The Prometheus Conformance Program

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The 101

- The Prometheus project will publish a list of compatible projects, products, and services, starting today
  - We will also list incompatible ones if they claimed compatibility in the past
- As of this recording, I don't know who will make the cut
- You, the end user, should be able to choose solutions with confidence

Rationale

- Prometheus is the standard in cloud-native metrics and beyond
- We have 100,000 of installations, 1,000,000 of users
- The market segment Prometheus leads is worth billions of dollars
- It's easier to claim compatibility, than to implement it

This leads to confusion, unintentional or otherwise

The inner workings

- Prometheus created a suite of tests at
  https://github.com/prometheus/compliance
- CNCF (actually LF) uses **trademark law** to grant the usage of the
  "Prometheus Compatible" mark
  a. Sign paperwork with LF, including clauses on good faith testing
  b. Submit test results
  c. Receive time-limited permission to use mark
  d. Keep up to date, or lose mark

Conformance, Compliance, and Compatibility

- Conformance: The name of the program
- Compliance: Pass test suite of specific interface test
  - E.g. OpenMetrics, PromQL, Remote Write, Alert Generator
- Compatibility: 100% conformance with all relevant compliance tests
  - Compatibility % == Conformance % multiplied with each other

    End users should only look for "Prometheus Compatible"

Incentives

- A lot of informal knowledge about incompatibility exists
  - Direct monetary incentive to improve tests
  - Incentive is money, result is more comprehensive tests
- Initial cadence very aggressive
  - 12 weeks/two minor releases, whichever is longer
- If you need help convince your manager, talk to us :)

Future

- We're not where we wanted to be
  - CNCF didn't have time, then I didn't have time
- We ~need three companies and/or projects to launch with
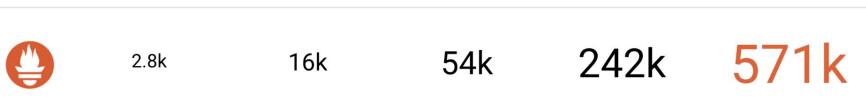- Email prometheus-team@googlegroups.com

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One more thing…

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Prometheus & Grafana Growth in Adoption

2016-2020

PromCon	2016	2017	2018	2019	2020
	36k	92k	186k	454k	615k
	2.8k	16k	54k	242k	571k

One more thing…

- Prometheus: 774k
- Grafana: 1,100k

Thank You!

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