

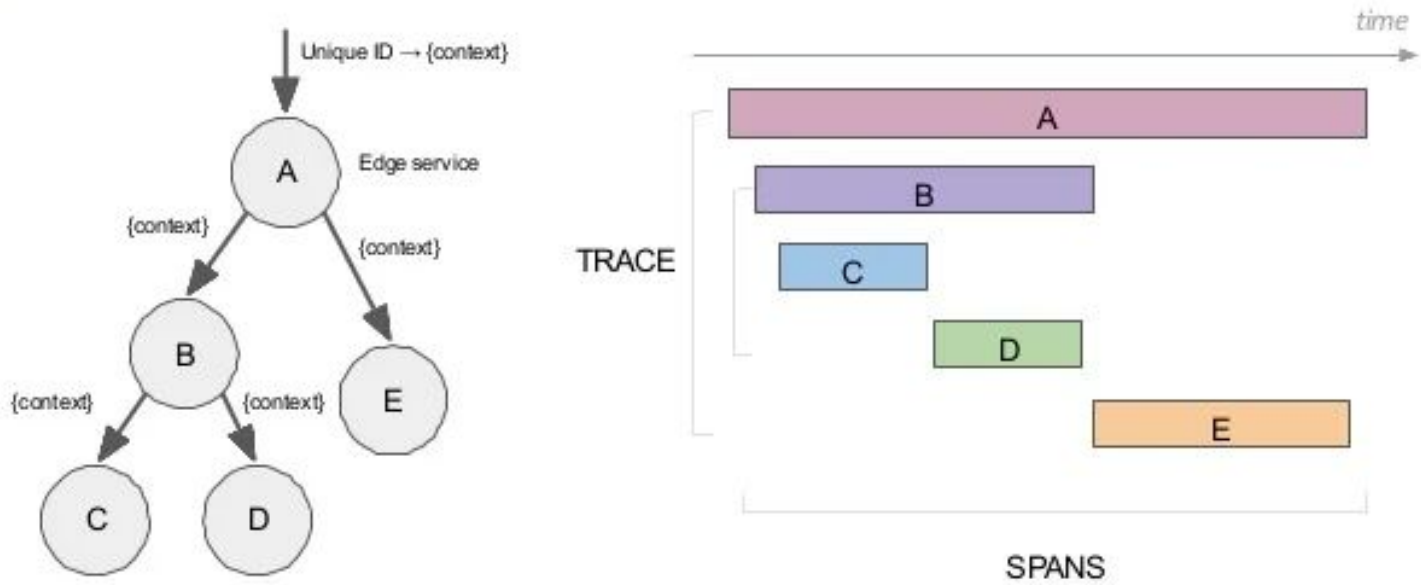
ATS Fall Summit 2022

OpenTelemetry Tracer Plugin

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Distributed Tracing

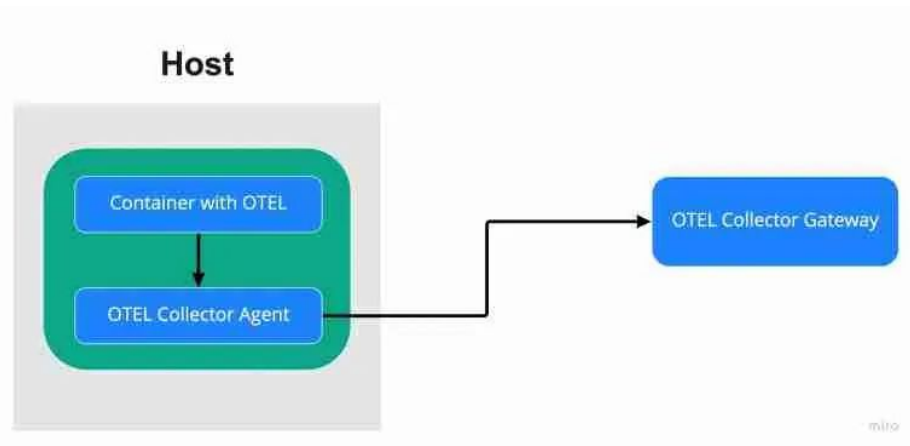
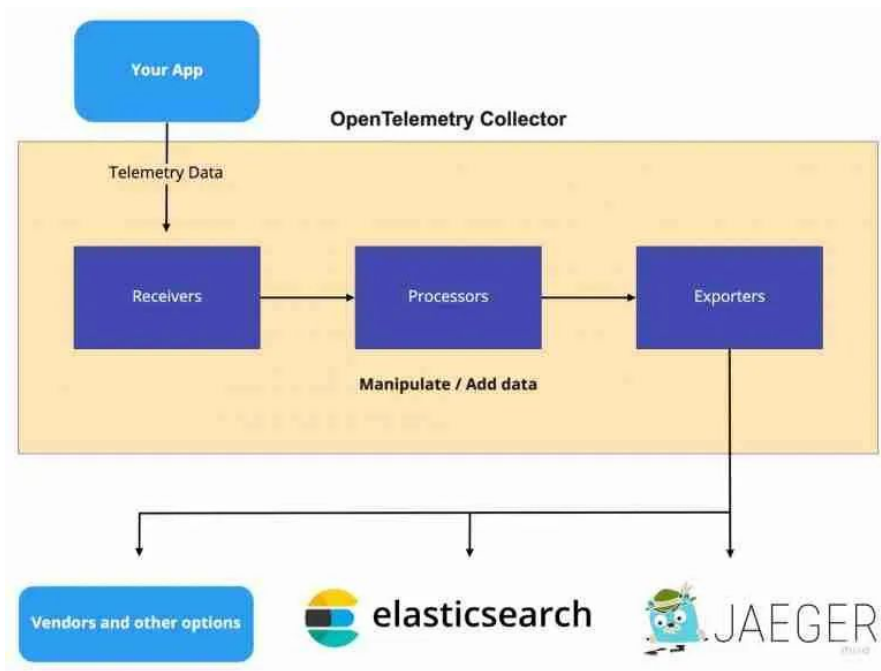
Distributed Tracing In A Nutshell



Distributed Tracing

- Open Source Example
 - Jaeger (CNCF graduated project)
 - Zipkin
 - LightStep
 - Apache Skywalking
- OpenTracing
 - Vendor Neutral APIs/instrumentation for distributed tracing
 - Deprecated in 2020
- OpenTracing + OpenCensus -> OpenTelemetry
 - CNCF incubating project
 - deals with telemetry (metrics, logs, traces)

OpenTelemetry Collector



ATS OpenTelemetry Tracer Plugin

- Works with OpenTelemetry Cpp library
- Reads incoming B3 headers in the transaction
- Attaches B3 headers to the transaction if not found
- Sends trace information to OTLP endpoint

Demo

(tips on setting up otel collector - https://github.com/shukitchan/ats_tips/blob/master/otel_collector.md)

Future?

- Support other propagation header format. E.g.
 - Single b3 header
 - traceparent / tracestate
 - uber-trace-id
- Support more options for OTLP exporter. E.g.
 - Timeout
 - TLS settings
- (Optionally) Support other exporters. E.g.
 - Stream output (for debugging)
 - Jaeger / Zipkin / etc
- Adding more info into the span