From zero to developer: my one year serendipity journey with

OpenTelemetry

Cloud Native Days Kuala Lumpur | Women in Cloud Era 8 September 2025 **Diana Todea** - DX Engineer



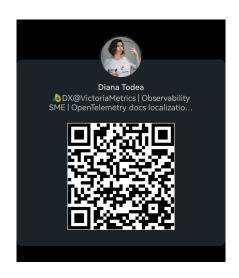
About me

Former SRE, now DX Engineer

Support women in tech, member of CNCF #merge-forward, co-lead #neurodiversity WG

OTel active member, #otel-docs-localization

Cloud Native Romania co-organizer





What is and what isn't this talk about?

100% motivational talk

A personal journey into Open Source and OpenTelemetry

No demos



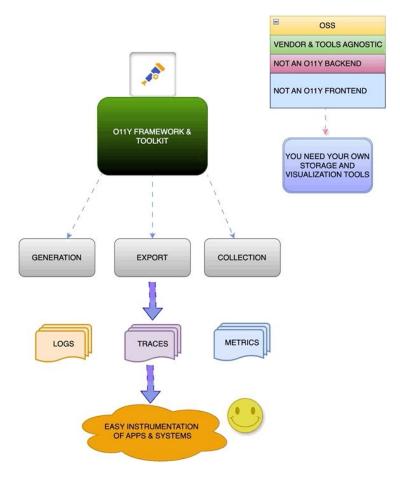
OpenTelemetry in a nutshell

"OpenTelemetry's mission: to enable effective observability by making high-quality, portable telemetry ubiquitous."

Telemetry has to be

- simple
- universal
- vendor-neutral
- loosely coupled
- built-in







Journeys start with a grain of curiosity

Linux Foundation community call for observability SMEs

Creating the first ever certification and exam for OpenTelemetry

OTel exam developer







Continue with practice

Create a POC: validate OTel in orgs with fragmented o11y

PROs: vendor neutrality, standard for OSS o11y

To be improved: docs, manual instrumentation, count for overhead

Limited: customize OSS visualization/dashboards

Not available: support in production

OTel considers profiling and instrumenting as a different scope

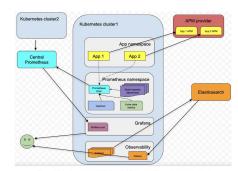
I played with OTEL and I liked it



As mentioned in my previous article, in 2024 I had the opportunity to work on an observability project where I wrote a proof of concept on OpenTelemetry. As an SRE I saw the window to experiment with one of themst-popular CNCF projects on distributed tracing and provide an open source alternative to monitor the performance of my client's applications. I had the chance to give a more in depth talk on this topic at KCD Accra Ghana as well as at OSMC 2024. You can access my presentations directly on my Github repo.

Architecture

This particular observability architecture was mainly composed of <u>Prometheus metrics</u>, <u>Victoria Metrics</u>, <u>Grafana</u> for visualizations and alerting, <u>ELK</u> for logging and a commercial APM vendor. A fragmented observability architecture leads to a confusing developer and user experience, working in observability for almost 5 years now it's easy to say that most people prefer having a unified monitoring pane of glass, which is easier to onboard and manage.

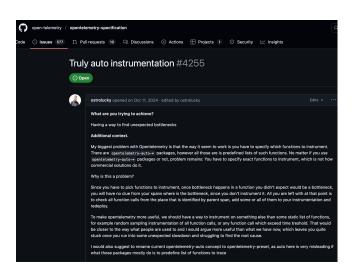


Observability architecture explaining how the K8s clusters ship metrics, traces and logs

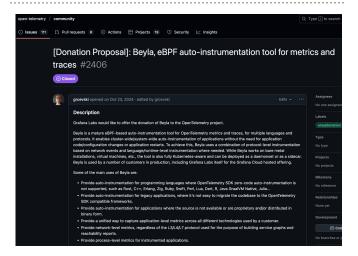


Provide feedback to the community

https://github.com/open-telemetry/ opentelemetry-specification/issues/4255



https://github.com/open-telemetry/community/issues/2406





Exam developer->IC

Not org dependent

Code NO Code contribution

Multiple OSS projects



Get involved in local & virtual communities

#otel-docs-localization #otel-localization-es #cloud-native-valencia #cnd-romania

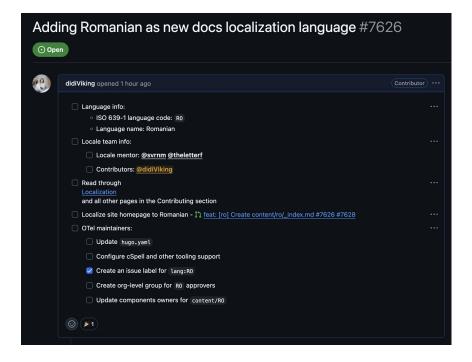




Take initiative

Submit an issue, create a first PR
My aim: OTel docs localization for
Currently looking for Romanian
speaking contributors

https://github.com/open-telemetry/opentelemetry.io/issues/7626





Share with larger audiences

Developer Experience contributions





Educate through written content

Cloud Native Days Romania 2025tales from the field



I had the honor to participate at <u>Cloud Native Days Romania</u>'s 2nd edition, hosted in Bucharest, Romania, on the 5th and 6th of May and honestly I was amazed. Meeting with a vibrant open source community, talented organizers and an overall curious audience that made me feel that I belonged, what a dream come true.



Formerly known as <u>Kubernetes Community Days Romania</u>, CND Romania has reinvented itself this year adding an extra day for <u>workshops</u>. From CI/CD pipelines with Dagger, to GitOps with FluxOperator, Ray and Kubernetes for ML projects, Istio Service Mesh and many other exciting topics, no wonder the workshop day reached its full capacity.

Why feedback matters for open source



My 2024 has been a year where I finally immersed myself in the open source realm. It has been on my mind for a while to start contributing to an open source project, however I wanted to pick the right project that resonated with my current on-going work.

Putting doubts aside, I was really impressed with <u>OpenTelemetry</u>'s popularity and the fact that so many organizations already adopted it into their production environments. When I started drafting my <u>GenerativeAI talk</u>, I interacted with OpenTelemetry, APM and Elastic's Observability stack. Seeing how everything blended together was a great experience, so when the chance opened up to contribute to OpenTelemetry project, I jumped right into it.

OTCA certification from Linux Foundation has been released on the market just very recently. It is the first exam and certification covering the OpenTelemetry topic at its foundational level. I got the chance to contribute as a developer to OTCA exam, writing questions, double checking the documentation sources and putting myself in the shoes of a person who wants to get certified on OpenTelemetry. For me it has been the perfect opportunity to get closer to an open source project I admired from afar and interacting with the open source community.

OpenTelemetry project has a vast <u>documentation</u> with a tendency to get complicated really fast. Some parts are still developing and definitely are in need of developers' constant feedback. It's hard to perceive OpenTelemetry's level of difficulty from afar, you actually have to put your working gloves and deploy it. Later on in 2024, I had the chance to get my hands "dirty" with such an observability project and build the proof of concept for OpenTelemetry with several SDKs, documenting my experience in this article.

OpenObservabilitySummit and OTel Community Day 2025 recap





Last Thursday in Denver, US, <u>OTel Community Day</u> event took place as part of the <u>Open Observability Summit</u> and it was a blast. I had the chance to participate with a lightning talk and learn about all the latest releases within the <u>Open Observability realm</u>.

Below, you can find the summary based on the sessions I participated at, the official videos will be released on the <u>CNCF Youtube</u> channel in a couple of weeks. The OTel Community Day had two parallel tracks and some of the presentations are already uploaded on the schedule page.



Take-aways

- Diversify your contributions
- Take initiative
- Find inspiration in other people's contributions
- Raise awareness for cloud native projects



Join #otel channels on CNCF slack



Resources

I played with OTel and I liked it

Why feedback matters for Open Source

https://opentelemetry.io/blog/2025/devex-survey

https://opentelemetry.io/community/

https://opentelemetry.io/blog/2025/contribex-survey-results/

https://training.linuxfoundation.org/certification/opentelemetry-certified-associate-otca/

https://www.cncf.io/people/ambassadors/application-process/

https://community.cncf.io/merge-forward/

https://github.com/open-telemetry/opentelemetry-demo



Thank you

Any questions?

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