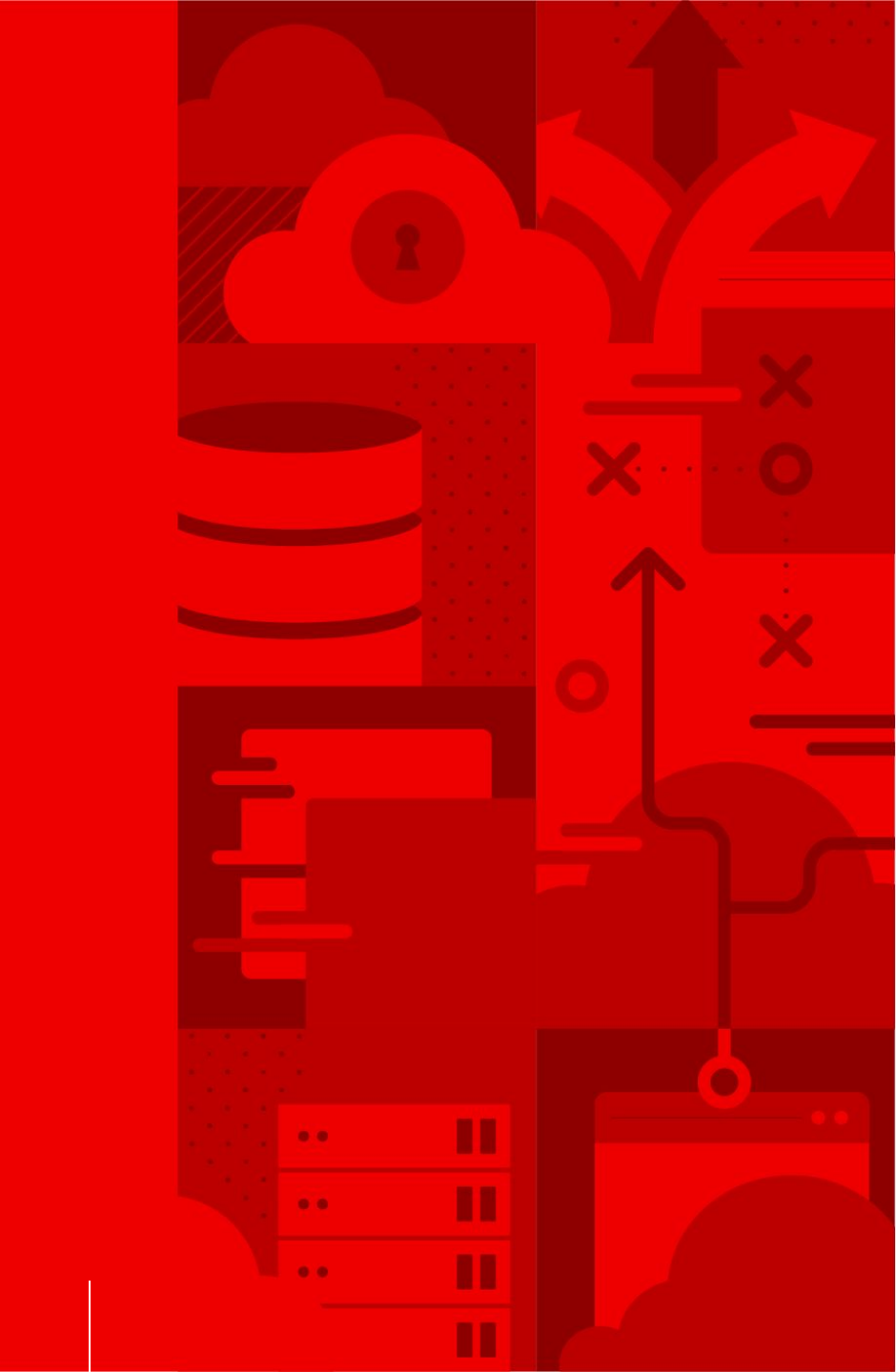
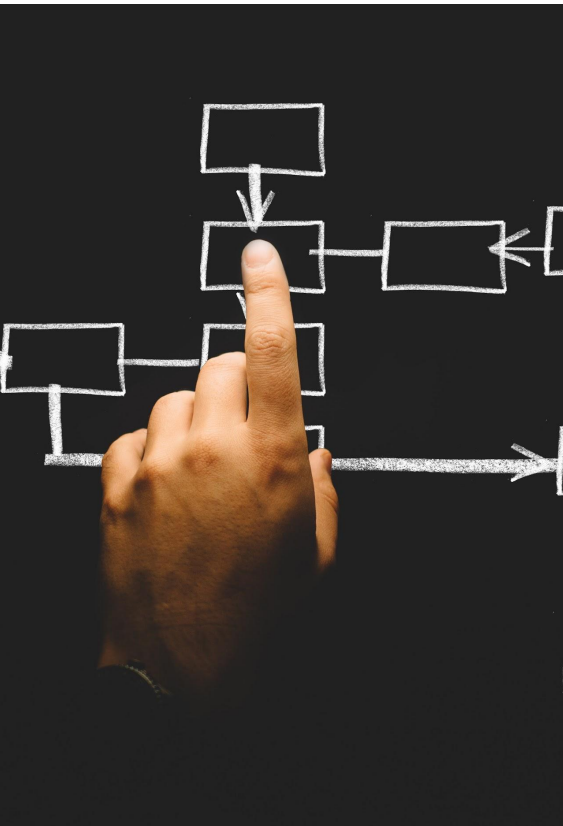




Jaeger Deep dive

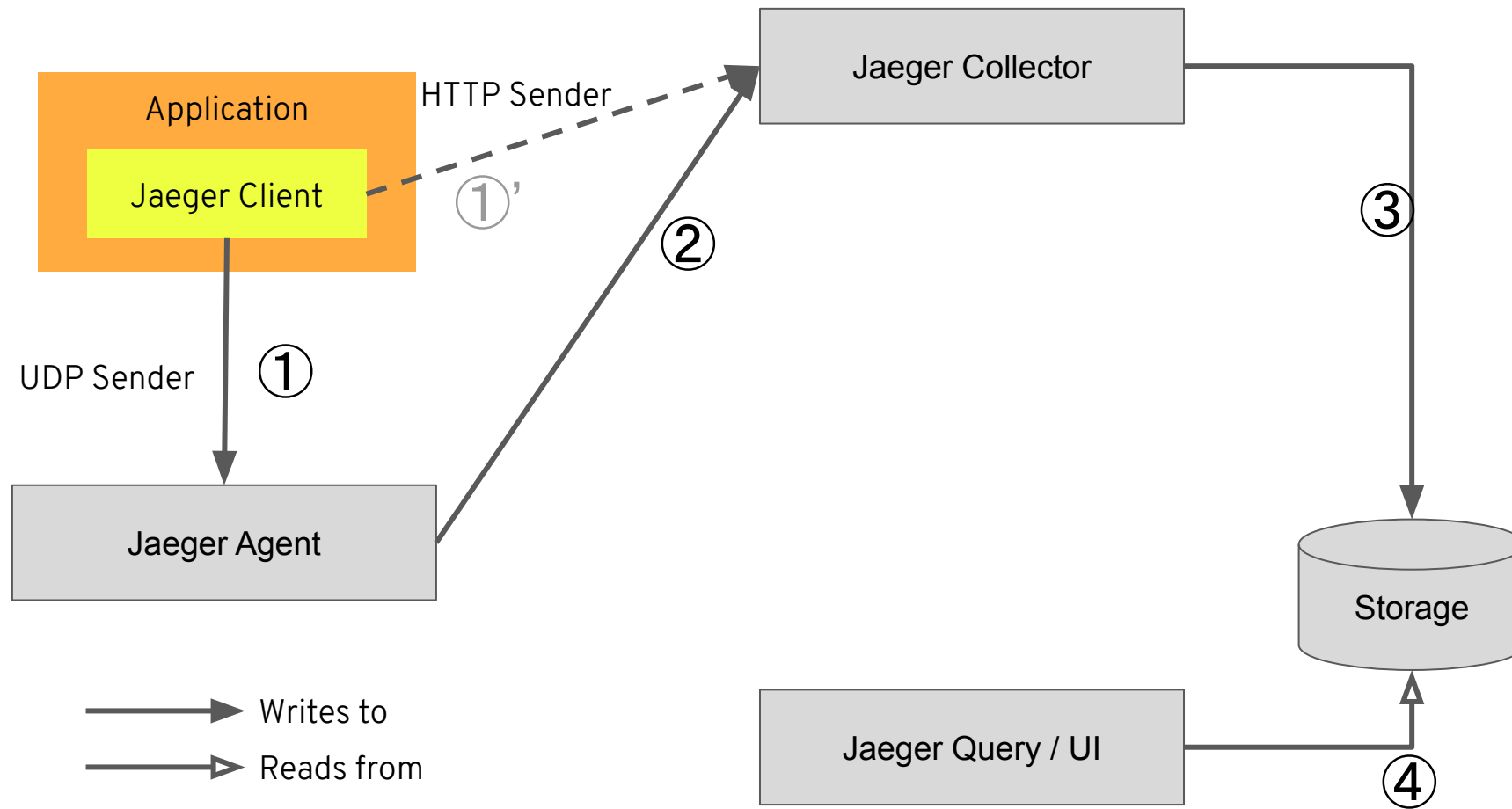
Juraci Paixão Kröhling
Software Engineer
@jpkrohling

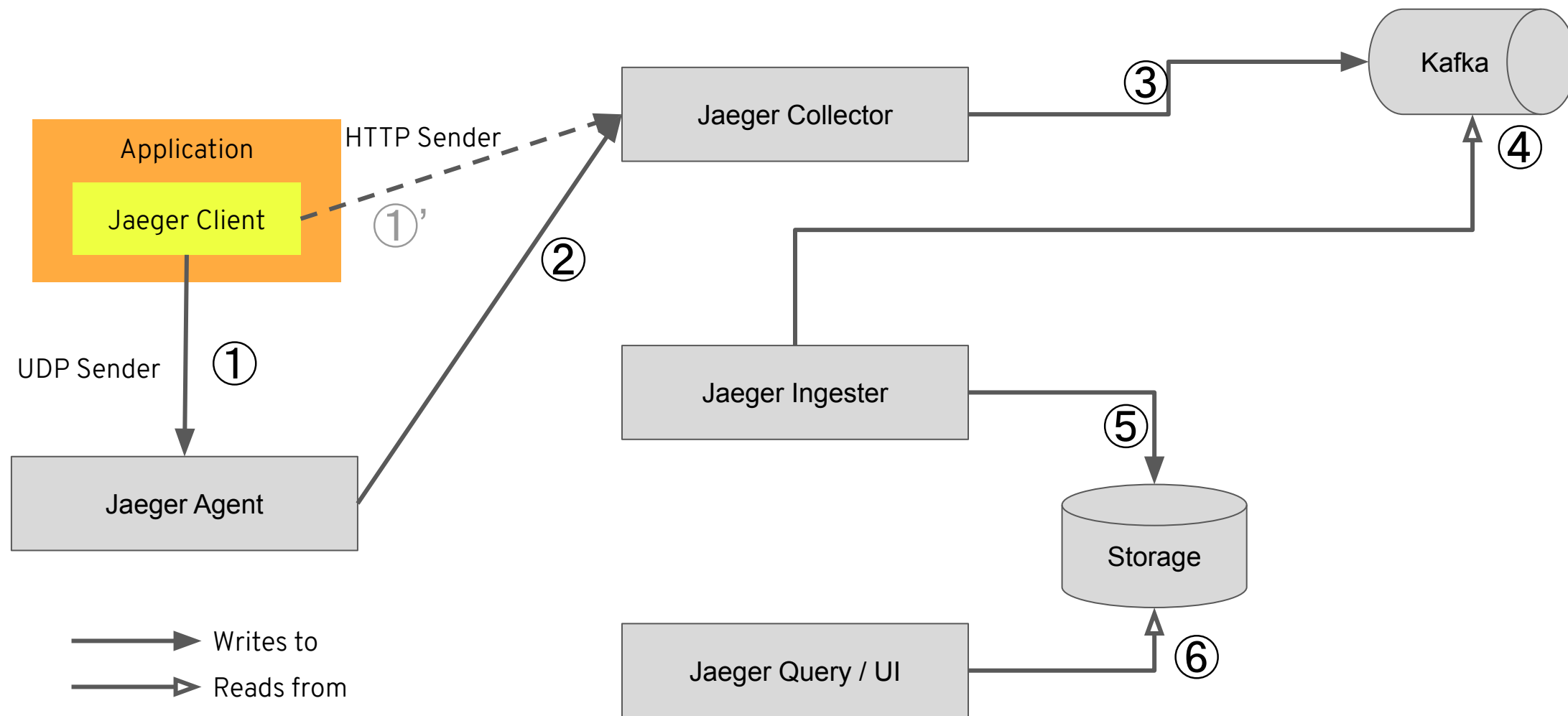


Source: pexels.com

Components

- * Client / Tracer
- * Agent
- * Collector
- * Query / UI
- * Ingestor







Source: pixabay.com

Tracer

- * OpenTracing-compliant
- * Official support for popular languages
- * Community support for other languages
- * OpenCensus exporter



Source: [pexels.com](https://www.pexels.com)

Agent

- * Buffer between client and collector
- * Runs on localhost



Source: pixabay.com

Collector

- * Receives spans from agent and/or tracer
- * Processes spans (cleanup, normalize, ...)
- * Writes to backing storage



Source: [pexels.com](https://www.pexels.com)

Ingester

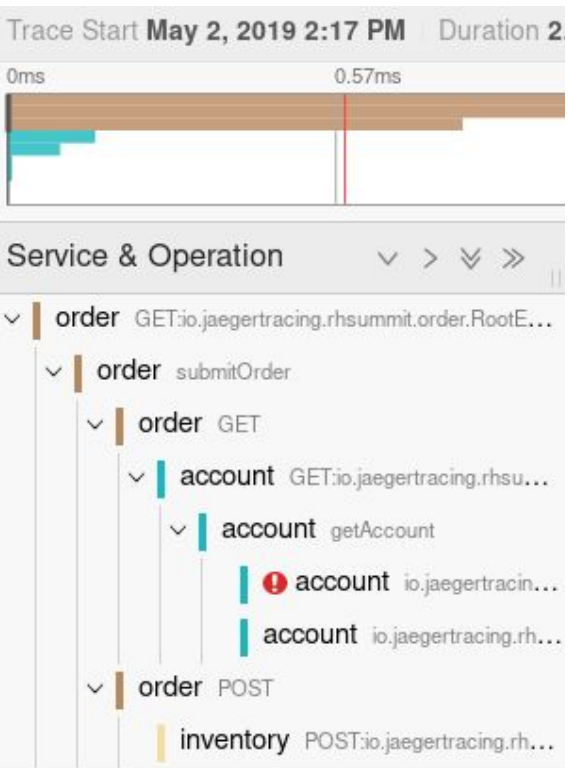
- * Reads stream from Kafka
- * Writes to backing storage



Source: [pexels.com](https://www.pexels.com)

Query

- * REST endpoint
- * Reads from the backing storage



User interface

- * Trace list, trace view, trace search
- * Trace diff / compare
- * Basic service graph



Source: pixabay.com

Deployment strategies

- * All in one
- * “Production” (individual components)



Source: pixabay.com

Deployment targets

- * Bare metal
- * Kubernetes via Helm
- * Kubernetes via Operator



Source: [pexels.com](https://www.pexels.com)

Configuration options

- * Each component has its set of `--help` options
- * Command-line options
- * Environment variables
- * Configuration file



Source: [pexels.com](https://www.pexels.com)

Monitoring

- * Most components have `/metrics` endpoint
- * Expvar and Prometheus
- * Internal state is exposed via metrics/gauges

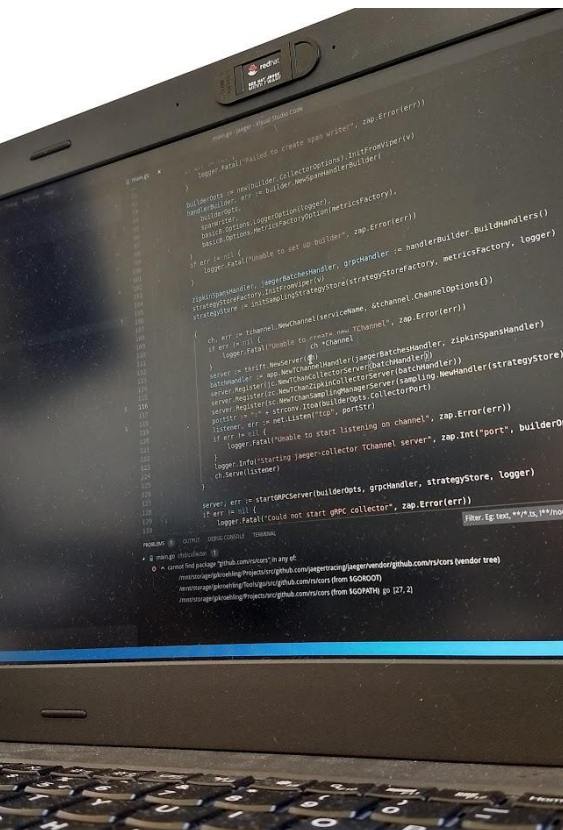


Source: [pexels.com](https://www.pexels.com)

Performance tuning

- * Careful with “dropped” spans!
- * “Bounded queues everywhere” (by @ledor473)
- * Check out the tuning guide





Join us

- * jaegertracing.io/get-in-touch
- * Bi-weekly meetings
- * Tons of “good first issue” items

