What Is **CNCF TAG Observability** and How You Can Join Our Effort?

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CLOUD NATIVE
COMPUTING FOUNDATION

CNCF Structure

- Mainly vendors
- Fund the organization
- Marketing and strategic direction

- 11 top technical architects
- Admit new projects
- Acts as a resource to projects

- Real end users of these technologies
- Communicate back requirements
- And good and bad experiences

Excerpt from our charter

- Foster, review and grow the ecosystem of observability
- Identify and report gaps in the CNCF's project portfolio
- Patterns and Best Current Practices
- Educate and inform users without bias
- Vendor-neutral venue for relevant thought validation, discussion, and project feedback
- Project due diligence (TOC test balloon)

Bias for action!

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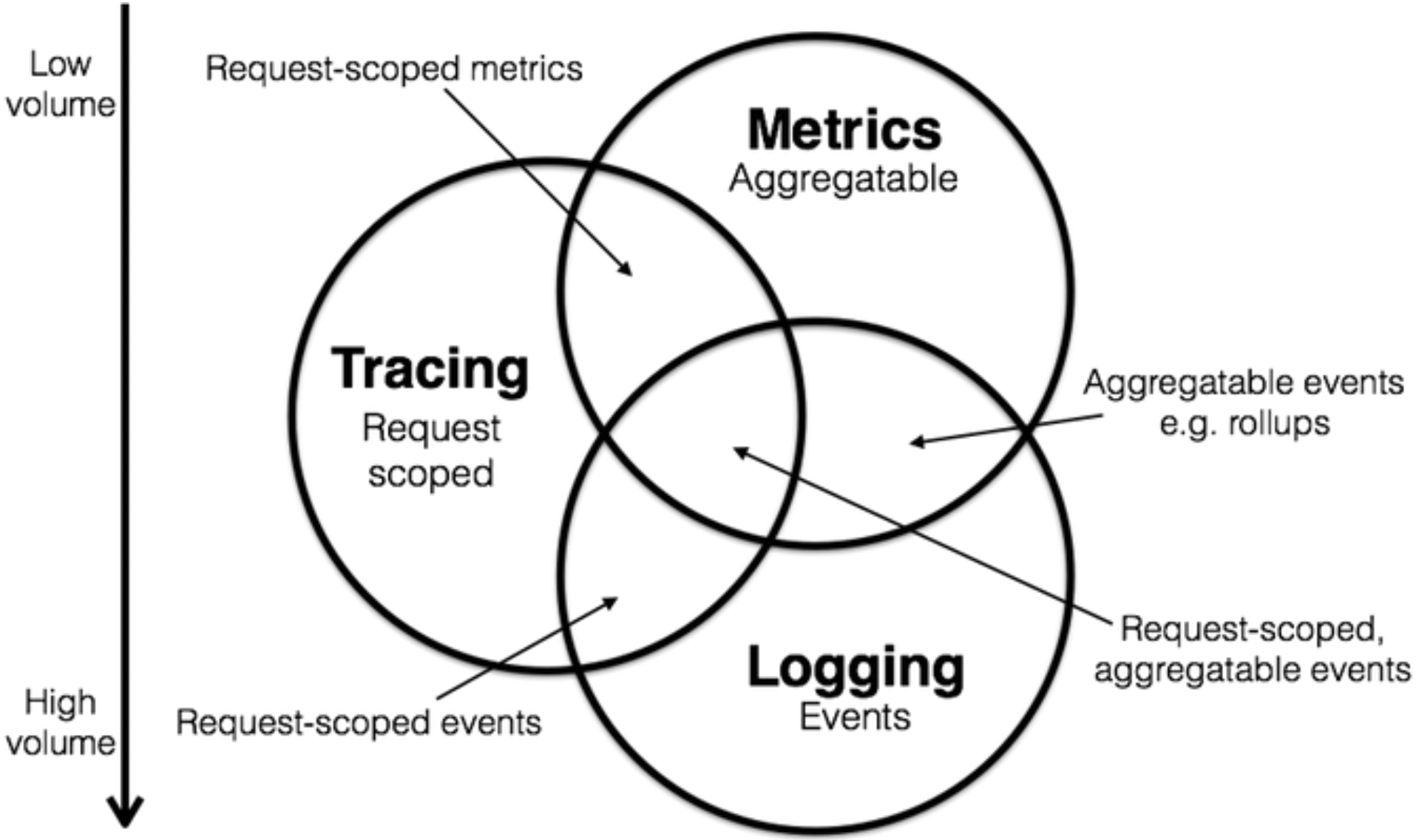
Observability is a measure of how well internal states of a system can be inferred from knowledge of its external [inputs and] outputs

— paraphrased from Rudolf Emil Kálmán, 1960

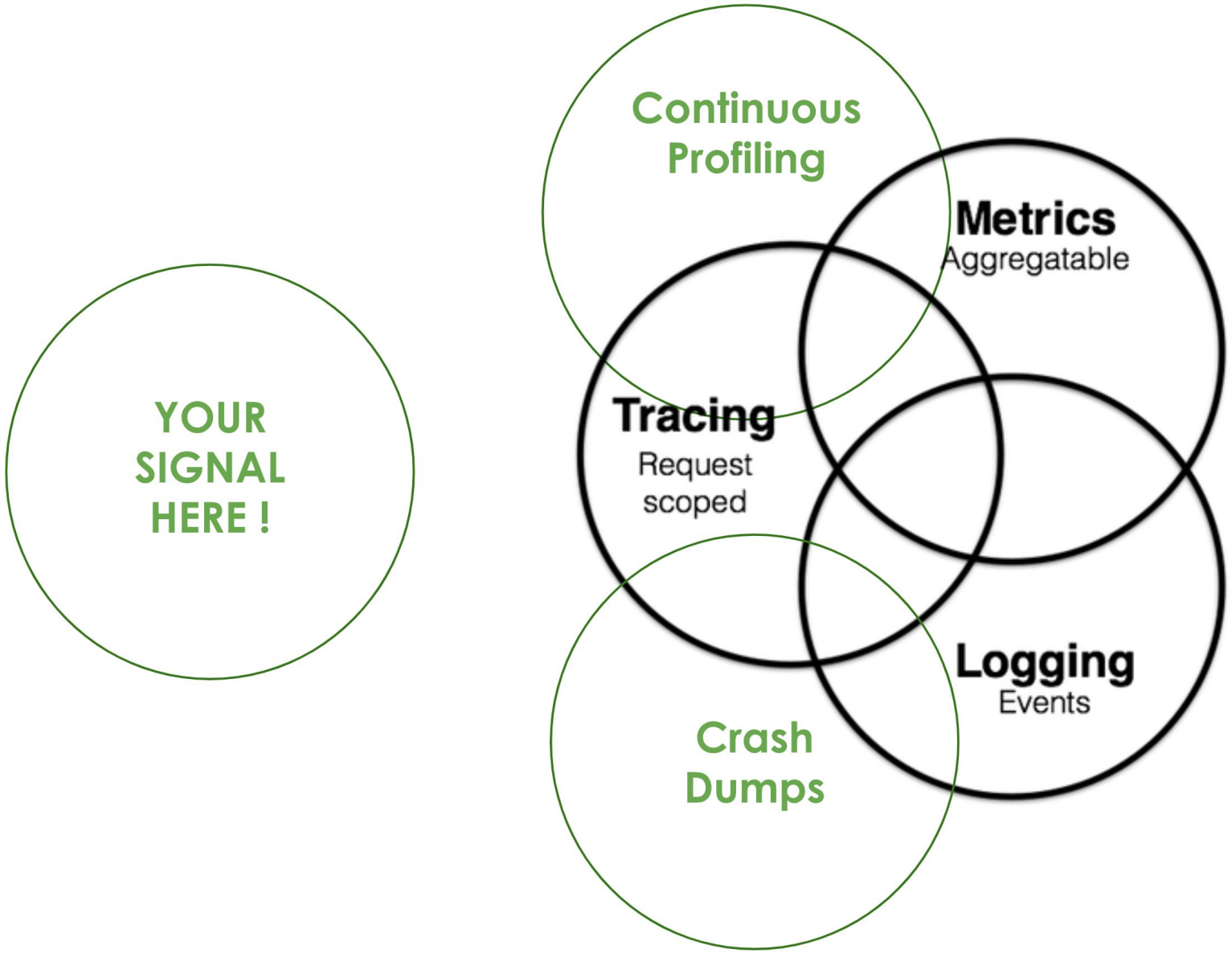
Monitoring tells you whether the system works.

Observability lets you ask why it's not working.

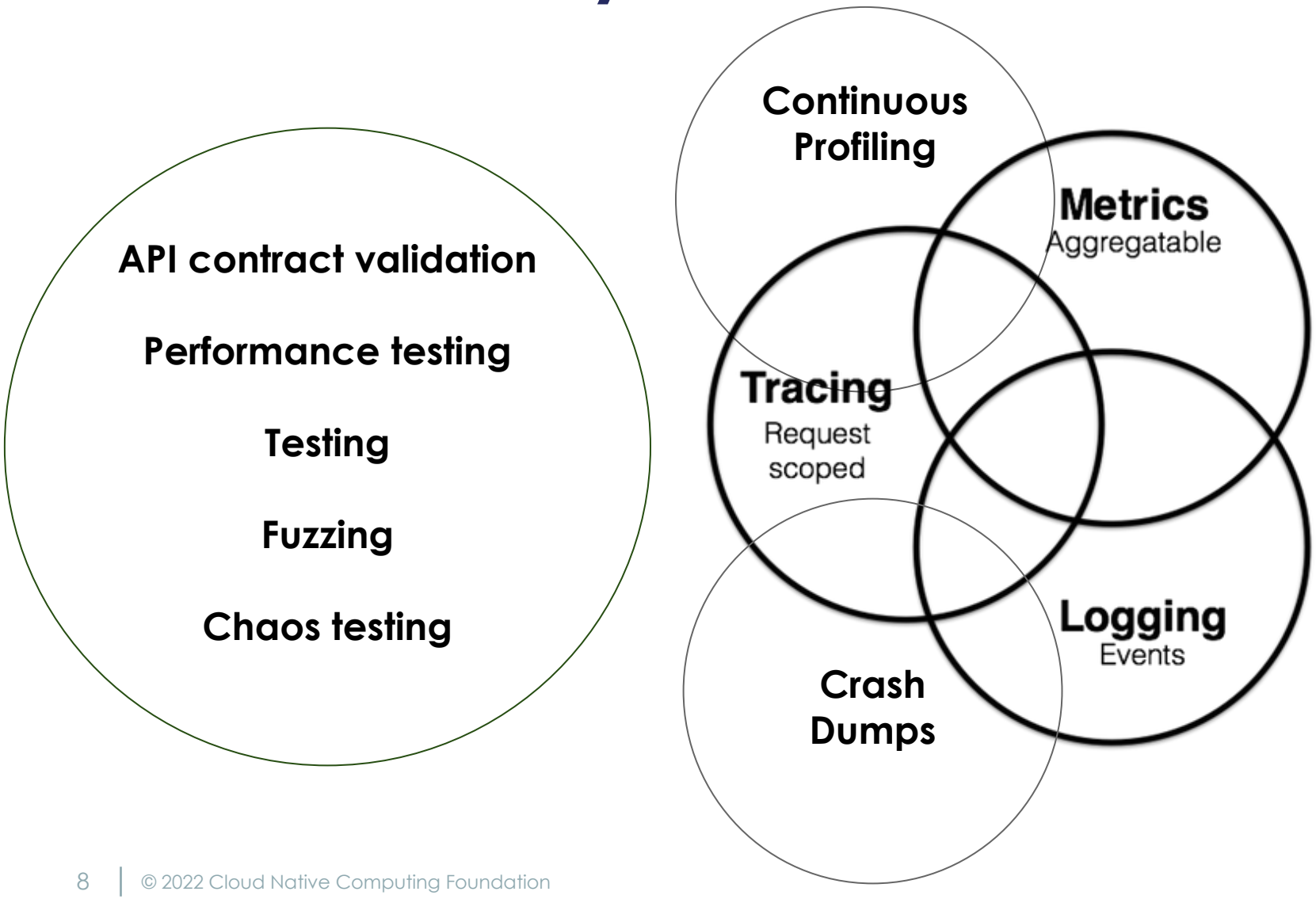
— Baron Schwartz (@xaprb) October 19, 2017



Credits for Diagram → *https://peter.bourgon.org/blog/2017/02/21/metrics-tracing-and-logging.html*



Observability Three Pillars... and beyond?



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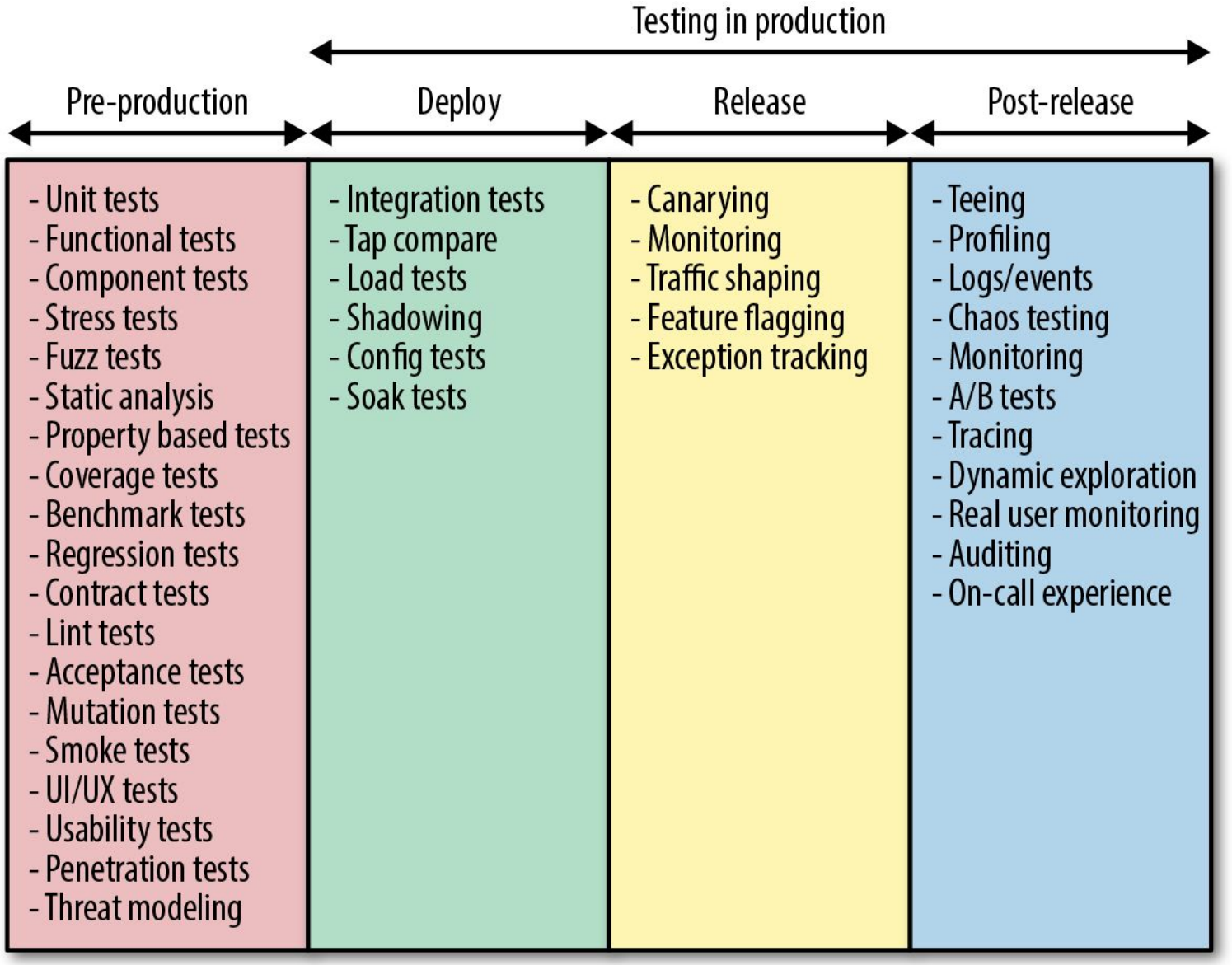
"**Logs**, **metrics**, and **traces** are often known as the **three pillars of observability**.

While plainly having access to logs, metrics, and traces doesn't necessarily make systems more observable, these are powerful tools that, if understood well, can unlock the ability to build better systems."

Cindy Sridharan
Distributed Systems Observability (O'Reilly)



Why does Observability matter?

developerExperience++

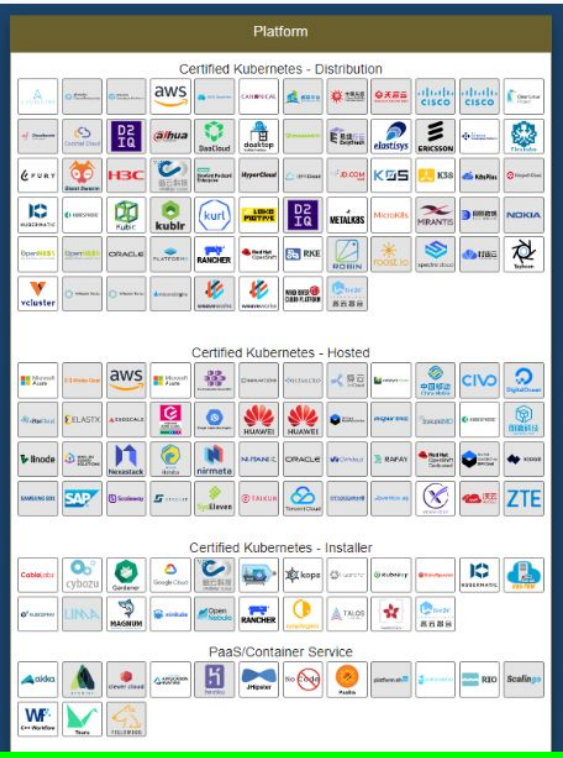
- **Easy**
- Data-driven Canaries using arbitrary data, safer rollouts.
- Correlate deployments & config changes with infra and business metrics.
- Low time to diagnose/fix
- Developer UX **saves $$$**

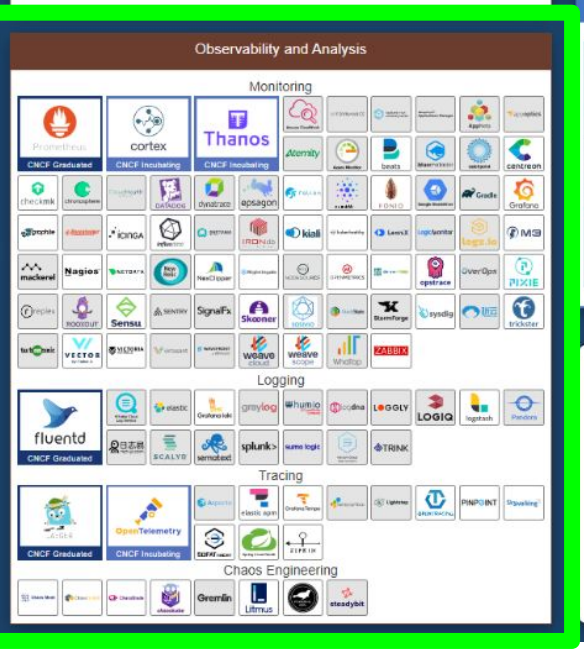
Data Enables Our Future

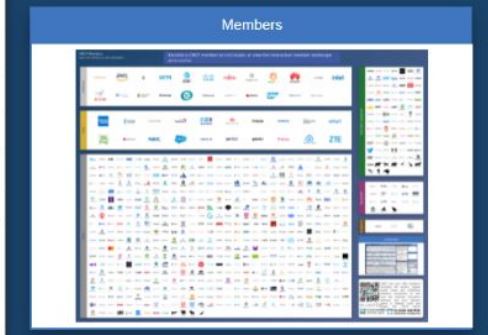
- Incident Response
- Durable Metrics, Logs, Traces
- Available & Usable at Scale
- Secure & Protect: PII and ePHI
- Autoscaling, ML, anomaly detection, intrusion alerting, optimizing infra scaling, …, …, ...

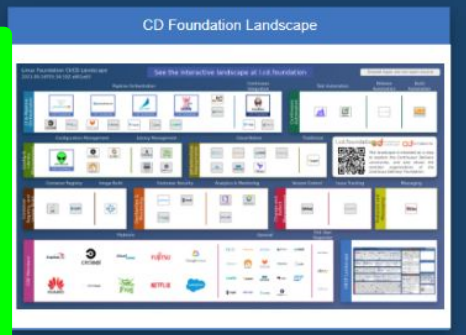
Fiscally Responsible

- Scale business not bills.
- Correlate Costs w/ workloads
- Spend Strategically
- Open Source is capable...USE IT!









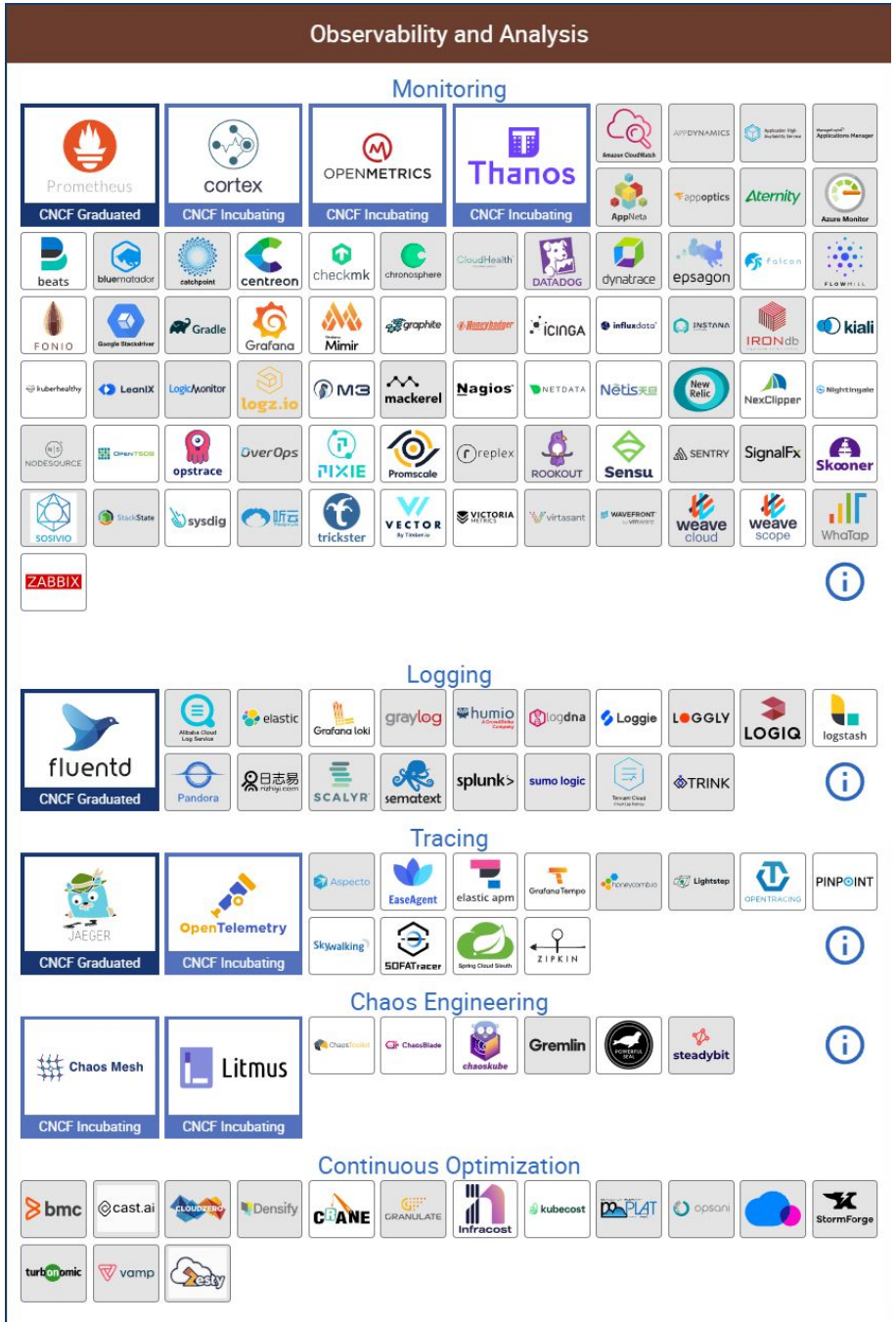
CLOUD NATIVE Landscape

CLOUD NATIVE COMPUTING FOUNDATION

Redpoint Amplify

l.cncf.io

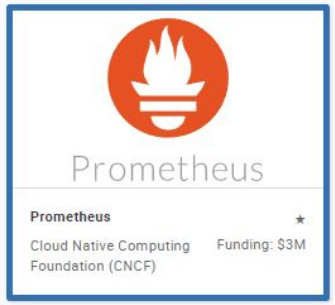
This landscape is intended as a map through the previously uncharted terrain of cloud native technologies. There are many routes to deploying a cloud native application, with CNCF Projects representing a particularly well-traveled path.



CNCF Graduated Projects (3)

Fluentd ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Jaeger ★
Cloud Native Computing Foundation (CNCF) Funding: $3M



Prometheus ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

CNCF Incubating Projects (6)

Chaos Mesh ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Cortex ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Litmus ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

OpenMetrics ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

OpenTelemetry ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Thanos ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

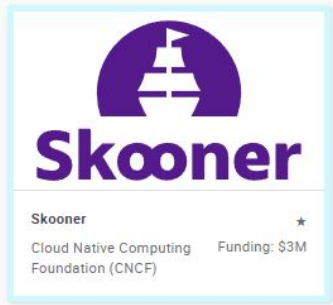
CNCF Sandbox Projects (6)

Chaosblade ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Fonio ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Kuberhealthy ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Pixie ★
Cloud Native Computing Foundation (CNCF) Funding: $3M



Skooner ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

Trickster ★
Cloud Native Computing Foundation (CNCF) Funding: $3M

What's on our TODO

- More content
- Resurface existing content which is older, but new joiners don't know about
- Whitepapers
- Best Current Practices
- Demos of verified stacks
- Getting more end users

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How you can help and join us?

- **Fortnightly call:** TAG Observability Meeting Notes
- **Repository:** https://github.com/cncf/tag-observability
- **CNCF Slack:** #tag-observability
- **Mailing list:** cncf-tag-observability@lists.cncf.io

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Thanks

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