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Unified Observability with OpenTelemetry

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We Now Live in a Cloud Native World

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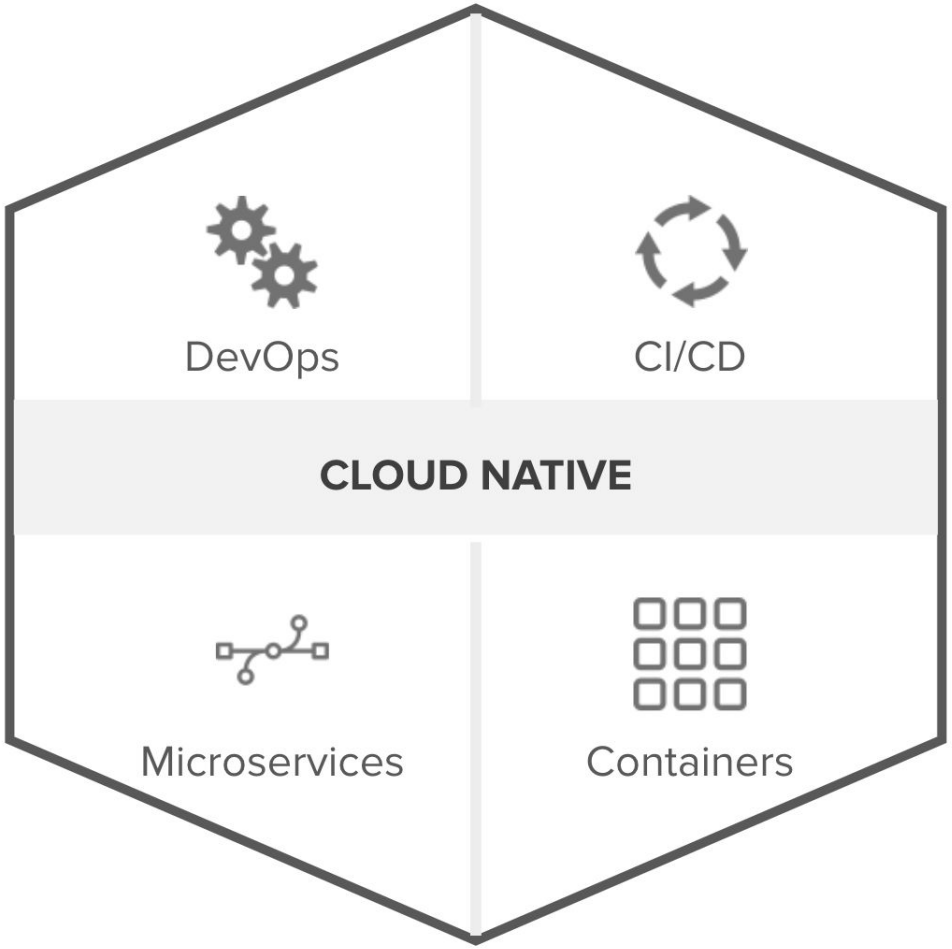
We Build Software Differently



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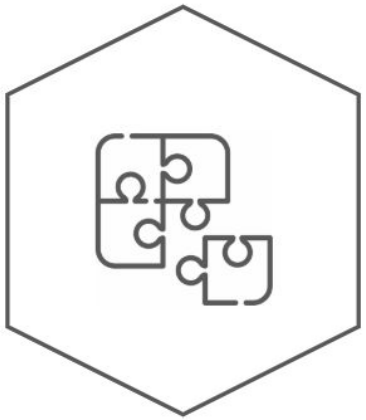
Pains of the Microservice World…



How to connect problem to root cause?

Who to wake up?

Which customer or action is impacted?

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Where is the Context?

Metrics

Logs

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Three Pillars of Observability

Traces

Metrics

Logs

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The Power of Distributed Tracing

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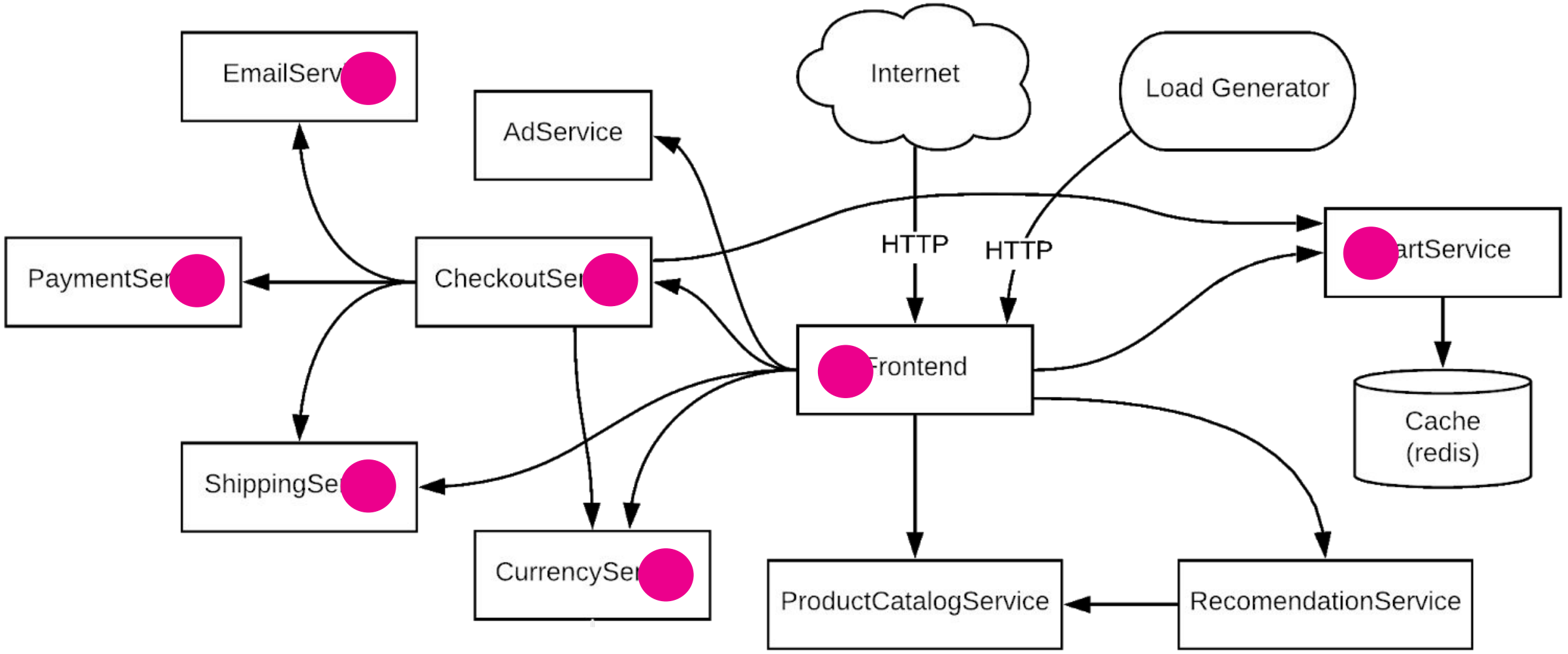
Example Microservice Architecture



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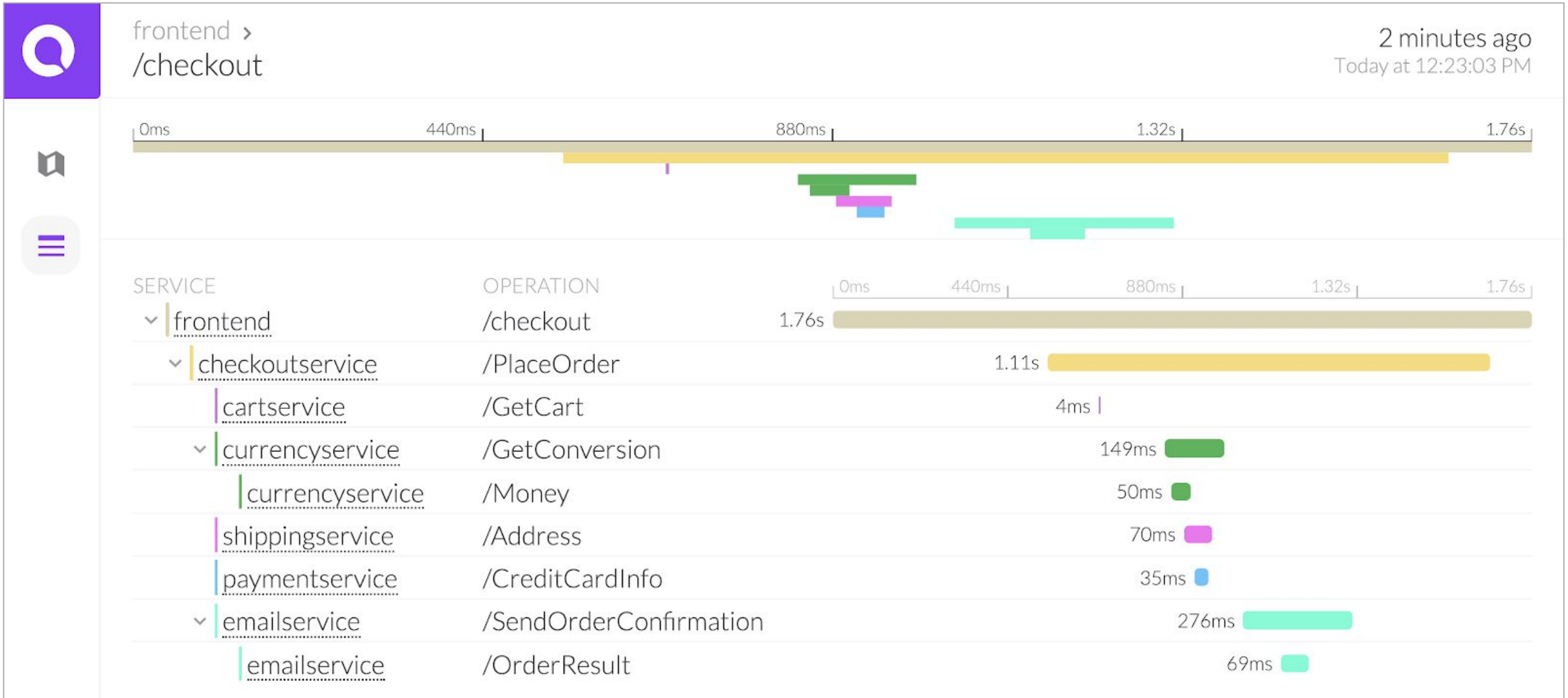
Distributed Trace Visualization



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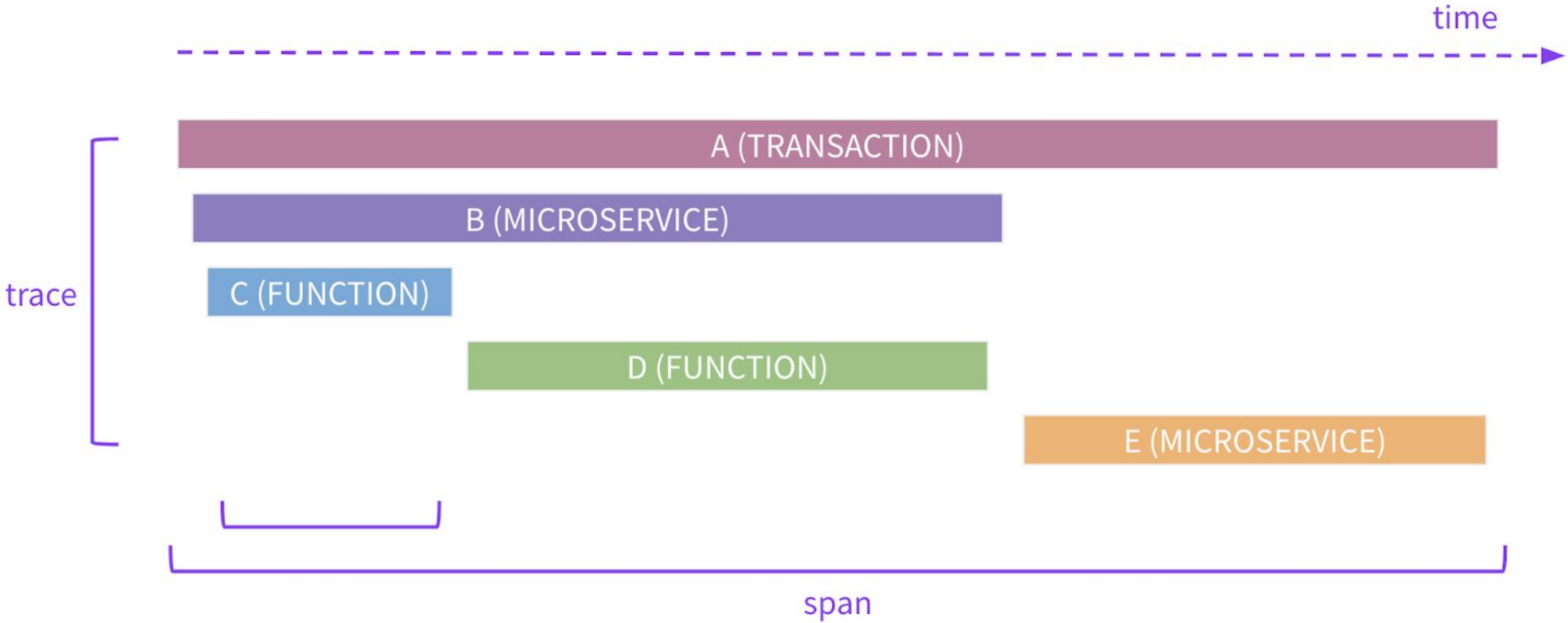
Distributed Trace Details



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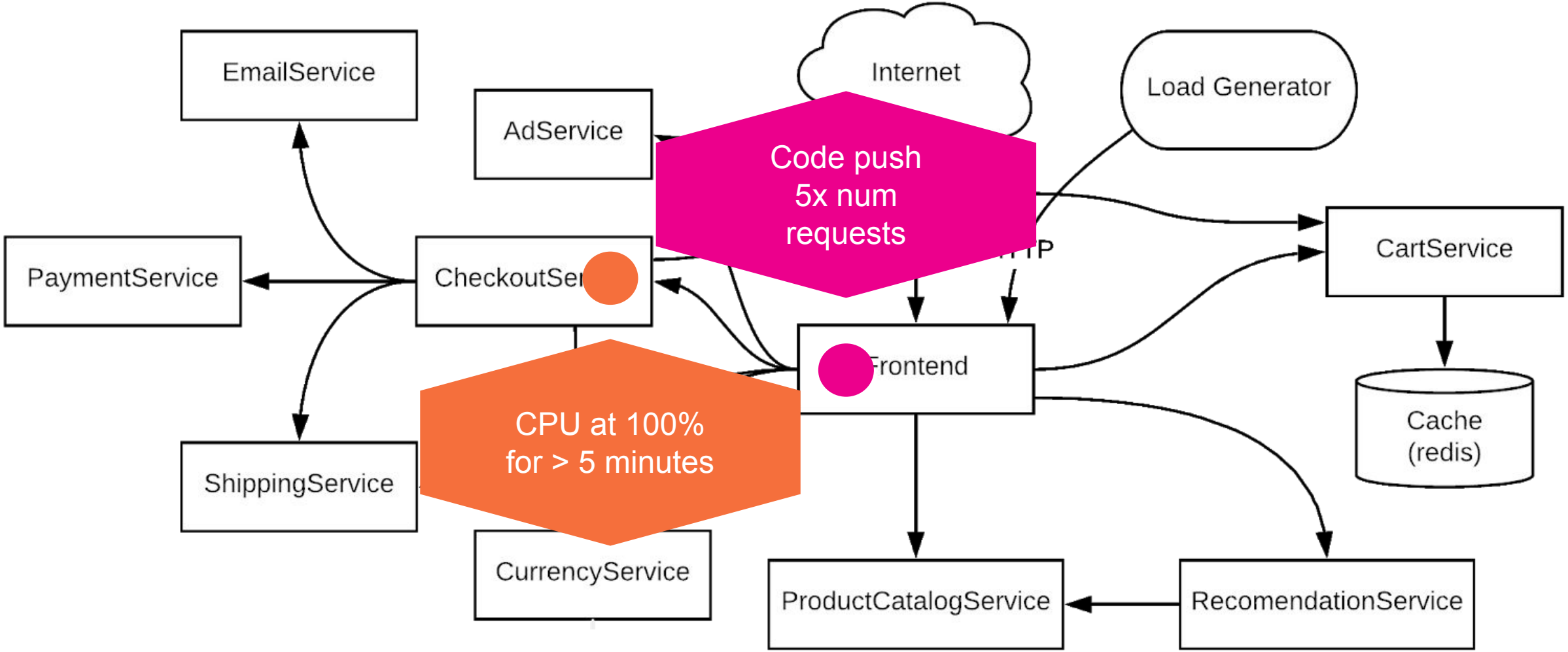
Metrics in Microservice Architecture



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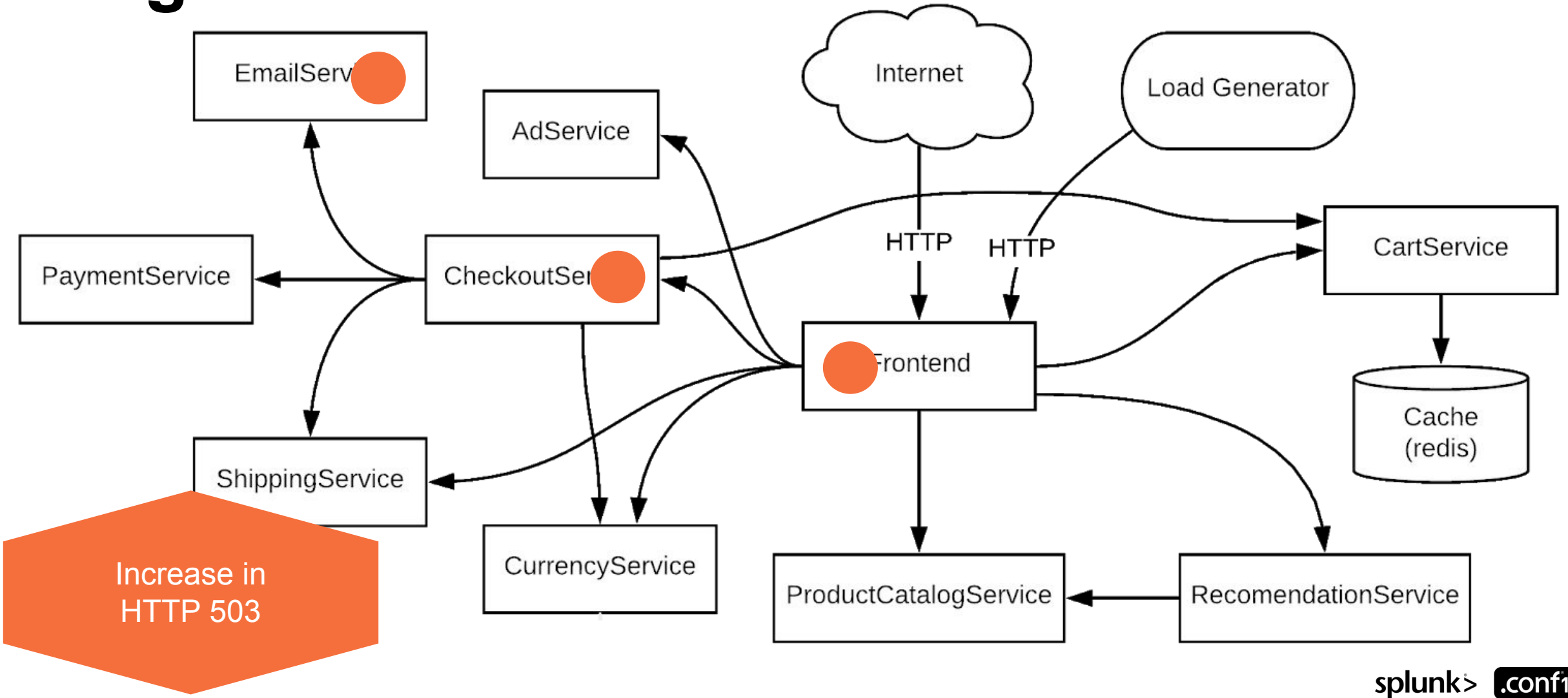
Logs in Microservice Architecture



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Introduction to OpenTelemetry

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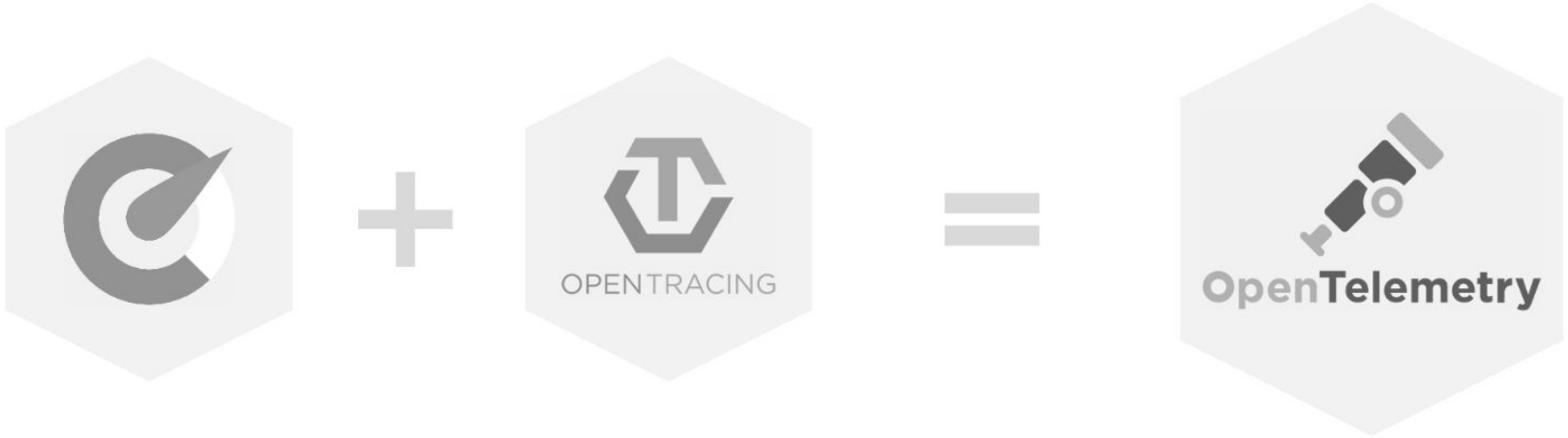
OpenTelemetry



Google Cloud

omnition

Microsoft Azure

And many more...

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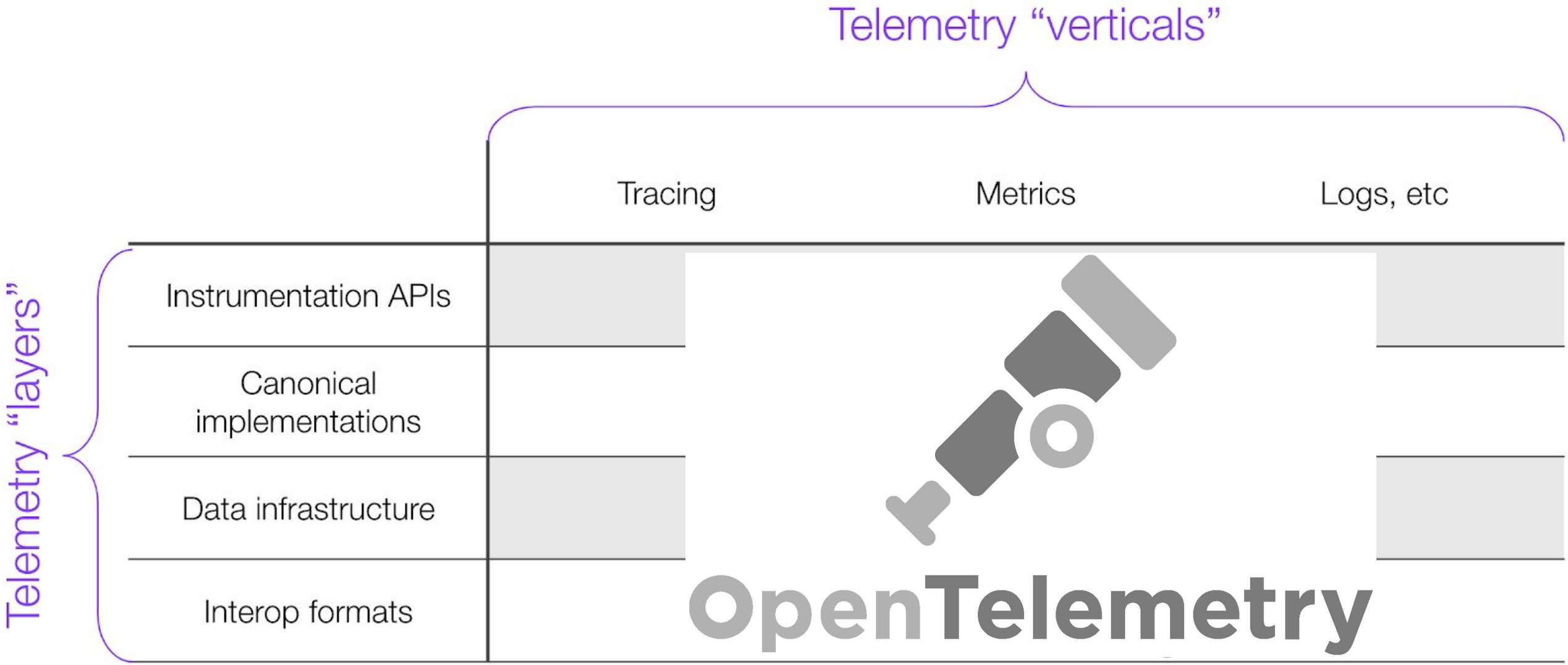
Cloud Native Telemetry



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Client Libraries

1. Add a client library dependency
   - Choose a context propagation format
   - Instantiate a tracer
   - Configure a destination
2. Enhance spans
   - Key/Value tags
   - Logs
3. Add more spans
   - Functional level instrumentation
   - Integrations (DBs, public cloud services, etc.)

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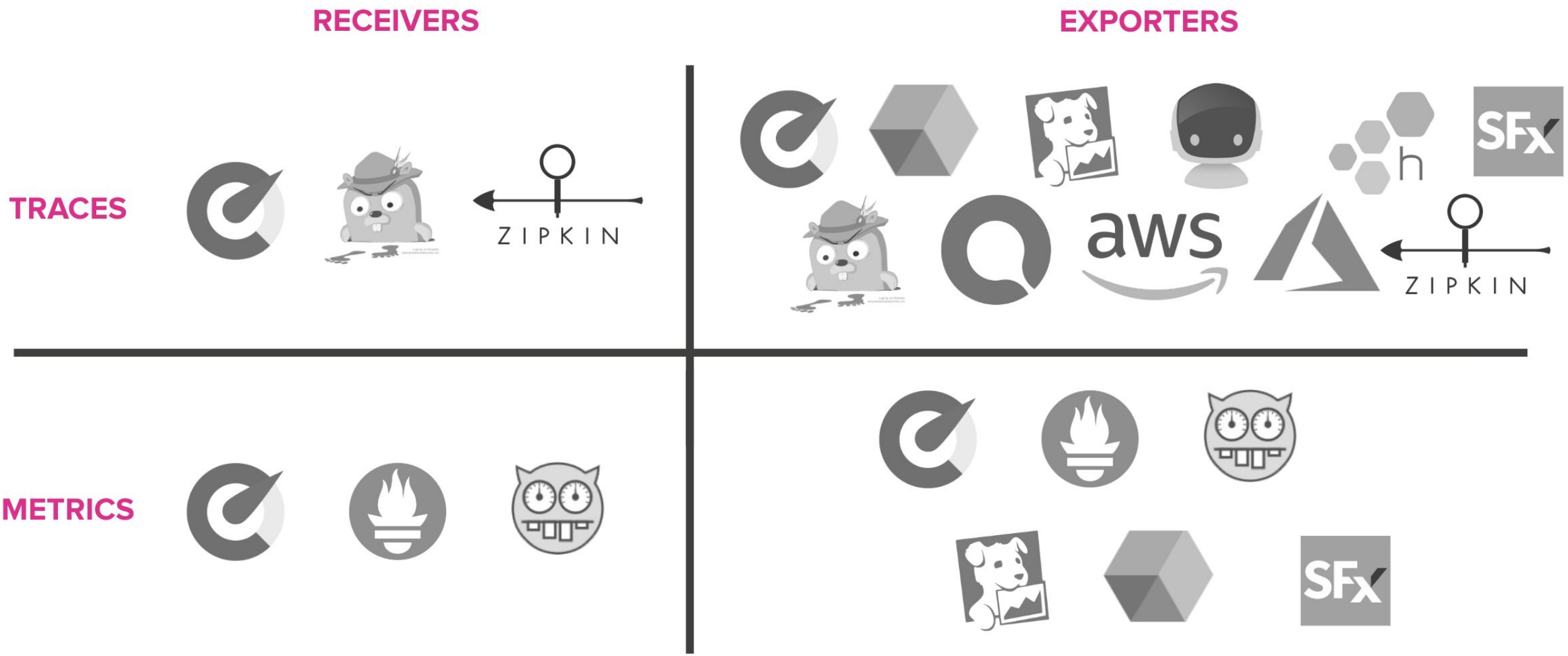
OpenTelemetry Collector



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DEMOs

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THANK YOU!

Links

- https://opentelemetry.io
- https://opencensus.io
- https://opentracing.io

GitHub

- https://github.com/open-telemetry/community
- https://github.com/census-instrumentation

Other

- Twitter: @opentelemetry
- Gitter: open-telemetry

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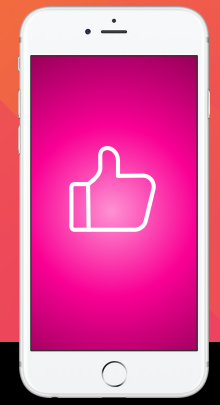
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