

What's New in OpenTelemetry

A night sky with the Milky Way galaxy visible. In the foreground, a telescope is mounted on a tripod, pointing towards the stars. The background is a dark, starry sky with the bright, hazy band of the Milky Way stretching across it.

Dotan Horovits
[@horovits](#)

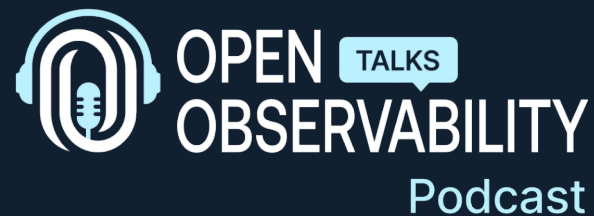


Dotan Horovits

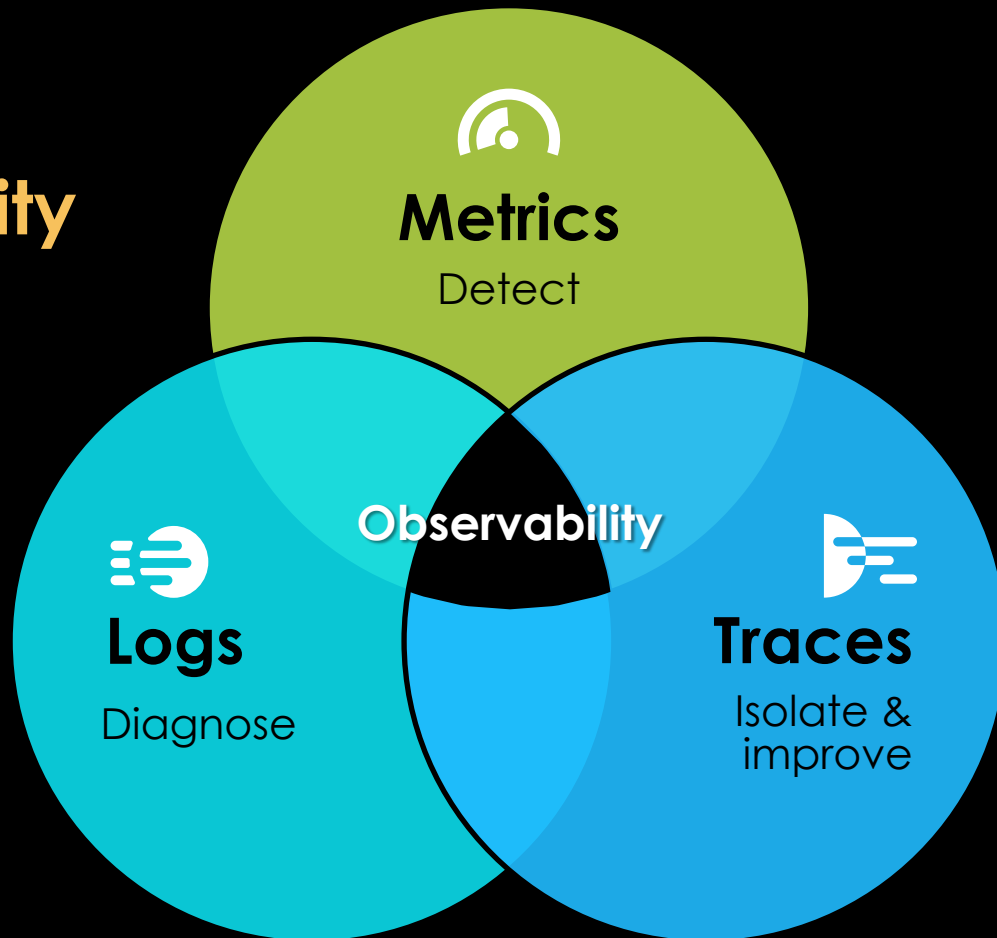
Principal Developer Advocate



     @horovits



The vision: unified observability



The reality: fragmented instrumentation



Protocol



API



SDK



Backend



Collector



Agent



OpenTelemetry (a.k.a. OTel)



CLOUD NATIVE
COMPUTING FOUNDATION

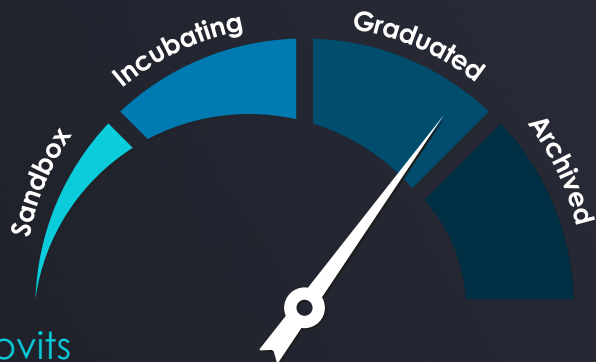
“OpenTelemetry is an observability framework – software and tools that assist in **generating and capturing telemetry data** from cloud-native software.”

Across Traces, Metrics, Logs



hot

OpenTelemetry Applies for CNCF Graduation




@horovits



Dotan Horovits 🇮🇱 🏳️‍🌈 • You

Technology Evangelist | CNCF Ambassador | Podcaster | Speaker | B...

1d • 🌐

 #OpenTelemetry is applying for graduation at the [Cloud Native Computing Foundation \(CNCF\)](#)!

Check out the issue for the Technical Oversight Committee (TOC) of the @CloudNativeFdn and chip in

<https://lnkd.in/dZRF2WYz>

#opensource #observability #devops #cloudnative

@opentelemetry @CNCFAmbassadors

<https://lnkd.in/dgC7SWu8>

cncf/toc

#1271 OpenTelemetry Graduation

💬 1 comment 🗨️ 0 reviews 📄 1 file +54 -0 🟢🟢🟢🟢🟢



austinlparker • March 7, 2024 🔒 2 commits

   Tomer Horev and 97 others

2 comments · 10 reposts

Project Stats

@horovits



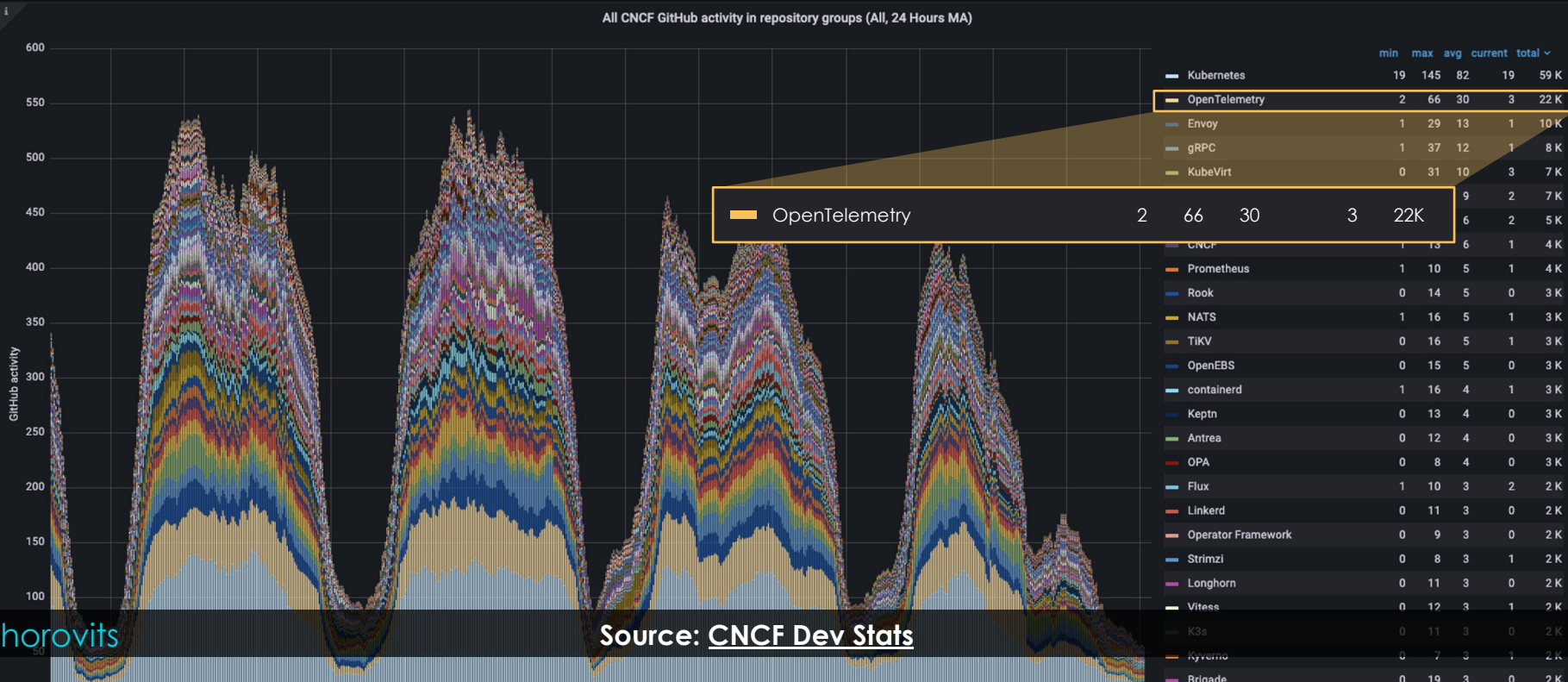
Second most active CNCF project



General / Activity Repository Groups

now-30d to now-1h

Period 24 Hours MA Repository group All Releases



Source: [CNCF Dev Stats](#)

@horovits

Second most active CNCF project

PROJECT SNAPSHOT



OpenTelemetry made its **first commit to GitHub** in April 2019. Since **joining CNCF** on May 17, 2019, OpenTelemetry has added:



67,250+
Pull requests



9,160+
Contributors



466,000+
Contributions

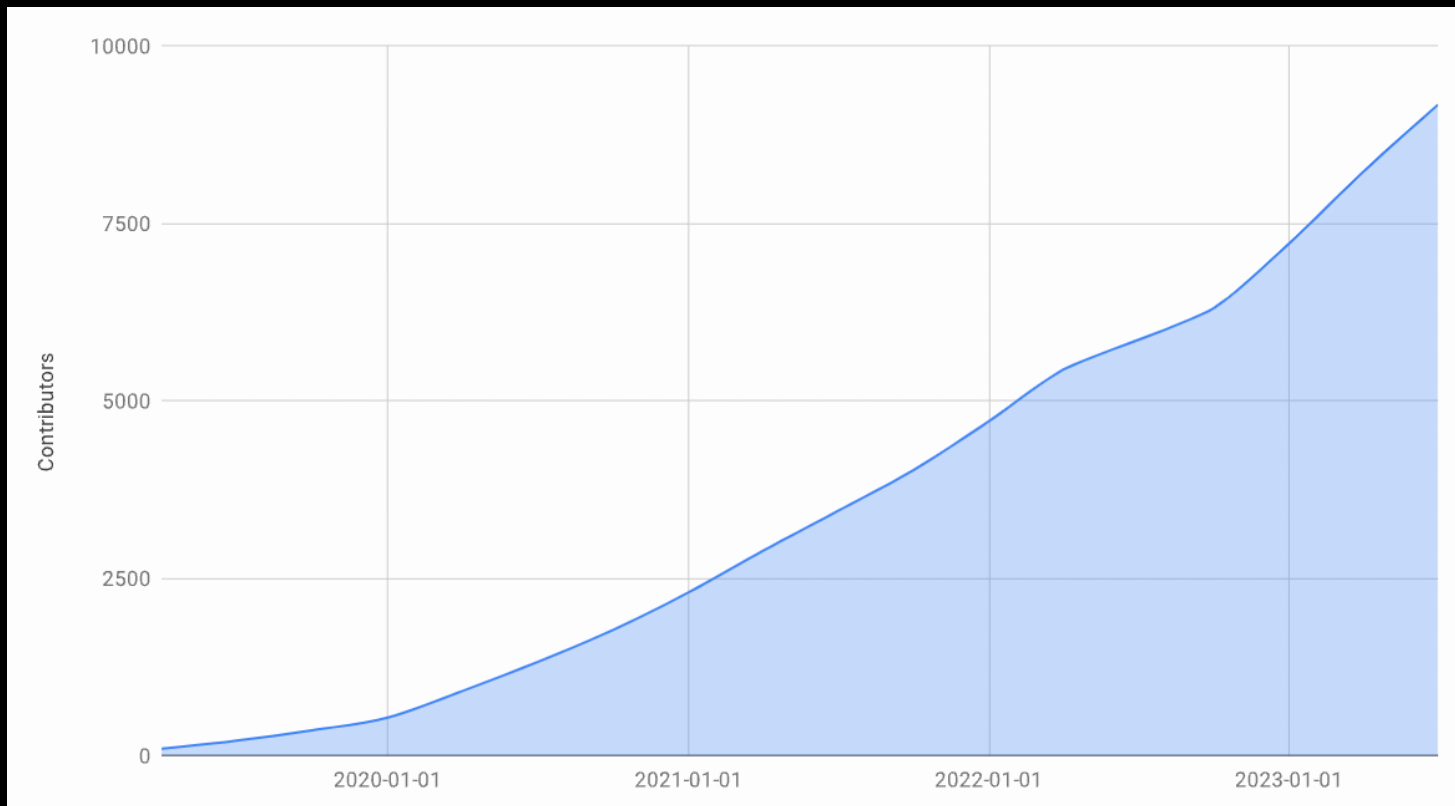


55,640+
Code commits

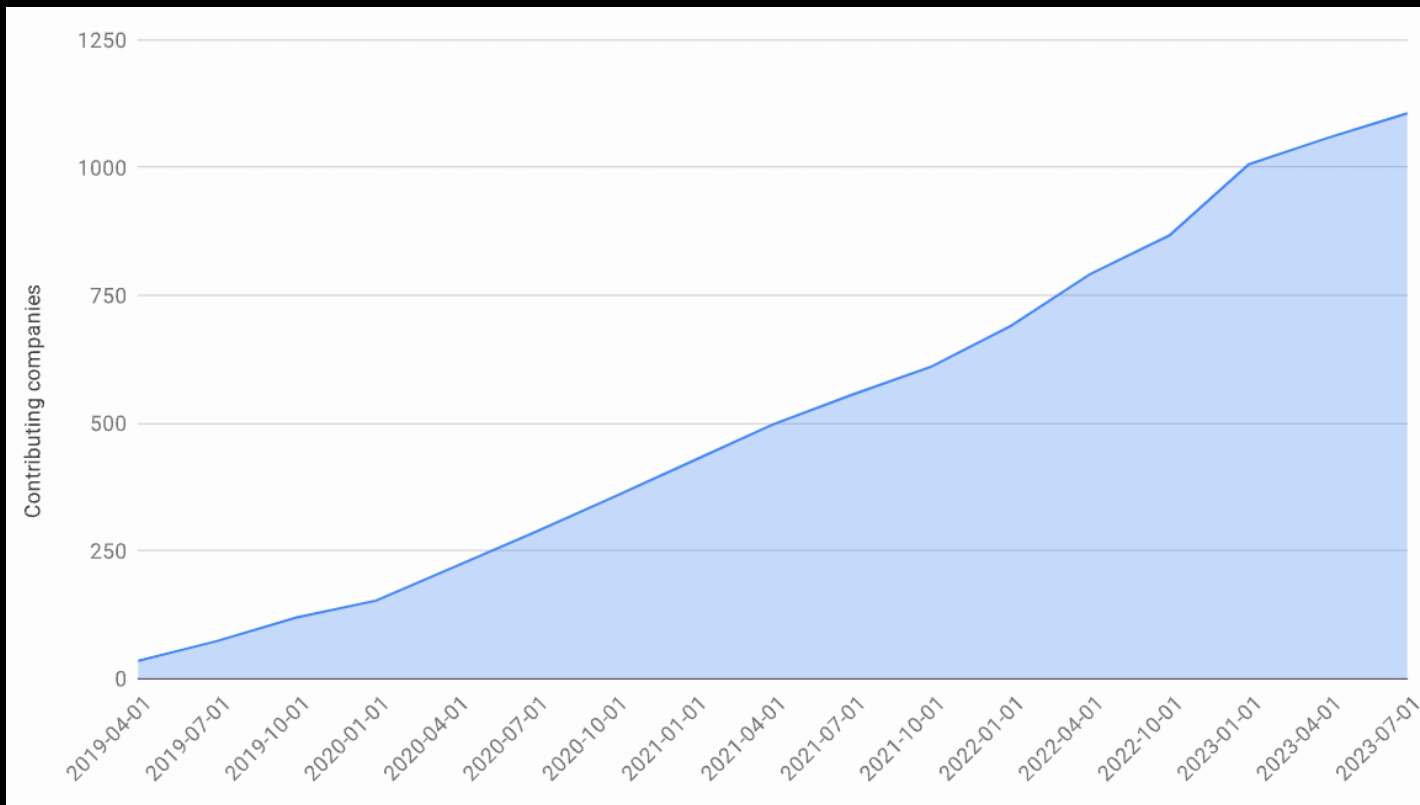


1,100+
Contributing companies

Second most active CNCF project



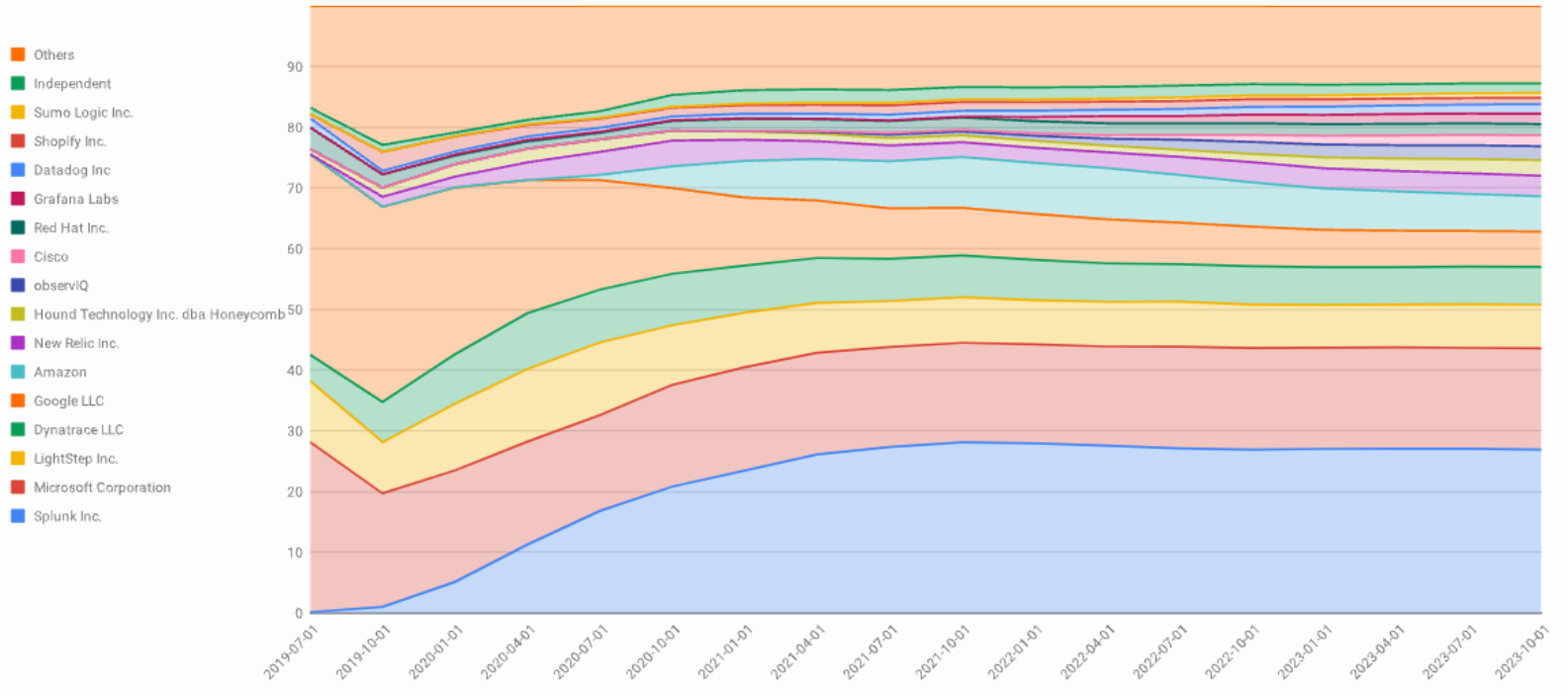
Second most active CNCF project



Source: CNCF Project Report for OpenTelemetry

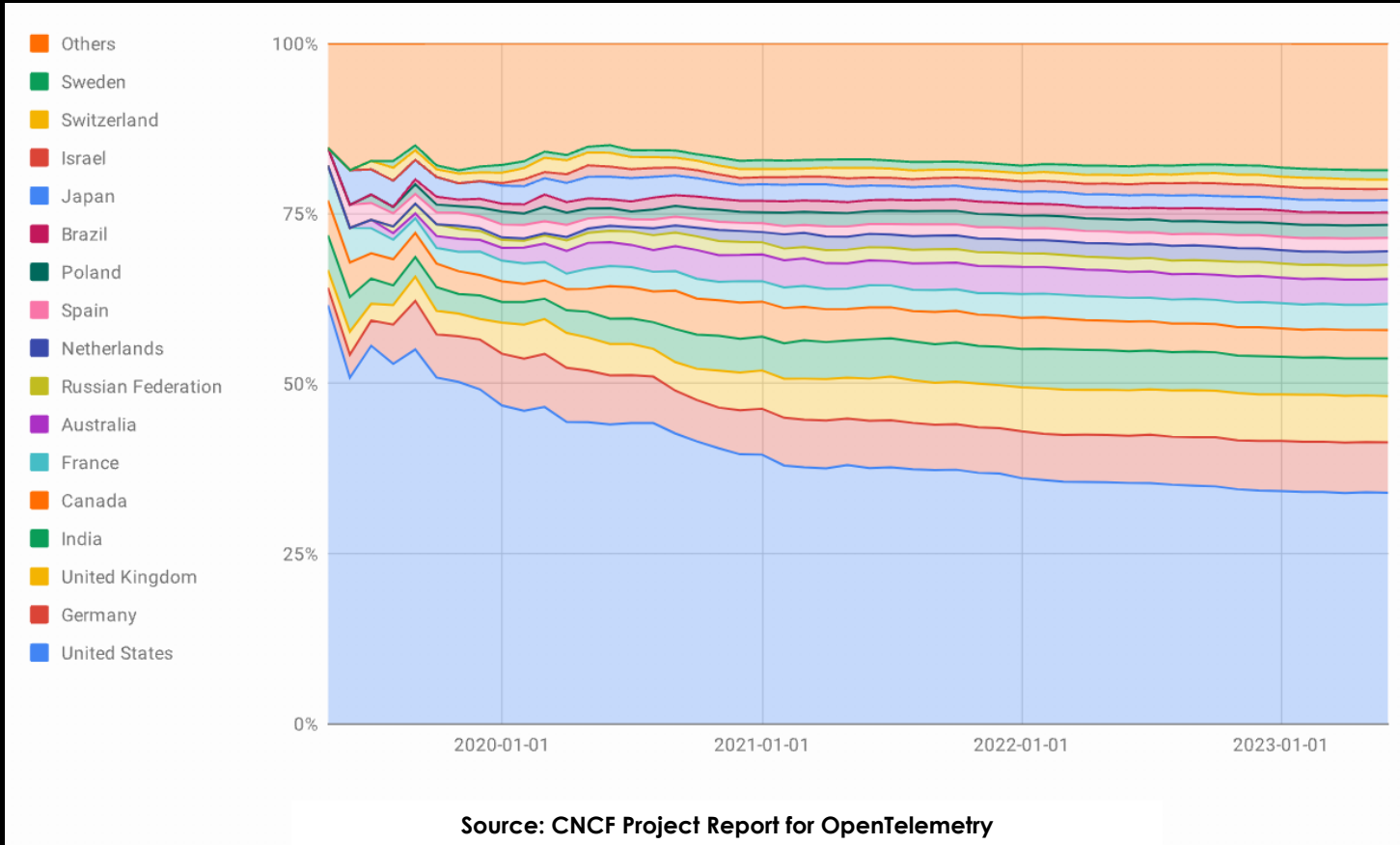
Major companies contribute

Percentage OpenTelemetry Code Contributions by Company (cumulative)



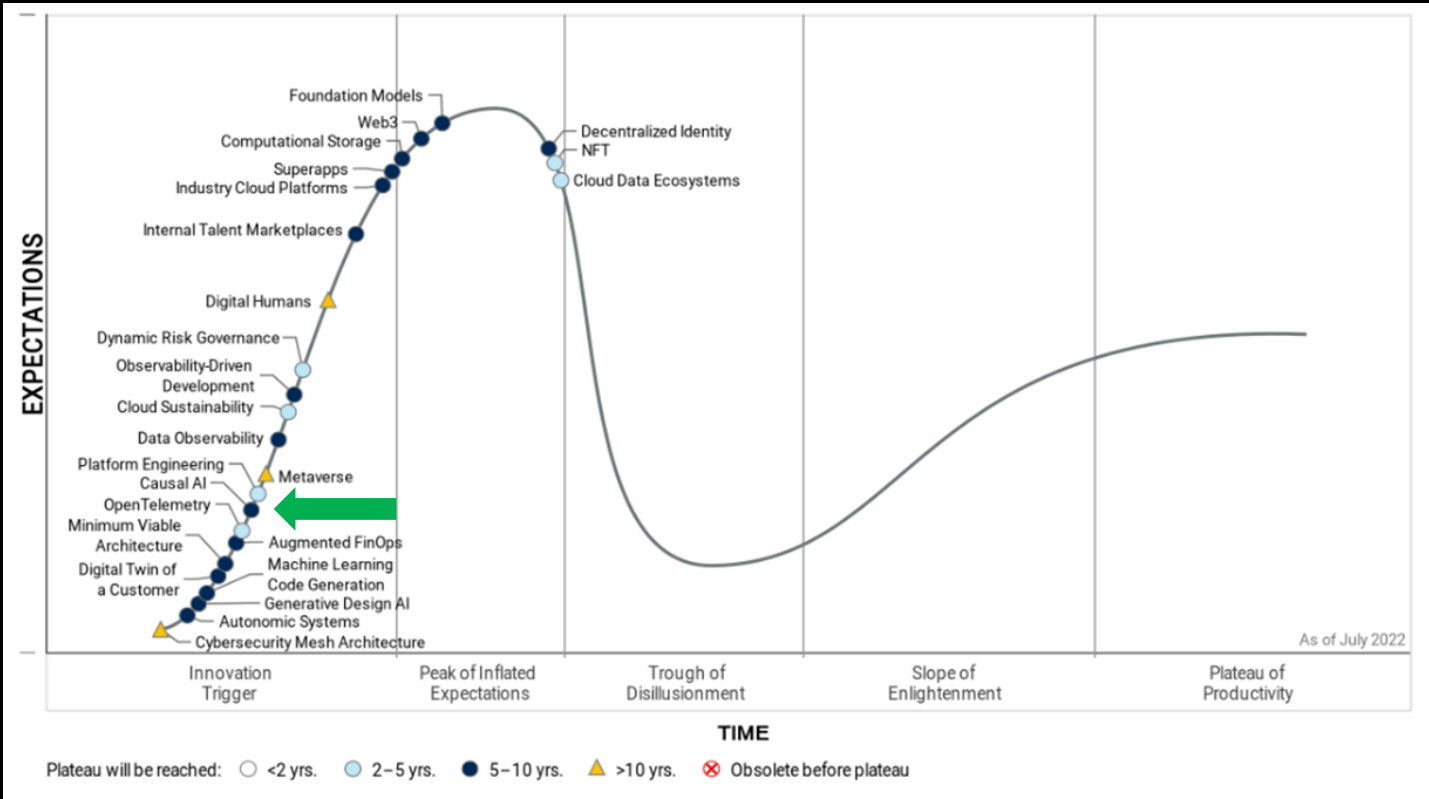
Source: CNCF Project Report for OpenTelemetry

Major companies contribute



Source: CNCF Project Report for OpenTelemetry

Flagged by Analysts as an Emerging Technology



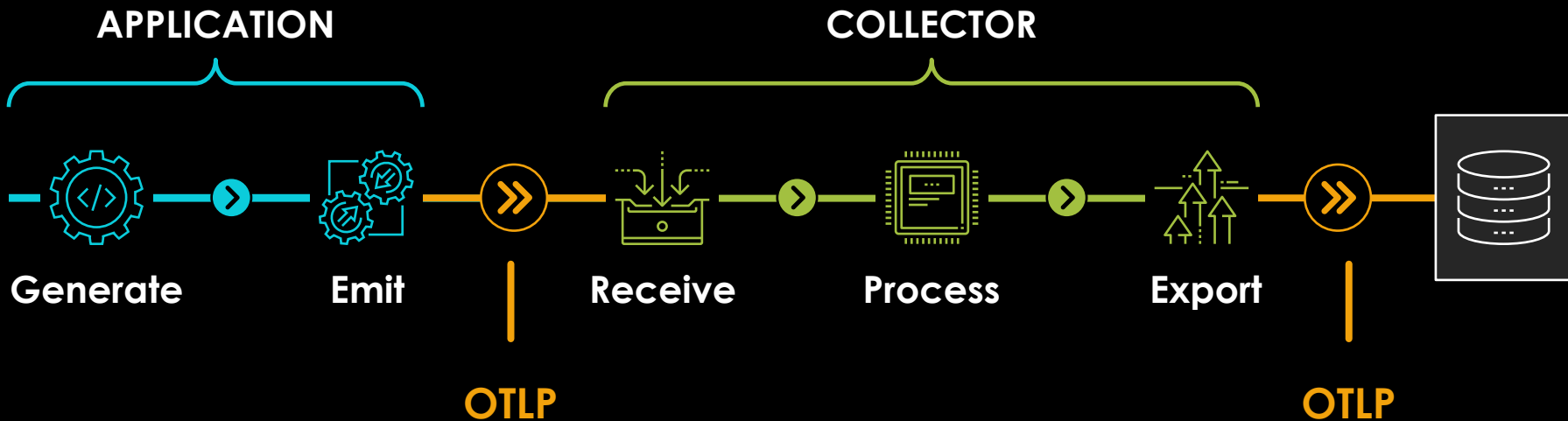
Quick Recap

@horovits



OpenTelemetry

A unified set of vendor-agnostic APIs, SDKs and tools for generating and collecting telemetry data, and then exporting it to a variety of analysis tools.



@horovits

Updates

@horovits




OTel Logging is GA!



Source: PGNDIR

@horovits


 **Dotan Horovits** 🇺🇸 🧡
Technology Evangelist | CNCF Ambassador | Podcaster | Speaker | Blogger
3mo · Edited


📣 **OpenTelemetry Logging has reached GA!** 🎉

For me this is one of the biggest news out of this [#KubeCon](#).
Now all the "three pillars of observability" - traces, metrics and logs - are generally available, stable, and are ready for use in production, with all the necessary guarantees, such as long-term support, backward compatibility and dependency isolation.
And you've got stable client libraries for Java, .Net, C++, PHP (and more in the works).
Great work to all the [OpenTelemetry](#) maintainers and contributors who've made this happen 🙌

KUBECON + CLOUDNATIVECON NORTH AMERICA 2023 ANNOUNCEMENT

Updates from OpenTelemetry!

 **CLOUD NATIVE**
COMPUTING FOUNDATION



👍 🌱 117 · 1 Comment

State of the signals

Generally Available



Traces

- API, SDK, Protocol are stable
- Client libraries for Java, Go, .Net, C++, JavaScript, Python, PHP, Ruby, Swift, Erlang are stable
- OpenTracing and OpenCensus are deprecated

Generally Available



Metrics

- API, SDK, Protocol are stable
- Client libraries for Java, Go, .Net, C++, JavaScript, Python, PHP are stable
- Collector supports metric pipelines
- Prometheus support

Generally Available



Logs

- API, SDK, Protocol are stable
- Integration with existing logging frameworks
- Client libraries for Java, .Net, C++, PHP are stable
- Log appenders are under development in many languages
- New strongly-typed and machine-readable logging format

Elastic Common Schema merge into OpenTelemetry



Source: PGNDIR



@horovits

 **Dotan Horovits #CNCFAmbassador**
@horovits

📣 Big news on [#OpenTelemetry](#) [#logging](#) support!
Elastic Common Schema (ECS) is now merging into the OTEL Semantic Convention 🎉

Great work for the teams on the successful collaboration! 🌟
opentelemetry.io/blog/2023/ecs-...

[@CloudNativeFdn](#) [@CNCFAmbassadors](#) [@opentelemetry](#) [@elastic](#)
[#DevOps](#)



OpenTelemetry

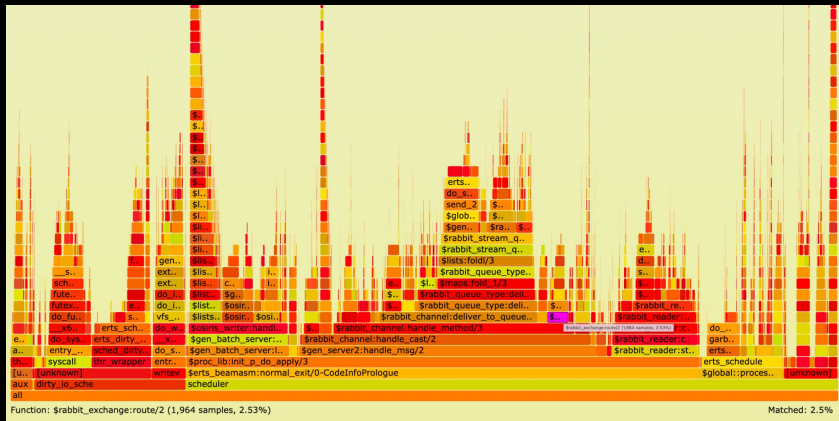
opentelemetry.io
Announcing the Elastic Common Schema (ECS) and OpenTelemetry Semanti...
Today, we're very excited to make a joint announcement with Elastic about the future of Elastic Common Schema (ECS) and the OpenTelemetry Semantic ...

More Updates

@horovits



Adding Continuous Profiling



@horovits



Dotan Horovits • You

Technology Evangelist | CNCF Ambassador | Podcaster | Speaker | Blogger
1yr • Edited •

The [#OpenTelemetry](#) community is looking into supporting Continuous Profiling. Here's the vision draft. Great work by all the contributors 🙌

Check out OTEP-212 on GitHub and approve if you support:

<https://lnkd.in/d9TRbPmK>

Are you new to Continuous Profiling? Check out this intro post:

<http://ow.ly/Z2AZ50KNeOp>

Cloud Native Computing Foundation (CNCF)

open-telemetry/oteps

#212 Propose OpenTelemetry Profiling Vision



7 comments 36 reviews 1 file +188 -0



Rperry2174 • August 30, 2022 - 17 commits



Adding Continuous Profiling



@horovits

Dotan Horovits [#CNCFAmbassador](#) [@horovits](#) · Feb 29

A major **milestone for adding Continuous Profiling** to [#OpenTelemetry](#): The extension proposal (OTEP) outlining the data model has been merged 🎉

I need to look into that deeper [@OpenObserv](#) with the SIG members - [@felixge](#) [@rperry_](#) joining me?

[#opensource](#) [#devops](#) [#observability](#)

[open-telemetry / oteps](#) Public

<> Code Issues 20 Pull requests 16 Actions

New issue

Introduces Profiling Data Model v2 #239

Merged

jsuereth merged 37 commits into [open-telemetry:main](#) from [petethepig:profiling-pprofextended](#) last week

OpenTelemetry and 3 others

2 13 36 5K

Adding Continuous Profiling

Charting New Territory: OpenTelemetry Embraces Profiling



DOTAN HOROVITS
Principal Developer
Advocate, Logz.io



RYAN PERRY
Principal Product
Manager, Grafana Labs

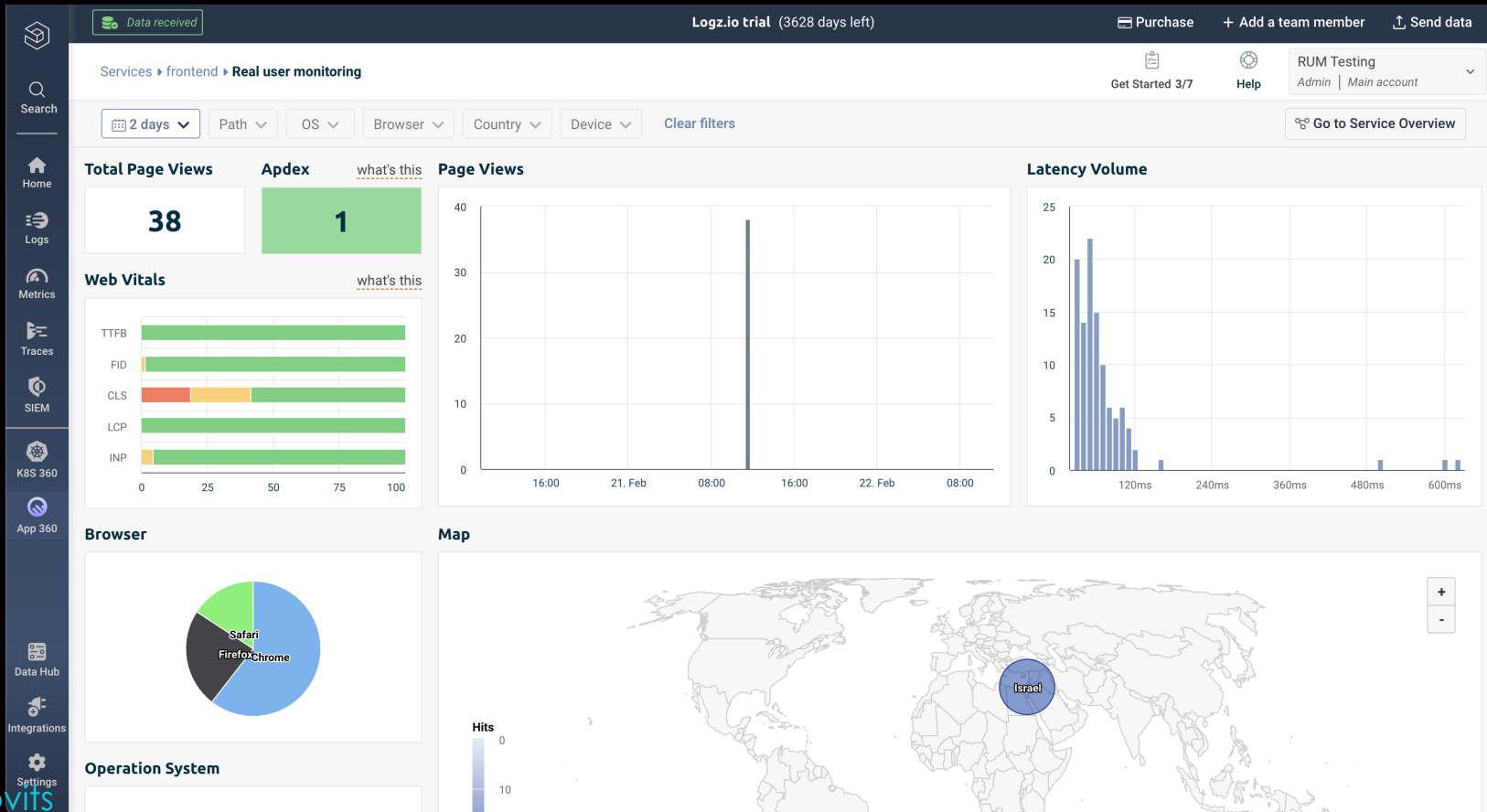


HOSTING

FELIX GEISENDÖRFER
Senior Staff
Engineer, Datadog



Adding Real User Monitoring support



Adding Real User Monitoring support (client-side tele.)

Proposal to create a SIG for Real User Monitoring #830

 Closed martinkuba opened this issue on Sep 8, 2021 · 25 comments

Semantic conventions for browser events #3286

 Closed scheler wants to merge 7 commits into [open-telemetry:main](#) from [scheler:browser-events](#) 

Real User Monitoring (RUM) with Otel metrics #3500

 Closed hxtpoe opened this issue on Dec 21, 2022 · 2 comments

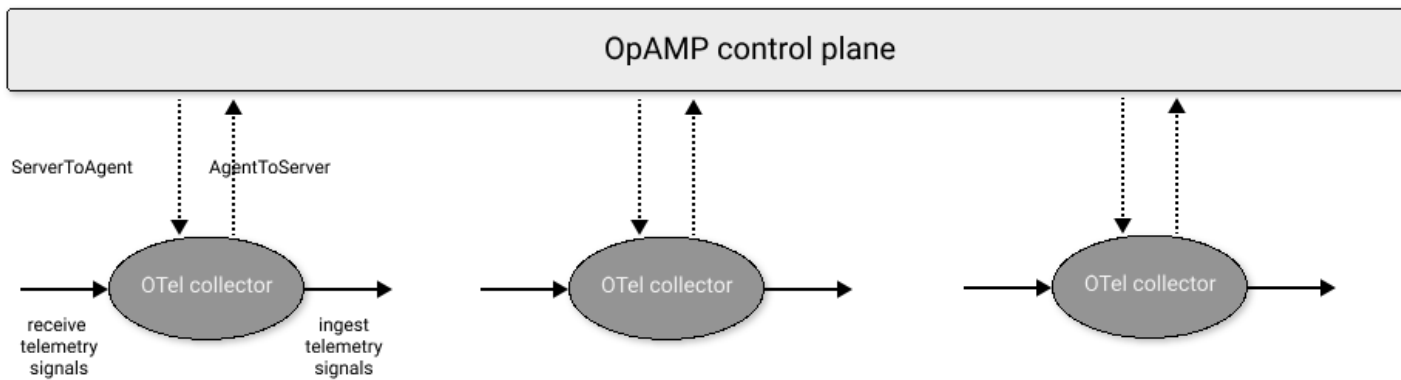


Ease of Operation with Remote Agent Mgmt.

open-
open-
Kubern

open-telemetry/
opamp-spec

OpAMP Specification



Ease of Operation with Remote Agent Mgmt.

open

open

Kubern

open-telemetry/ **opamp-spec**

OpAMP Specification



159

open-telemetry/ **opamp-java**

OpAMP protocol implementation in Java

3
Contributors

3
Issues

4
Stars

3
Forks

open-telemetry/ **opamp-go**

OpAMP protocol implementation in Go

22
Contributors

57
Used by

104
Stars

54
Forks



eBPF for auto-instrumentation

open-telemetry/
opentelemetry-go-...

OpenTelemetry Auto Instrumentation using eBPF



👤 31
Contributors

🕒 73
Issues

OPEN TALKS
OBSERVABILITY

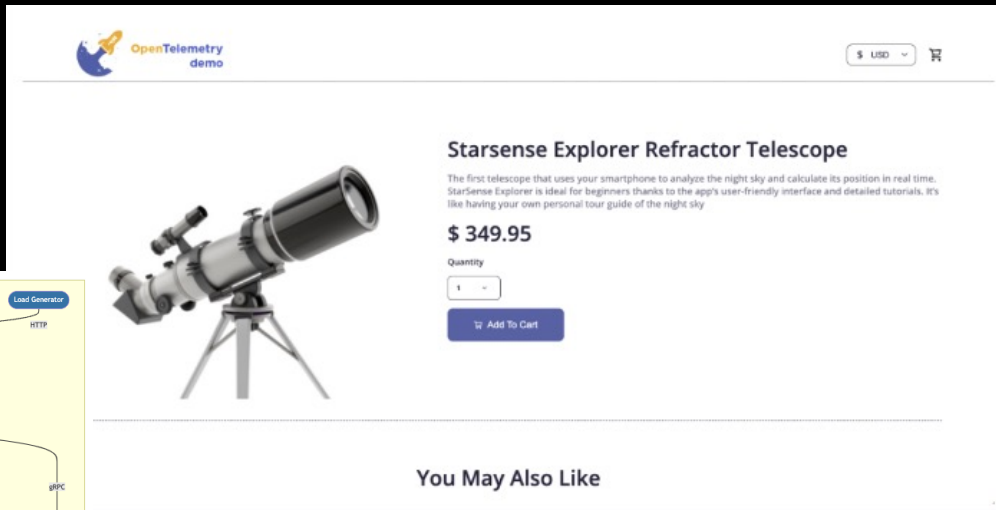
From **logz.io**

Where Are My App's Traces??
Instrumentation in Practice

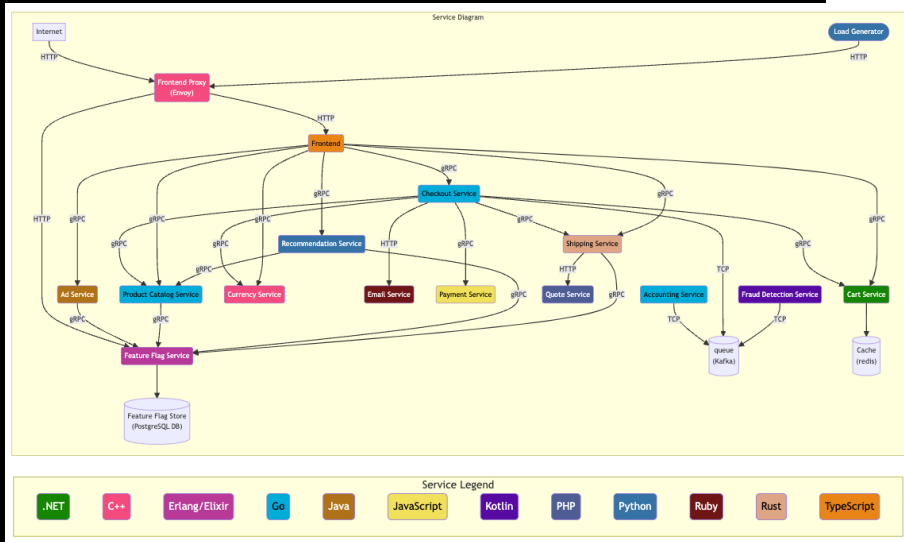
The banner features a yellow background with a large white 'O' containing a microphone icon. Two speakers are shown: a man with glasses on the left and a man on the right. The text 'OPEN TALKS OBSERVABILITY' is in the top left, 'From logz.io' in the top right, and the title 'Where Are My App's Traces?? Instrumentation in Practice' is in the center.



OpenTelemetry demo reached GA



The screenshot shows the OpenTelemetry demo website. At the top left is the 'OpenTelemetry demo' logo. At the top right, there is a currency selector set to '\$ USD' and a shopping cart icon. The main content area features a product titled 'Starsense Explorer Refractor Telescope'. Below the title is a description: 'The first telescope that uses your smartphone to analyze the night sky and calculate its position in real time. StarSense Explorer is ideal for beginners thanks to the app's user-friendly interface and detailed tutorials. It's like having your own personal tour guide of the night sky.' The price is listed as '\$ 349.95'. There is a 'Quantity' input field with a value of '1' and an 'Add To Cart' button. Below the product image, there is a section titled 'You May Also Like'.



Sunsetting OpenCensus

(OpenTelemetry achieved feature parity)



@horovits

 **Dotan Horovits #CNCFAmbassador**
@horovits

The end of an era: sunsetting [#OpenCensus](#).
What's next? [#OpenTelemetry](#) of course! 🚧
[@OpenTelemetry](#) has reached feature parity with [@opencensusio](#), and offers a richer ecosystem and an active [#opensource](#) [#community](#) [@CloudNativeFdn](#).
opentelemetry.io/blog/2023/suns...
Kudos to all involved! 🌟



The diagram illustrates the transition from OpenTracing and OpenCensus to OpenTelemetry. It features three logos in a row: OpenTracing (a stylized 'T' inside a hexagon), OpenCensus (a stylized 'C' inside a circle), and OpenTelemetry (a stylized 'T' inside a circle). A plus sign (+) is placed between OpenTracing and OpenCensus, and an equals sign (=) is placed between OpenCensus and OpenTelemetry. Below each logo is its respective name: OPENTRACING, OPENCENSUS, and OpenTelemetry.

8:54 PM · May 2, 2023 · 658 Views

hot

OTel Day is Back!



@horovits



Dotan Horovits 🇮🇱 🧡 • You

Technology Evangelist | CNCF Ambassador | Podcaster | Speaker | B...
2m • Edited • 🌐

📣 **#OTelDay** is back! The **#OpenTelemetry** community day will take place June 25, 2024 in Seattle WA.

It's a great opportunity for maintainers, contributors, and users to come together.

Early bird ticket sales is now open, as well as CFP:

<https://lnkd.in/dYntvYq9>

#opensource #cloudnative #observability

Cloud Native Computing Foundation (CNCF) The Linux Foundation



JUNE 25, 2024

SEATTLE,
WASHINGTON

#OTelDay #OpenTelemetry

REGISTER

SPONSOR

SUBMIT A PROPOSAL

Getting Started

@horovits



Know your stack



Which languages?



Which signals?



Which protocols?



Which analytics tools?

Then check status for each and follow respective guides

<https://opentelemetry.io/status/>

<https://opentelemetry.io/docs/>

<https://opentelemetry.io/registry/>

<https://github.com/open-telemetry/>



A night sky filled with stars, with the Milky Way galaxy visible as a bright, hazy band of light stretching across the center. In the bottom right foreground, a telescope is mounted on a tripod, pointing towards the stars. The overall scene is dark, with the stars providing the primary light source.

Thank you!

Dotan Horovits,
[@horovits](#)