class like HTTPTraceContext.

- https://github.com/w3c/trace-context/tree/master/test
- [Sam] Context API implementation has been added to the existing PR
  - Runtime and threadlocal context on the way after approval

## • zPages (TraceZ)

- [Janet] Processor: Added requested changes and TODO comments for processor PR, using span\_data as recordable
  - Processor thread safety <u>progress</u> (WIP in separate branch)
    - Added several tests to check threaded behavior, added basic lock guard to functions
    - Failing some tests with --config=tsan
      - OnStart and OnEnd causing data race issues when concurrently run
      - o different combinations of locks still have issues
  - [Johannes] perhaps just add a big lock to make it correct, and later address the perf issue?
    - std::lock guard<std::mutex> lock(mtx );
- [Keshav] Aggregator: Waiting for completion of Span processor PR before submitting PR.
  - Working on a multi threaded approach to aggregate spans.
- Includes folder structure?
- Github issue for the project:
   <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/166">https://github.com/open-telemetry/opentelemetry-cpp/issues/166</a>

### • Prometheus Exporter

- o [Cunjun] PR for design doc review filed.
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/172

# Jul 6th, 2020

#### Attendees:

Reiley Yang (Microsoft), Max Golovanov (Microsoft), Johannes Tax (New Relic) Google Interns: Snehil Chopra, Tianlin Zhao, Sam Atac, Oliver Zhang, Janet Vu, Nadia Ciobanu, Nick Holbrook, Keshav Manghat

Ankit Bhargava (AWS),

Google hosts: Oulin Yao, Ilya Kobelevskiy, Lia Davitashvili, Ziwei Zhao

## Agenda:

## • Sampling API and basic samplers

- [Oliver] Tracer integration PR approved, waiting to merge; Parent-Or-Else sampler under review; Working on StartSpan integration and "integration testing" Question regarding StartSpan integration: How to get span data (e.g. parent span, TraceID) in a tracer instance.
  - Solution: pass in nullptr for parent context and TraceID. Create a PR for future integration. Check out Tianlin's PR for more details
- [Nick] Finishing Probability Sampler. Need a way to enforce bounds when constructing, but bazel flags currently do not allow throwing exceptions. Looking for a recommendation on how to proceed
- [Reiley] the SDK is having exception already (e.g. std::vector), we can enforce noexception for API (by having a flag that controls noexception/kill or exception, which we already have today), and allow exception from SDK (which is new).
- Follow up: Nick to create an issue.

### Metrics API and implementation

- [Ankit] API with tests is essentially complete
  - Making changes based on comments to design doc (PR #145)
  - Waiting on internal approval to file PR
- Clarification on nostd data structure usage
  - How to pass in pointer, value pairs for batch recording

#### Context API

- [Tianlin] Updates on PR(#143): included more classes needed for implementation of the HTTPTextFormat:
  - Also not sure about the api structure--do we have to implement these headers in detail or only dummy ones?
- https://github.com/open-telemetry/opentelemetry-python/blob/a8a0ed40df851b8e
   6477d188c393b89c84f15e42/opentelemetry-api/src/opentelemetry/trace/propaga
   tion/tracecontexthttptextformat.pv#L49
- 1. First look at Python, whether the code belongs to API or SDK, and follow in C++
- o 2. If the code has to be in the API package in C++, follow our ABI guideline.

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- o [Sam] PR with context object with dummy methods submitted today
  - sdk implementation ready to go upon dummy approval
  - Runtime context container ready to go upon sdk implementation approval
  - [Reiley] context is part of API, not SDK
    - Take Python for example
       https://github.com/open-telemetry/opentelemetry-python/tree/mast
       er/opentelemetry-sdk/src/opentelemetry/sdk
    - <a href="https://github.com/open-telemetry/opentelemetry-python/tree/master/opentelemetry-api/src/opentelemetry/context">https://github.com/open-telemetry/opentelemetry-python/tree/master/opentelemetry-api/src/opentelemetry/context</a>

#### • Z Pages Processor (TraceZ)

- [Janet] Will send out official PR for span processor in the next few days, preliminary PR currently at <a href="here">here</a>
- [Keshav] Working implementation of data aggregator ironing out some stuff before submitting a PR
- Role of exporter in zPages? Do we need one? It is passed to the SpanProcessor, for example:
  - https://github.com/open-telemetry/opentelemetry-cpp/blob/master/examples/simple/main.cc#L16
- [Max] is zPage going to work with other SDK (not the official OpenTelemetry C++ SDK)? [Reiley] nope, not required by the spec <a href="https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/trace/sdk.md#span-processor">https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/trace/sdk.md#span-processor</a> (clarify with a Github issue)
- https://github.com/open-telemetry/opentelemetry-specification/pull/683

### Trace Exporters (metrics is out of scope) for GCP and OTLP

- o GCP [Snehil]
  - Implemented <u>custom recordable</u> for the GCP exporter
  - Will send out a PR for benchmark tests
  - Working on batch span processor
    - [Issue] <u>PR</u> for dispatcher unmerged, which handles timer functionality for batch span processor (<u>Github Issue</u>)
- OTLP [Nadia]
  - Merged basic OTLP recordable and updated opentelemetry-proto definitions
  - PR for OTLP exporter under review, working on benchmark tests
  - Created <u>issue</u> for building gRPC with CMake

# Jun 29th, 2020

#### Attendees:

Reiley Yang (Microsoft), Max Golovanov (Microsoft)

Google Interns: Tianlin Zhao, Snehil Chopra, Sam Atac, Nick Holbrook, Oliver Zhang, Janet Vu, Keshav Manghat, Nadia Ciobanu

Google hosts: Lia Davitashvili, Aditya Shirodkar, Ilya Kobelevskiy, Dustin Pho AWS Interns: Hudson Humphries, Cong Zou, Cunjun Wang, Ankit Bhargava, Eric Hsueh

#### Agenda:

Sampling API and basic samplers

- [Oliver] Always On sampler completed. Waiting to merge; Need to change a few things for tracer integration; Will submit a PR for Parent-Or-Else sampler in one or two days.
- [Nick] Attribution of Open Census functions for Probability Sampler
- https://github.com/open-telemetry/opentelemetry-cpp/blob/master/api/include/opentelemetry/nostd/variant.h
- Working on the sampler which follows the parent decision.
- Next step on integration / performance test, need help [reach out to Max]

## • Metrics API and implementation

- Split the design doc into API and SDK.
- o PR for the interface / API will be ready.
  - Reiley will comment on the API PR.

## • Context API and implementation

- [Tianlin] PR for httptextformat header, some assumptions need to be confirmed
  - Support from other data structures like span context?
  - [Reiley] will review.
- [Sam] PR for nostd::vector and nostd::pair (Reiley: linked-list / iterator or vector?)
  - [Max] follow up offline.
  - https://github.com/open-telemetry/opentelemetry-cpp/issues/134

- Progress on allowing STL??
  - https://github.com/open-telemetry/opentelemetry-cpp/issues/67

### • ZPages Processor (TraceZ)

 Blocked by some missing recordable attributes for the Data Aggregator, may make PRs for these or make feature requests (getters, hashing/comparators)?

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#### Trace Exporters (metrics is out of scope) for GCP and OTLP

- [Snehil] Added Minimal GCP exporter (<u>link</u>)
  - TODO
    - Implement custom recordable
    - Implement Batch span processor
- [Nadia] Basic recordable for OTLP almost ready to merge (link)
  - Next working on OTLP exporter itself
  - Update opentelemetry-proto?
    - The vendoring is out-of-date.
    - OpenCensus Python is using package dependency having proto publishing a python package during CI, and the Python SDK takes package dependency.

- For C++, having the generated source code checked-in might help debugging?
- OpenTelemetry Javascript is taking submodule approach.
- Recordable is not required by the specification, it is designed specifically for the C++ client to achieve high performance without having to copy memory (e.g. zero allocation), but for async exporter it is okay to copy the data and let the exporter own it.

## • Exporter for Prometheus

 [Cunjun] Finish internal design document review this week, and plan to share an external version by early next week.

## Jun 22th, 2020

#### Attendees:

Reiley, Max (MSFT)

Johannes

Google Interns: Oliver Zhang, Tianlin Zhao, Sam Atac, Nadia Ciobanu, Nick Holbrook,

Snehil Chopra, Janet Vu, Keshav Manghat

Alolita Sharma (AWS)

AWS Interns: Hudson Humphries, Eric Hsueh, Brandon Kimberly, Cong Zou, Ankit

Bhargava

Google hosts: Aditya Shirodkar, Oulin Yao, Ziwei Zhao, Ilya Kobelevskiy, Lia Davitashvili,

Dustin Pho

## • Sampling API and basic samplers

#### 2 PRs

API

Always on (currently as a "draft") - clarification: ready for review? (will remove the "draft" tag)

Always off

One blocker on the attributes PR from Johannes (ready to merge today or tmr?) - conclusion : merge and open follow up issue

Max is fine to merge (there might be optimization for sync exporter)

Reiley: question - string\_view has no ownership, question is do we allow string\_view as member of a class?

Oulin - shouldn't be member Johannes - probably not

#### Metrics API and implementation

Suggestion to split into smaller PRs.

E.g. PR for API, PR for one scenario implementation (similar to what Context API is doing)

#### Context API and implementation

Will up the PR today. Concern over ABI compatibility.

Wrote header files for context propagation and implemented a sample HTTPTextFormat class. Need more discussion with host before issuing a PR

### Exporter for ZPages (TraceZ)

Have the initial design.

Need to decide the folder structure.

https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/library-layout.md#sdk-package

### .NET ZPages exporter

https://github.com/open-telemetry/opentelemetry-dotnet/tree/master/src/OpenTelemetry. Exporter.ZPages

#### OT C++ exporters

https://github.com/open-telemetry/opentelemetry-cpp/tree/master/exporters

## Trace Exporters (metrics is out of scope) for GCP and OTLP

Have a design doc, shared with Johannes.

Which repo for GCP?

- GCP has to go to a separate repo
- OTLP will be part of the main repo (prefer minimum dependency if possible, but not enforced by the project/ABI compat)
- Exporter for Prometheus
  - o <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/81">https://github.com/open-telemetry/opentelemetry-cpp/issues/81</a>
  - A couple of our AWS Interns are working on the technical design and implementation for this exporter.

# Jun 15th, 2020

#### Attendees:

Reiley, Max Golovanov Johannes AWS Interns: Brandon Kimberly, Ankit Bhargava, Hudson Humphries, Cunjun Wang Google Interns: Nadia Ciobanu, Sam Atac, Snehil Chopra, Oliver Zhang, Janet Vu, Nick Holbrook

Google host: Ziwei Zhao, Oulin Yao, Lia Davitashvili, Aditya Shirodkar, Ilya Kobelevskiy

[update] CI on GitHub Actions

### Sampling API and basic samplers

[Oulin] synced with Johannes on the plan, next step is to define the interface.

[Oliver] working on the interface / header file definition. Might have some challenge to integrate as there might be components missing in the current API/SDK.

### • Metrics API and implementation

[Hudson] have a design doc ready, trying to format it to external format and send to Reiley.

## • Context API and implementation

[Sam/Reiley] context API seems to be a good start. Have several comments related to API design and implementation (around TLS).

[Max] if there is a need on string\_view / variant, Max might help.

[Reiley] TraceContext - Sam: need to follow up

## • Exporter for ZPages (TraceZ)

[Lia] had discussion with Max/Sergey last week, Max gave a workaround.

[Max] need to discuss the layering. Sergey is driving the zpages overall effort across the project. C++/Java will be the prototype projects.

#### Trace Exporters (metrics is out of scope) for GCP (and potentially OTLP)

[Ilya] decided to work in parallel on GCP and OTLP exporters. Currently working on design / deciding which feature. Followed up with Johannes last week.

[Lia] question about the attributes.

[Reiley] currently we have variant, the OT spec is still changing but we assume it will be just additive changes (e.g. adding recursive type)

[Max] will follow up with OT specification about the byte[] type.

[Johannes] plan to work on passing variant from API to Recordable (SDK).

[Max] proposal to have alternative way to allow using stdlib instead of current nostd

- No API change
- Make the final offering more flexible (e.g. doesn't require dynamic loading).
- Compare perf across compilers/stdlibs.
- Identified few issues (standard compliance) e.g. string\_view compatibility.

## Jun 8th, 2020

#### Attendees:

Reiley

Johannes

Google Host: Oulin Yao, Dustin Pho, Aditya Shirodkar, Ilya Kobelevskiy, Lia Davitashvili, Ziwei Zhao

AWS Interns: Ankit Bhargava, Connor Lindsey, Brandon Kimberly, Hudson Humphries Google Interns: Oliver Zhang, Nick Holbrook, Snehil Chopra, Sam Atac, Tianlin Zhao,

Nadia Ciobanu, Janet Vu

AWS FTE: Richard Anton, Alolita Sharma

### Agenda:

[reiley] each intern project v-team report back the status / plan

## • Sampling API and basic samplers

- Mentor: Johannes (Github: pyohannes, jtax@newrelic.com)
- o Host: Oulin Yao, Jake Sandler
- o Interns: Oliver Zhang (Github: ziqizh), Nicholas Holbrook
- o [Oulin] a doc is ready, will review with Johannes.
- [Oliver] have an OpenCensus one in C++, tried it and haven't yet started working on the OpenTelemetry one.

### • Metrics API and implementation

Mentor: Reiley

o Host: Alolita, Richard, Tom

- o Interns: Brandon Kimberly, Hudson Humphries, Ankit Bhargava
- Status: working on a technical design, done the initial analysis on Python/Go/Java. Will submit the design and hopefully next week.

#### • Context API and implementation

https://github.com/open-telemetry/opentelemetry-cpp/issues/73 https://github.com/open-telemetry/opentelemetry-cpp/issues/74

- Mentor: Reiley (https://github.com/reyang)
- Host: Kirk, Aditya
- o Interns: Sam Atac (satac2), Tianlin Zhao (Tianlin-Zhao)
- This PR (API design) is out, commented
   <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/99">https://github.com/open-telemetry/opentelemetry-cpp/pull/99</a>

#### • Exporter for ZPages (TraceZ)

- Mentor: Max Golovanov (with Johannes as the consultant) (https://github.com/maxgolov)
- Host: Lia Davitashvili (github: liadavid), Dustin Pho (github: dustinpho)

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- o Interns: Janet Vu (github: jajanet), Keshav Manghat (github: kmanghat)
- [Lia] Have the initial design, shared with Max. Have another sync with Max/Sergey tomorrow.
- o [Max] Will submit an HTTP server proposal (header only) to speed up this.

## • Trace Exporters (metrics is out of scope) for GCP (and potentially OLTP)

- Mentor: Johannes (Github: pyohannes, jtax@newrelic.com)
- Host: Ilya Kobelevskiy, Ziwei Zhao
- o Interns: Nadia Ciobanu, Snehil Chopra
- [Ilya] deciding whether to start both GCP and OLTP together or focus on GCP first.

## https://github.com/open-telemetry/opentelemetry-cpp/pull/98

[Max] could we generalize the start/end into one single option?

- [Johannes] start option has more things (kind, links, timestamps) more than end option, prefer to have two rather than one
- [Reiley] +1

[Reiley] current approach looks good, already approved. (let me know when it is ready for merge). (curious - do we want the end option or just the timestamp?)

## https://github.com/open-telemetry/opentelemetry-cpp/pull/97

Ready to merge

[Johannes] create issue to track the open item.

https://github.com/open-telemetry/opentelemetry-cpp/pull/94 https://github.com/open-telemetry/opentelemetry-cpp/pull/86 Merge the old PR (86) and rebase 94.

# Jun 1st, 2020

#### Attendees:

- Microsoft FTE: Reiley Yang
- AppDynamics FTE: Andrei Boulgakov
- Google FTE: Ilya Kobelevskiy, Aditya Shirodkar, Lia Davitashvili, Oulin Yao, Ziwei Zhao, Dustin Pho
- Google Interns: Nicholas Holbrook, Nadia Ciobanu, Tianlin Zhao, Janet Vu, Snehil Chopra, Sam Atac
- AWS FTE: Alolita Sharma
- AWS Interns: Brandon Kimberly, Hudson Humphries, Ankit Bhargava
- New Relic: Johannes Tax

#### Internship projects:

• Sampling API and basic samplers

- Mentor: Johannes
- Host:
- o Interns:

### Metrics API and implementation

- Mentor:
- Host:
- Interns:

## Context API and implementation

https://github.com/open-telemetry/opentelemetry-cpp/issues/73 https://github.com/open-telemetry/opentelemetry-cpp/issues/74

- Mentor: Reiley (https://github.com/reyang)
- Host:
- o Interns: Sam Atac (satac2), Tianlin Zhao (Tianlin-Zhao)
- Exporter for ZPages (TraceZ)
  - Mentor: Max Golovanov (with Johannes as the consultant) (https://github.com/maxgolov)
  - o Host: Lia Davitashvili (github: liadavid), Dustin Pho (github: dustinpho)
  - o Interns: Janet Vu (github: jajanet), Keshav Manghat (github: kmanghat)

## May 25th, 2020,

Meeting canceled due to US holiday

# May 18th, 2020

**Attendees:** Reiley, Johannes, Morgan (Google), Oulin (Google), Nick (Google Intern), Dennis (SDE manager from AWS).

## Internship projects:

- Context API / W3C Compliance [Reiley will be the mentor, github: reyang, reyang@microsoft.com]
  - Kirk Kelsey (<u>yeslek@google.com</u>, github: 0x4b)
  - o Interns:
    - Sam Atac (github: satac2) (5/18 -- 8/21)
    - Tianlin Zhao (github: TBD) (5/26 -- 8/21)
- Sampling API / Samplers [Johannes will be the mentor, github: pyohannes, jtax@newrelic.com]
  - Oulin Yao (<u>oulinyao@google.com</u>, github: oulin-coder)
  - o Interns:
    - Oliver Zhang (github: ziqizh) (5/4-7/24)
    - Nick Holbrook (github: nholbrook) (5/11-8/14)
- Exporters
  - Zipkin
  - Jaeger

- OTLP (OpenTelemetry Protocol) talks to the OT Collector
- ZPages
  - Lia Davitashvili < liadav@google.com>
  - Interns:
    - Keshav Manghat (5/26-8/24)
    - Janet Vu (5/26-8/28)
- CorrelationContext

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# May 11th, 2020

Attendees: Reiley, Oulin (Google), Lia D. (Google), Johannes, Max

## https://github.com/open-telemetry/opentelemetry-cpp/milestone/6

Explained the issues and how we collaborate with the internship program.

Funding / Resourcing

GA - swap SDK and it should work, otherwise the spec needs to be changed.

Might be a good idea to try with Python or Rust.

Max - write an ETW exporter.

[Reiley] should we put it in the main repo, or a contrib repo?

# May 4th, 2020

Attendees: Reiley, Oulin (Google), Ryan, Johannes, Max

Oulin: Google summer interns will come to help, 2-3 weeks (end of May) to start working on the real project (May. 4th - Aug. 12th, full time, 4 pairs - 8 interns)

- [Reiley] context API
- [Ryan] OTLP exporter
- [Johannes] exporter for other systems
- [Ryan] port nginx tracer to OpenTelemetry
- [Reiley] break down the items/issues, come with milestones, review next week, maybe we can invite the interns next time
  - [Oulin] one intern is able to join next week, another is coming, not sure now; the other 6 interns are not here yet, Oulin will follow up
- [Oulin] ask for mentors:
  - [Reiley] committed to be a mentor for context related API, OpenTelemetry overall direction / spec
- https://gitter.im/open-telemetry/opentelemetry-cpp

Reiley: quick update on the 1st maintainers meeting

• Wonder if next meeting we should propose GitHub Actions

PR <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/63">https://github.com/open-telemetry/opentelemetry-cpp/pull/63</a> - timing with testing

Johannes: focus on traces for NewRelic, could potentially help on metrics (traces, metrics are equal priority), logs have lower priority

Ryan: focus on traces (nginx and envoy) from Lightstep perspective Reiley: traces first, interested in logs, metrics are low importance

# April 27th, 2020

Attendees: Reiley, Johannes, Max

- [Max]
  - Want a way to use the standard library (e.g. variant) instead of the nostd one.
  - In this way we can also avoid the license dependency.
  - File GitHub issue: "As a user of OpenTelemetry C++, I want to use stdlib as much as possible without nostd, this helps me to get rid of the external license dependency (e.g. Boost). I understand the implication of ABI compatibility and it works since my app is self-contained". Max to open two issues 1) licensing dependency 2) binary size / dependency on nostd vs. stdlib.
  - o nostdlib is not a goal here
- [Max] need to document the supported platforms / compilers.
  - One example Max gave:

Operating System Compiler Mac OS X 10.11.6 Clang Xcode 8.3 Mac OS X 10.12.6 Clang Xcode 9.0, 9.1 Mac OS X 10.13.3 Clang Xcode 9.2, 9.3, 10.0, 10.1 Raspbian GNU/Linux 8 (jessie) GCC 4.9.2 (armv7l) Ubuntu 14.04.\* LTS GCC 4.8.\*, 4.9.4 Ubuntu 14.04.1 LTS GCC 5.x.x Ubuntu 16.04 LTS GCC 5.x.x (armv7l) Windows 10 Android Studio/Gradle Windows Server 2016 Visual Studio 2017

https://github.com/open-telemetry/opentelemetry-cpp/issues/66 for tracking

- [Johannes] exporter interface should be ABI stable?
   <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/43">https://github.com/open-telemetry/opentelemetry-cpp/issues/43</a>
  - Reiley to close the issue by clarifying in the doc.

- Also take a look at <u>https://github.com/open-telemetry/opentelemetry-cpp/issues/37</u> to see if we can close it.
- <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/59">https://github.com/open-telemetry/opentelemetry-cpp/pull/59</a>
  - Sign off from Max there are minor issues that Max will follow up separately (GH issues)
  - Good to go from Johannes and Reiley
- <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/60/files">https://github.com/open-telemetry/opentelemetry-cpp/pull/60/files</a>
  - Ryan to merge the Variant PR to make it easier to review
- <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/63">https://github.com/open-telemetry/opentelemetry-cpp/pull/63</a>
  - Johannes will take another look
  - Reiley signed off
  - Max will work on something else
- <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/65">https://github.com/open-telemetry/opentelemetry-cpp/pull/65</a>
  - o Ryan and Reiley to join the cross language SIG
  - Ryan believes having a lightweight tracer without dependency on TraceProvider would benefit the Envoy scenario.
  - Agreement is to update the PR to meet with the current spec
  - Follow up with the cross language SIG to see if we change the design

For Composit/Multi SpanProcessor, got okay from Ryan/Reiley

# April 20th, 2020

Attendees: Reiley, Johannes, Ryan, Max

- [Follow up from last meeting]
  - https://github.com/open-telemetry/opentelemetry-cpp/pull/55 ready to merge?
    - Bogdan has open comments regarding the Recordable interface.
    - Ready to merge after rebase
  - [Follow up from last meeting] Need to follow up on the streaming exporter issue
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/2
    - For high throughput scenario (exporter acts like a callback, the actual transport/network layer calls back to the exporter to fetch spans)
    - Johannes/Reiley to read through the issue #2 and comment
    - Reiley what's the general bar for alignment with OT spec vs. perf optimization?
      - Johannes as long as it is optional, don't make integration harder for vendors

- Reiley +1 with Johannes, in additional, don't make the API/SDK bloated by default (user have to opt-in)
- Ryan +1
- [Bogdan] when can we have alpha (something to try)?
  - Exporter no need to worry
  - Context not done yet, need some help (OTEP 66)
    - Bogdan will try to get someone to help.
  - Trace API basic structure is there
  - Exporter/SpanProcessor API almost done

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- Oustanding PRs
  - Variant <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/59">https://github.com/open-telemetry/opentelemetry-cpp/pull/59</a>

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- o Async networking <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/59">https://github.com/open-telemetry-cpp/pull/59</a>
  - SimpleSpanProcessor doesn't need this
  - BatchSpanProcessor will need a in-memory queue (already covered by the lock-free circular buffer) + timer
  - [Reiley] #59 might be too big for the timer?
  - [Ryan] the async code is need by both the timer and async-io
  - [Ryan] split the PR, timer/dispatch part will be kept, other asyncio part will be moved to another folder in the SDK (and optional)
    - Have a compile time option (off by default) but keep in the SDK package?
    - [Reiley] ExampleAsyncExporter -> depends on OpenTelemetry
       C++ SDK and OpenTelemetry C++ Helper/ClassLibrary

# April 13th, 2020

Attendees: Reiley, Johannes, Ryan, Max

- [Follow up from last meeting]
  - https://github.com/lightstep/lightstep-tracer-cpp/issues/219
    - o Don't wait for the ACK from server if timed out
    - [Johannes] the spec mentioned optional timeout <u>https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/trace/sdk.md#shutdown-1</u>
    - [Reiley] either way should be fine? Python does not have a timeout parameter.
    - [Johannes] call exporter shutdown during tracer.Close():
    - [Ryan] calling exporter.Shutdown in tracer.Close() might introduce perf/block concern, suggest to decouple it
    - [Max] suspend/resume
      - [Ryan] probably align with the fork() effort?

- [Reiley] stepping back design principles
  - [Ryan] we shouldn't block indefinitely.
  - [Reiley] we should protect the user by default (e.g. if a user forgot to shutdown exporter, we should try to shutdown during atexit).
- o [conclusion]
  - We should have an explicit timeout parameter, and the default value should be 0 (which means INFINITE timeout).
  - Tracer doesn't have exclusive ownership of the lifecycle of the span processor/exporter. It should be a shared pointer. Allow sharing but don't mandate sharing.
  - [Johannes] exporter/process is owned by TraceProvider according to the spec..
- [Follow up from last meeting] Need to follow up on the streaming exporter issue
  - o <a href="https://github.com/open-telemetry/opentelemetry-cpp/issues/2">https://github.com/open-telemetry/opentelemetry-cpp/issues/2</a>
  - For high throughput scenario (exporter acts like a callback, the actual transport/network layer calls back to the exporter to fetch spans)
  - Johannes/Reiley to read through the issue #2 and comment
- [Bogdan] when can we have alpha (something to try)?
  - Exporter no need to worry
  - Context not done yet, need some help (OTEP 66)
    - Bogdan will try to get someone to help.
  - o Trace API basic structure is there
  - Exporter/SpanProcessor API almost done

# April 6th, 2020

Attendees: Reiley, Ryan, Johannes

- [Reiley] Logging update.
  - https://docs.google.com/document/d/10ntlywKEaWfHe\_hWuRO\_P2JbHN2Y8vYp TAHwmalQqGY/edit#heading=h.zbkb6yyed8iy
  - https://docs.google.com/document/d/1cX5fWXyWqVVzYHSFUymYUfWxUK5hT9 7gc23w595LmdM/edit#heading=h.lro8kgalys10
  - https://docs.google.com/document/d/1431f4LRBIUS8hVv7plW1lglGjigQXRoy7n MzGLJ\_bdc/edit#
  - [Ryan] nginx is using its own logging, how do we support that (seems like a custom logging API specific to this case).
  - [Reiley]
    - Workstream1: Log Processor, Log Record, Log Exporter (sync, async/buffered)
  - Gitter Channel: https://gitter.im/open-telemetry/logs
  - When
  - O Wed, April 8, 4pm 5pm

- Where
- https://zoom.us/j/8203130519 (map)
- Description
- Zoom: <a href="https://zoom.us/j/8203130519">https://zoom.us/j/8203130519</a>

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- Agenda:
  - https://docs.google.com/document/d/1cX5fWXyWqVVzYHSFUymYUfWxUK5hT97gc23w595LmdM/edit#heading=h.lro8kgalys10
- [Johannes] PR https://github.com/open-telemetry/opentelemetry-cpp/pull/55
  - o [Ryan] support Unix style fork buffer / exporter
    - Forked process needs to clean up the buffer (parent process should handle it)
    - Exporter with system handlers (e.g. UDP/TCP socket) doesn't get duplicated in the forked process
    - https://github.com/lightstep/lightstep-tracer-cpp/blob/master/src/recorder/stream\_recorder/stream\_recorder.cpp#L149-L174
  - [Reiley] need a fork handler interface?
    - Buffer
    - Random Generator (seed)
    - Exporter (UDP/TCP)
    - How about server port (e.g. SDK runs as a TCP/UDP server listening for agent polling)
  - Use a github issue to discuss the requirement and clarify the design (Ryan)
  - [Ryan] streaming exporter
    - https://github.com/open-telemetry/opentelemetry-cpp/issues/2
    - For high throughput scenario (exporter acts like a callback, the actual transport/network layer calls back to the exporter to fetch spans)
    - Johannes/Reiley to read through the issue #2 and comment
  - https://github.com/lightstep/lightstep-tracer-cpp/issues/219
    - Don't wait for the ACK from server if timed out
    - [Johannes] the spec mentioned optional timeout <a href="https://github.com/open-telemetry/opentelemetry-specification/blob/mast">https://github.com/open-telemetry/opentelemetry-specification/blob/mast</a> er/specification/trace/sdk.md#shutdown-1

- [Reiley] to check the spec, get back to gitter channel
- [Ryan] Variant PR <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/59/files">https://github.com/open-telemetry/opentelemetry-cpp/pull/59/files</a>
  - Main code taken from MPark, boost license
  - Max has a different approach (Reiley to get Max here to comment)

Mar 30th, 2020

Attendees: Reiley, Ryan, Johannes

### **Apologies:** Emil (vacation)

- [Reiley] Logging SIG (Wed. every week, 10AM PST or 4PM PST).
  - [Ryan] spdlog seems to be the most famous one, used by Envoy
  - [Reyang] Python example:
     <a href="https://github.com/census-instrumentation/opencensus-python/tree/master/contrib/opencensus-ext-logging">https://github.com/census-instrumentation/opencensus-python/tree/master/contrib/opencensus-ext-logging</a>
    - Logging integration with Traceld and SpanId
    - Log exporter infrastructure
  - [Ryan] suggest that we don't put a recommendation for logging API, instead, provide a simple way for people to get trace id and span id.
  - [Johannes] observed similar requirements to support the most famous logging libs similar like what OpenCensus Python did
  - o [Johannes] <a href="https://github.com/open-telemetry/oteps/pull/92/files">https://github.com/open-telemetry/oteps/pull/92/files</a>
  - [Ryan] in C++ standard 2020 there might be a support for a typed API (replacement for printf?)
    - https://www.zverovich.net/2019/07/23/std-format-cpp20.html

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- [Johannes] <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/55/files">https://github.com/open-telemetry/opentelemetry-cpp/pull/55/files</a>
  - [Ryan] some of the code doesn't seem to compile, for example, "= 0" in non-virtual functions.
  - o [Reiley] to dig out the spec and PR regarding sampling
  - Does SpanProcessor perform read-only operations, or there will be write operations?
  - <a href="https://github.com/open-telemetry/opentelemetry-specification/pull/331/files">https://github.com/open-telemetry/opentelemetry-specification/pull/331/files</a>
  - https://github.com/open-telemetry/opentelemetry-specification/blob/master/specification/sdk-tracing.md#sampling

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- o [Ryan] fine with changing OnStart to take a Recordable class
- [Ryan] folder structure for exporter
  - o Go:
    - Go has exporters and plugin folder
    - https://github.com/open-telemetry/opentelemetry-go
  - Pvthon:
    - Everything is under "ext" folder including integrations, exporters
    - https://github.com/open-telemetry/opentelemetry-python/tree/master/ext/opentelemetry-ext-otcollector/src/opentelemetry/ext/otcollector
  - [Reiley] propose to follow Python approach as it makes things easier for consumers to find the package, but no strong opinions

## Mar 23rd, 2020

Attendees: Reiley, Johannes, Emil, Max, Ryan, Andrew Hsu (Lightstep)

- [Reiley] SpanProcessor Shutdown() semantic
  - When Shutdown is being called

- [Max] we should not allow (behave no-op) any other call to onStart/onEnd/ForceFlush
- [Reiley] what about spans that already started (and reported through onStart) before Shutdown gets called? It is fair to say that consumers of the SpanProcessor should not expect that onStart/onEnd gets called as pairs (in case of orphan or half finished spans)
- [Johannes] not much we can do with orphan spans
- [Reiley] onStart/onEnd should return immediately without doing anything
- [Max] do we need an async Flush? E.g. mobile app developers want to flush the data before the app switches to background / suspend.
- [Reiley]
  - Example one:
    - Shutdown gets called in thread 1, timeout = 5000 ms.
    - Flush gets called in thread 2, timeout = 2000 ms.
    - Flush gets blocked until 2000ms timeout or things get flushed.
  - Example two:
    - Shutdown gets called in thread 1, timeout = 2000 ms.
    - Flush gets called in thread 2, timeout = 5000 ms.
    - As soon as Shutdown returns, all Flush API calls will return immediately (no matter if they are called before or after Shutdown).
- After Shutdown returned
  - onStart/onEnd/Flush/Shutdown will return immediately without doing anything
- [Reiley] is it possible to have a SpanProcessor associated with a tracer while spans are being created? (e.g. a span created before SpanProcessor got registered, so SpanProcessor will receive onEnd without onStart).
  - [Ryan] suggest to enforce SpanProcessor at tracer construction
  - [Johannes] agreed with Ryan as it makes things easier (also observed the same approach from other SDKs)
  - [Max] there might be chances that span got created before the actual SDK got initialized (e.g. UI lazy loading HTTP components).
- [Ryan] https://github.com/open-telemetry/opentelemetry-cpp/pull/52
  - [Emil] is this something we want to push to the SDK now?
  - [Reiley] suggestion yes, as long as it is not in all the span processors (Simple Span Processor will not use the buffer; Batch Span Processor will use Ryan's lock-free buffer).
- [Johannes] PR <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/55/files">https://github.com/open-telemetry/opentelemetry-cpp/pull/55/files</a>
  - Duration ns, [Ryan] trying to follow opentelemetry-proto

## Mar 16th, 2020

Attendees: Reiley Yang (Microsoft), Johannes, Ryan, Evgeny Yakimov (Bloomberg), Max

Golovanov

**Apologies:** Emil (away)

[Ryan] exporter ABI

[Max] nice to have but not required [Reiley] Python does not support this

 $\frac{https://github.com/open-telemetry/opentelemetry-python/blob/005575e537ff97f}{345610c92276d6b55c32e65e5/opentelemetry-sdk/src/opentelemetry/sdk/trace/export/_init__.py#L38}$ 

[Evgeny] something that can be done later

[Johannes]

[Ryan] go

[Ryan] <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/49/files">https://github.com/open-telemetry/opentelemetry-cpp/pull/49/files</a>, how to handle protobuf files, currently it is vendoring for Bazel and download for CMake (Emil has concerns about doing that differently).

[Reiley] would git submodule work?

[Johannes] <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/24">https://github.com/open-telemetry/opentelemetry-cpp/pull/24</a>, addressed all the outstanding comments

[Reiley] - take another round of review

[Ryan] - take another round of review

# Mar 9th, 2020

Attendees: Andrew Hsu (Lightstep), Reiley (Microsoft), Emil (Google), Johannes, Ryan, Max

- [Emil] <u>TraceState</u> is non-obvious (and part of SpanContext), please review.
  - o [Reiley] Specs and Python have examples of usage. Always key-value pairs.
  - Strict order, last modified goes first, limits on size: only five pairs.
  - Not for tag propagation, but for vendor-specific trace propagation.
  - TraceContext (W3C standard) https://www.w3.org/TR/trace-context/
  - CorrelationContext (W3C draft spec) <a href="https://github.com/w3c/correlation-context/">https://github.com/w3c/correlation-context/</a>
  - In OpenTelemetry Python, context is implemented as part of the API package
  - Local context propagation: https://github.com/open-telemetry/opentelemetry-python/tree/master/opentelemetry-ry-api/src/opentelemetry/context
  - W3C TraceContext implementation: https://github.com/open-telemetry/opentelemetry-python/blob/d7d9b158eafc84da

<u>cb84344a8f68ea1fb9181526/opentelemetry-api/src/opentelemetry/trace/\_\_init\_\_\_.</u> <u>py#L279</u>

- Reiley to follow up on the behavior of OT Python API/SDK
- [Reiley] Ryan's Flush PR <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/45">https://github.com/open-telemetry-cpp/pull/45</a>
- [Ryan] PR to add Recordable design
  - Reiley's PR on Python
     https://github.com/census-instrumentation/opencensus-python/pull/642
  - Max: Flush/Pause/Resume will apply not just to traces, but also logs/metrics/etc.
  - Johannes, it might be hard to get to the spec, considering sampling/pre-aggregation
  - [Ryan and Reiley to join the spec meeting]
     <a href="https://github.com/open-telemetry/community#cross-language-specification">https://github.com/open-telemetry/community#cross-language-specification</a>
- [andrewhsu] I see milestones
   <a href="https://github.com/open-telemetry/opentelemetry-cpp/milestones">https://github.com/open-telemetry/opentelemetry-cpp/milestones</a>, is one of them targeted for the otel beta or some timeline after the otel beta?

# Mar 2nd, 2020

Attendees: Reiley, Ryan, Johannes, Max, Emil

- [Ryan] Reusable TracerProvider
  - https://github.com/envoyproxy/envoy/issues/9998
  - Make it possible to keep using a Tracer after destroying the TracerProvider that gave it to you.
  - [Reiley] Flush tracer with optional timeout. There needs to be a way to close the tracer (subsequent span will get dropped on the floor) so the application owner has control over the memory/worker.
  - [Max] Is there a way to know that I can unload the tracer library? Do I have to wait for all the spans?
- [Johannes] Questions regarding the SDK
  - [Johannes] SpanProcessor is part of SDK, do we have the same ABI compat?
  - [Ryan] Can we have processor/exporter linked statically (into a single .so file)
     rather than relying ABI? to summarize, no pluggable exporter, only pluggable tracer. Whoever building the exporter should link statically against the tracer.
  - [Reiley] There are scenarios where people would need separated modules. For example, Python application + native C++ OpenTelemetry SDK + python async exporter.
  - [Max] Suggest to consider C API for ABI compatibility
- [Evgeny] Started writing up library distribution guidelines in PR38

## Feb 24th, 2020

Attendees: Evgeny, Reiley, Bryan, Emil, Ryan, Johannes, Max

• [Evgeny] Started writing up library distribution guidelines in PR38

- [Evgeny] Does library provide access to globals/singletons, e.g. TraceFactory
   Current requirements.md and this <u>comment</u> suggest no exported symbols
- [Reiley] suggest that we merge the PR once people are okay with the skeleton, so we don't have to wait too long
- Entry into API is via TraceProvider singleton? Application will load something into that slot, e.g. a vendor-specific implementation.
- Multiple libraries, built separately, how do they share/access the same singleton?
- [Ryan] The archives will have multiple symbols but the linker will resolve it.
   Bigger problems around late binding.
- <u>Issue 37</u> ran into a different problem with mixing different STLs.
- https://codereview.stackexchange.com/questions/147407/header-only-c-singleton
   -pattern-implementation
- https://gist.github.com/rnburn/501935437e8c2d4f547b95a96cd6661a (shows two libraries using a singleton and export maps) comment explaining DSOs accessing the same symbols
- https://gist.github.com/maxgolov/fd0efa7467dec1ad6374391e7cecd6c1 (using a protocol to communicate to the tracer)
- Version info <u>link</u>
- [Evgeny] Alternative: abandon header-only approach and put the singleton business into a \*.cc file.
- o [Ryan] We decided early on to try to be header-only to be easier to install.
- <a href="https://en.wikipedia.org/wiki/Microsoft\_Visual\_C%2B%2B#ABI">https://en.wikipedia.org/wiki/Microsoft\_Visual\_C%2B%2B#ABI</a> MSFT recommends against C++ interfaces.
- [Emil] What's left in PR35 (Span API)?
  - Keep explicit End(). Have destructor call End().
- TraceProvider PR24?
  - Don't create a new Tracer every time Get is called.
  - Needs discussion about reconfiguring / replacing tracers at runtime. Something Envoy wanted: <a href="https://github.com/envoyproxy/envoy/issues/9998">https://github.com/envoyproxy/envoy/issues/9998</a>

# Feb 17th, 2020

Holiday, no meeting scheduled. Yey!

# Feb 10th, 2020

**Attendees:** Ryan, Reiley, Bryan, Max, Johannes, Evgeny, Emil **Agenda:** 

- [Ryan] gist about loading/ABI compat need feedback
  - o Evgeny suggestion: explain static/dynamic binding
- [Reiley] module loader from Ryan
  - Reiley since this loader functionality is only supposed to be used by App rather than Lib, is API package/folder the right place?
  - Evgeny most cases it will be app not lib who loads the modules.

• [Reiley/Johnnes] <u>SpanProcessor</u>

## Feb 4th, 2020

Attendees: ...

### Agenda:

- PR35 Add Span API.
- [Emil] Profiling benchmarks on CI: cachegrind or pprof?
  - o Emil/Ryan: try pprof first and if we don't like it switch to cachegrind
- [Evgeny] discuss and formalise ABI guidelines <u>Issue 4</u>
  - o Ryan: where do we need ABI stability
  - o Ryan: good use-case for vendoring is for a binary, not a client library
  - Evgeny: what about the case where there are two precompiled libraries
  - Reiley: 1) do we support multiple libraries that are statically linked with
     OpenTelemetry? 2) do we support one application using both static vs. dynamic
     OpenTelemetry? Reiley to put some examples in the issue.
- [reyang] milestones created, please add items
- [Ryan] Plugin PR

## Jan 27th, 2020

**Attendees:** Reiley, Emil, Evgeny, Ryan, Bryan, Max **Agenda:** 

- [Reiley] Understand the header only approach with TraceFactory
  - Ryan: should be able to link SDK statically
  - Emil: this is being discussed in Bryan's PR
  - Ryan: tracer lifecycle might not be process lifetime
  - Emil: we should document \*why\* we have these requirements:)
- [Emil] NoopSpan uses std::shared\_ptr ABI concerns?
  - Emil unclear on this. Ryan will send a PR to add a TraceOwner which should clarify.
- [Max] C API?
  - Ryan: major use-case for C is stable ABI, but we are already meeting that requirement by being careful with the C++ ABI.
  - Namespace versioning & compile time check

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- [Evgeny] How to get started/contribute
  - thttps://github.com/open-telemetry/opentelemetry-cpp/blob/master/CONTRIBU TING.md
  - Some issues for grab
  - Emil: project might be at too early stage for accepting more community contributions? Most of the work currently is around discussing APIs, ABIs,

requirements. Very few opportunities to "just implement this thing that we know what it should look like."

# Jan 20th, 2020

Attendees: Ryan, Emil

Agenda:

- US Holiday!
- Discussing Timestamp PR.
  - o Benchmark for reading clocks.
  - Request from Envoy to use monotonic time for intervals (<u>link</u>).
  - Threaded <u>benchmark</u>, <u>results</u>.
  - [Emil] Add comments in PR.

# Jan 13th, 2020

Attendees: Ryan, Bryan, Vinod, Emil, Max

Agenda:

• [Max] GUIDs as custom span annotations -> probably belongs in a vendor SDK.

## Jan 6th, 2020

Attendees: Ryan, Emil, Reiley, Bryan, Max, Josh, Vinod

Agenda:

- [Reiley] Ted asked if we can use C++ SDK to test the other languages FFI, to make sure the SDK can be swapped
  - [Ryan] OpenTracing did this for Python and Lua, including binary packages for Python.
- [Emil] Please have another look at PR10 (updated last month) for SpanID and bazel.
  - Discussion about endianness. (in summary, Ryan suggests big-endian and Emil suggests trying to avoid integers altogether) Is there an opentelemetry-specification bit that addresses this?
- [Reiley] What do we do about std::terminate and STL dependency in general?
  - Consensus is don't use STL types in API (per requirements.md) because of incompatibility in virtual interfaces with different STLs.

## Dec 23th, 2019

Holidays. No meeting scheduled.

## Dec 16th, 2019

Attendees: Ryan, Emil, Josh

**Apologies:** 

- Reiley on vacation
- Max in another meeting

### Agenda:

- [Ryan] PR close to merging, followup for C++17 string\_view.
- [Ryan] Want to backport std::span also.
- [Josh] Discussing dependencies.
- Ceph mailing list thread about dependencies and dynamic loading.
- [Ryan] Use something like <u>envoy Dispatcher</u> so that library and exporters can e.g. add timers.

### Dependency discussion: (PR#15)

- API must have zero dependencies and be header-only.
  - Pros: allows you to drop it into a source tree (vendor) without changing build or adding a dependency.
- SDK should have minimal dependencies.
- Exporters can bring in transport dependencies, e.g. Stackdriver exporter depends on gRPC.
  - Ryan: alternative to consider is just send protobufs over http2, the gRPC protocol is relatively simple.
  - MSFT have a nice HTTP library wrapper (related <u>issue</u>)
- Support both static linking and dynamic loading.
  - Dynamic loading required because some vendors want to drop in their own implementation of the SDK. Also allows low-dependency build.
  - This requires a stable C++ ABI. Quite a bit of interest in this. Related <u>discussion in envoy</u>. Can't use STL types in the interface. Would prefer to avoid a C shim.
- We should not require a dedicated thread for background work and exporters.

# Dec 9th, 2019

Attendees: Ryan, Emil, Max, Josh

Apologies:

Reiley on vacation

## Agenda:

- [Emil, Max] Prefer gtest over catch for testing.
- Let's move ahead with Max's .git\* PR.
- [Max] HTTP client interface and wrapper for different OSes' standard HTTP libraries.
- [Josh] Overhead (especially allocations) of the SpanData + SpanProcessor architecture.
- [Ryan] Compare the profiling breakdown of these two approaches for starting a span, setting multiple tags on it, and finishing it: <u>benchmark code</u>, <u>results</u>
  - Approach A: Builds up a protobuf representation of a span (that would later get serialized into a block of memory). <u>Profile A.</u>
  - Approach B: Doesn't use any intermediary object, just writes a span's serialization as the methods are called. Profile B.
  - Note malloc/delete represent only represent about 7% of the total cost

## Dec 2nd, 2019

Attendees: Ryan, Max, Josh, Emil

Apologies:

• Reiley on vacation

### Agenda:

- [Ryan] PR for string view backport.
- [Max] Pushing .gitignore PR forward, prefer LF over CRLF.
- Library should not mandate creating its own background threads.
- [Max] Existing HTTP client SDK, may be able to share.
- [Josh] Stats and metrics in the Go prototype.

# Nov 25th, 2019

(meeting cancelled)

## Nov 18th, 2019

## Attendees:

#### **Apologies:**

Emil is OOO and cannot attend today
Reiley has a conflicting hiring event and cannot join today
Max has urgent task and cannot join today

### Agenda:

• Propose to cancel the 11/18 and 11/25 meeting occurrences

## Nov 11th, 2019

Attendees: Josh, Ryan, Max, Emil, Reiley

Agenda:

- [Max] Context propagation and TLS
  - Feel free to borrow from OpenCensus Context
- [Ryan] Backport of std::string view and std::span in a namespace
  - Reiley is adding std::string\_view as part of his TraceContext PR.
- [Reiley] metrics in-proc aggregation
  - DataDog ddsketch, t-digest
  - o [Josh] SDK produces deltas, batchers and

# Nov 4th, 2019

Attendees: Reiley, Ryan, Emil, Josh, Max

Agenda:

- [Reiley] W3C TraceContext
- Accept string\_view in APIs, use backport of std::string\_view
- [Max] PR with clang-format config
  - (action) Grab the two configs and try them out and let's converge on something everyone likes.
  - Vote for which clang-format to use next week
  - For things that are not covered by tools, enforce in PR review
  - Naming convention add a quick PR for contributing.md file, pointing to the Google convention (done)
- Global initialization: please review
  - https://github.com/open-telemetry/oteps/pull/45

# Oct 28th, 2019

Attendees: Ryan, Max, Emil, Josh

Agenda:

- [rnburn] Guidance on coding convention, would help move PRs forward.
- [Max] Also file and class naming.
- Also line endings. (attendees prefer unix style)

• Explicit vs implicit context propagation.

## Oct 21th, 2019

Attendees: Reiley Yang, Ryan, Josh, Max, Emil, Ted

### Agenda:

- [Reiley] meeting time it is early for Emil, we might need to adjust to later afternoon PST.
- [Reiley] PRs
  - Header only API
  - Package
    - Reiley mentioned vcpkg
    - Ryan mentioned that vcpkg might not be used in other platforms besides
       Windows (although Linux/Mac are supported)
    - Emil proposed supporting bazel (bazel builds all deps from source)
    - Clang format (okay from Emil, Ryan, Reiley)
      - Enforce it as part of CI.
- Repo layout sketch (moved to <u>PR#8</u>)

## Oct 14th, 2019

#### **Attendees**

Name	Company	Time Zone
Reiley Yang	Microsoft	PST (UTC-7)
Josh MacDonald	LightStep	PST (UTC-7)
Emil Mikulic	Google	AEDT (UTC+11)
Ryan Burn	LightStep	PST (UTC-7)
Max Golovanov	Microsoft	

## **Agenda**

- [Reiley] maintainer / contributor.
  - https://github.com/open-telemetry/community/pull/220
  - Josh wants to be removed from approver? Let's keep it for now :)

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- [Reiley] PR <a href="https://github.com/open-telemetry/opentelemetry-cpp/pull/3">https://github.com/open-telemetry/opentelemetry-cpp/pull/3</a> (adds README)
  - Update CODEOWNERS file
- [Reiley] initial folder structure
- Discussing global singleton

- o Look at <a href="https://github.com/open-telemetry/oteps/pull/45">https://github.com/open-telemetry/oteps/pull/45</a>
- C support?
  - GlusterFS, Postgres, it's come up a few times.
  - o Microsoft needs C API, hasn't needed a pure C implementation though.
  - Reiley to create github issue to follow up.
- HTTP client support (e.g. for exporters to make POST requests)
  - o for a variety of platforms, Nice To Have a common HTTP instrumentation package
  - websockets for streaming? Can use HTTP/1.1 for non-bidi streaming, no acks.
  - Link to OTLP:
    - OTEP 35: Protocol
    - OTEP 59: Data format

## Oct 7th, 2019

#### **Attendees**

Name	Company	Time Zone
Reiley Yang	Microsoft	PST (UTC-7)
Max Golovanov	Microsoft	PST (UTC-7)
Ryan Burn	Lightstep	PST (UTC-7)
Morgan McLean	Google	PST (UTC-7)
Ted Young	Lightstep	PST (UTC-7)
Bogdan Drutu	Google	PST (UTC-7)
Emil Mikulic	Google	AEST (UTC+11)
Josh MacDonald	LightStep	PST (UTC-7)

## Agenda

- [Reiley] Introduce ourselves
- [Reiley] What is the best time for the meeting?
  - Weekly recurring meeting. Reiley
- [Reiley] C or C++?
  - Should we pick one or do two separate projects?
  - Could we create a C wrapper for a C++ library
    - Embedded scenarios, low power consumption devices
    - We could do this if we avoid using exceptions or templates

- Might not be able to get enough contributors for a pure C library
- Decision: we will use a C++ library, with C wrapper (separate C API).
- Bogdan can we have pure C++ header API? Ryan/Max singleton/global would be hard.
- [Reiley] What platforms do we target? Do we focus on server scenario only, or we plan to cover app/client/device (e.g. iOS, Android, MacOS, Windows, MCU/MPU/IoT devices).
  - Stackdriver (Google): backend services running on Linux / Windows, written in
     C++. Long term envision support iOS / Android (but doesn't need to use C++)
  - Max (Microsoft): Android, iOS, MacOS, Linux, Windows, both client and services.
  - Josh: Android JNI with C++, how to run on one tracer.
  - Ted: OT does have something like interop support.
  - Python and Lua both come up.
- [Reiley] Do we release source package or prebuilt binaries?
  - Reiley proposed to use source package with build scripts.
  - Ryan OT has prebuilt binaries, static link. (Ubuntu, x86/64)
  - Max many small customers might find it hard to onboard due to the build cost.
  - Ryan support at least two build systems. (we can cover later)
- [Reiley] Maintainers? Approvers?
  - o Bogdan bootstrap phase we can define 2 or 3 maintainers / approvers.
  - Reiley wants to be approver, will send PR and explain why.
  - Max can probably be the maintainer at this moment.
- [Reiley] Initial contribution on the W3C TraceContext implementation. We can use this to validate our process:)
  - o Bogdan separation between API and SDK.
  - Reiley can focus on one build system, other build systems and CI can be contributed by others.
  - Ryan are we using Circle CI. Suggest emulating Envoy's setup with a driver script.
- [Tigran] A couple other related issues: some organizations have problem with using anything newer than C++98 or exceptions or std. it is worth discussing what the minimum requirements and dependencies are going to be. The bare minimum one can do is header only, C++.
  - Most API should be no exception.
  - Callback do we throw when the call back throws?
  - Emil we use no exception by default, but we don't stop the others from enabling exceptions during build.
  - Bogdan gRPC doesn't depend on libstdc++, but does use STL headers. Someone should look into why and if we should do the same.
  - Max ABI compat?
  - Ryan Envoy and Nginx both use binary loading at runtime.
  - Bogdan can be postponed to v1.0 release.
- [Emil] Build system?
  - Discussed earlier: start with bazel (Envoy uses it) and CMake.
- [Emil] Shared libraries? ABI stability? Version numbers?

- o Ryan inline namespace for version.
- o Max +1. Used this in Skype, gave up at some point.