



Desde cero a <desarrollador/>

mi viaje de un año de serendipia con OpenTelemetry

Diana Todea-Senior SRE & Technical Advocate



Cloud Native
Community Groups
Santo Domingo



Links de la Comunidad

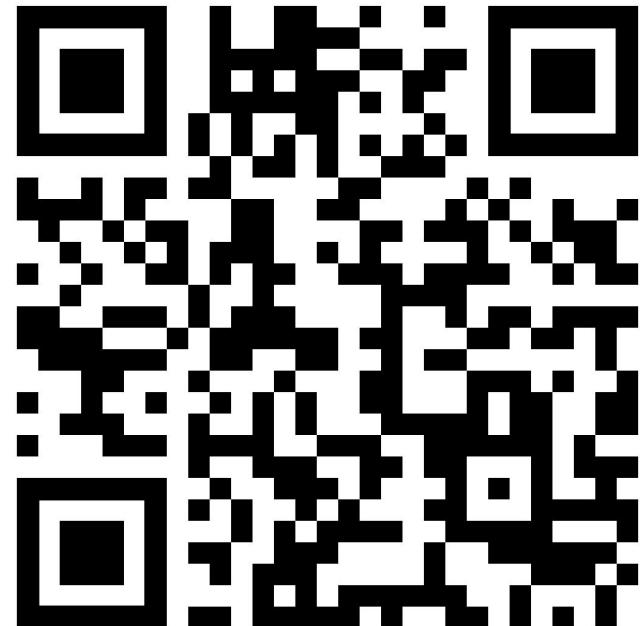
Anuncios

Descuentos

Eventos

Preguntas

Linktree*





Diana Todea

Developer Advocate, Observability
SME, OTEL contributor | Keynote & In...



[github@didiviking/Conferences_Talks](https://github.com/didiviking/Conferences_Talks)



Que es y que no es esta presentación?

Es una charla 100% inspiradora



Contar una trayectoria personal con OSS y OpenTelemetry

No es una charla donde el objetivo es de encontrar soluciones técnicas



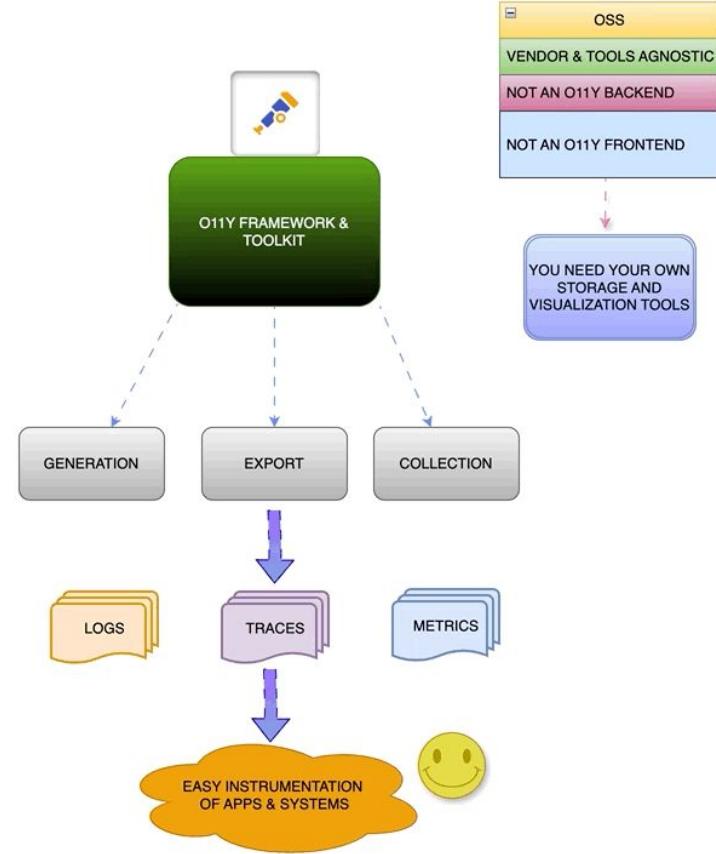
No hay demos

La misión de OpenTelemetry: permitir una observabilidad efectiva haciendo que la telemetría portátil y de alta calidad sea universal

La telemetría tiene que ser

- . fácil
- . universal
- . proveedor neutral
- . débilmente acoplado
(dependencias minimas)
- . incorporada



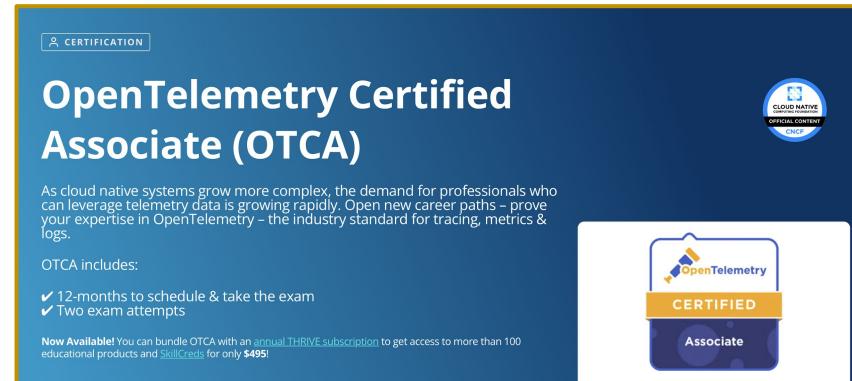


Tener la curiosidad para empezar

La comunidad Linux Foundation buscaba especialistas en observabilidad para crear el primer examen y la primera certificación de OpenTelemetry.

Fue mi primera contribución en el mundo open source y tuve la ocasión de conocer la comunidad de OpenTelemetry.

Disponible desde enero 2025
desarrolladora de examen OTel



The image shows a digital representation of the OpenTelemetry Certified Associate (OTCA) certification. It features a dark blue header with the text "CERTIFICATION" and "OpenTelemetry Certified Associate (OTCA)". Below this is a white section containing the "Cloud Native OFFICIAL CONTENT CNCF" logo, a "CERTIFIED" badge with the "OpenTelemetry" logo, and the word "Associate". The main body of the card is dark blue and contains descriptive text about the certification's purpose and benefits, along with a list of included items and availability information.

CERTIFICATION

OpenTelemetry Certified Associate (OTCA)

As cloud native systems grow more complex, the demand for professionals who can leverage telemetry data is growing rapidly. Open new career paths – prove your expertise in OpenTelemetry – the industry standard for tracing, metrics & logs.

OTCA includes:

- ✓ 12-months to schedule & take the exam
- ✓ Two exam attempts

Now Available! You can bundle OTCA with an [annual THRIVE subscription](#) to get access to more than 100 educational products and [SkillCreds](#) for only \$495!

Cloud Native OFFICIAL CONTENT CNCF

CERTIFIED

Associate



Adoptar OTel en organizaciones

- Crear una prueba de concepto: **explicar la estructura y lógica de OTel** dentro de una organización
- Validar OTel en organizaciones medianas con **observabilidad fragmentada** constituye un desafío en sí mismo
- Porque no hemos adoptado OTel en producción: la documentación **falta claridad y ejemplos reales**, la instrumentalización manual es difícil, hay que tener en cuenta los **gastos de la instrumentalización**, las visualizaciones en el frontend OSS no están a la misma altura que en una plataforma comercial, que tipo de soporte vamos a recibir de la comunidad

I played with OTEL and I liked it



Diana Todea
4 min read · Jan 7, 2025

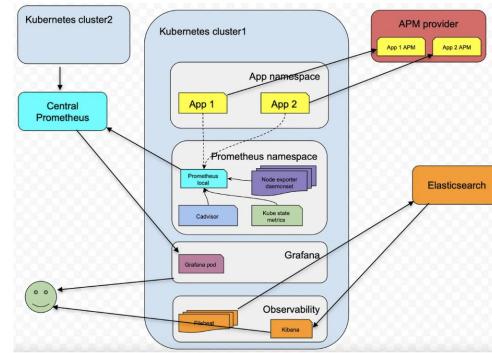
25 Q 1

...

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 the [most 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](#).

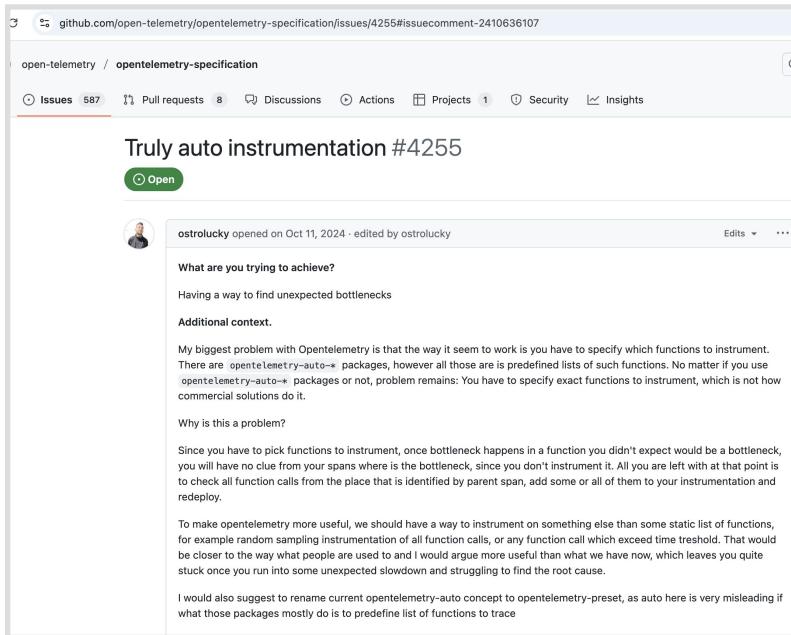
Architecture

This particular observability architecture was mainly composed of [Prometheus metrics](#), [Victoria Metrics](#), [Grafana](#) for visualizations and alerting, [ELK](#) 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.



Comparte tus comentarios con la comunidad

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

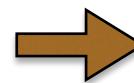


This screenshot shows a GitHub issue page for a proposal titled "Truly auto instrumentation". The issue has 587 comments and 8 pull requests. The post by user "ostrlucky" discusses the challenge of instrumenting functions without specifying them, noting that while there are "opentelemetry-auto-*" packages, they don't handle all cases. It suggests using random sampling or a threshold-based approach. Another user suggests renaming the concept to "opentelemetry-preset".

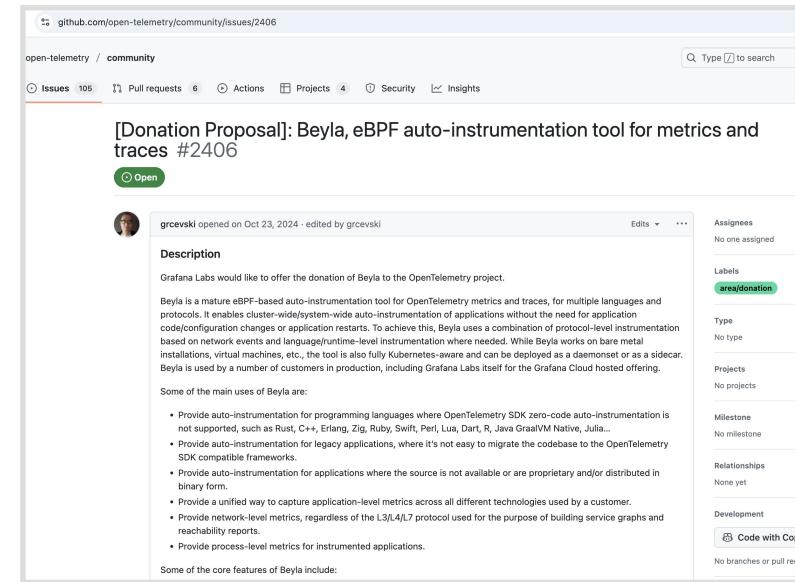
Truly auto instrumentation #4255

ostrlucky opened on Oct 11, 2024 · edited by ostrlucky

What are you trying to achieve?
Having a way to find unexpected bottlenecks
Additional context.
My biggest problem with OpenTelemetry is that the way it seem to work is you have to specify which functions to instrument. There are `opentelemetry-auto-*` packages, however all those are predefined lists of such functions. No matter if you use `opentelemetry-auto-*` packages or not, problem remains: You have to specify exact functions to instrument, which is not how commercial solutions do it.
Why is this a problem?
Since you have to pick functions to instrument, once bottleneck happens in a function you didn't expect would be a bottleneck, you will have no clue from your spans where is the bottleneck, since you don't instrument it. All you are left with at that point is to check all function calls from the place that is identified by parent span, add some or all of them to your instrumentation and redeploy.
To make opentelemetry more useful, we should have a way to instrument on something else than some static list of functions, for example random sampling instrumentation of all function calls, or any function call which exceed time treshold. That would be closer to the way that people are used to and I would argue more useful than what we have now, which leaves you quite stuck once you run into some unexpected slowdown and struggling to find the root cause.
I would also suggest to rename current `opentelemetry-auto` concept to `opentelemetry-preset`, as auto here is very misleading if what those packages mostly do is to predefine list of functions to trace

 #otel-ebpf-instrumentation

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



This screenshot shows a GitHub issue page for a donation proposal. The issue has 105 comments and 6 pull requests. The post by user "grcevski" discusses the donation of "Beyla", an eBPF-based auto-instrumentation tool. It highlights Beyla's ability to instrument applications across multiple languages and protocols without requiring code changes. The proposal includes a list of main uses and core features of the tool.

[Donation Proposal]: Beyla, eBPF auto-instrumentation tool for metrics and traces #2406

grcevski opened on Oct 23, 2024 · edited by grcevski

Description
Grafana Labs would like to offer the donation of Beyla to the OpenTelemetry project.
Beyla is a mature eBPF-based auto-instrumentation tool for OpenTelemetry metrics and traces, for multiple languages and protocols. It enables cluster-wide/system-wide auto-instrumentation of applications without the need for application code/configuration changes or application restarts. To achieve this, Beyla uses a combination of protocol-level instrumentation based on network events and language/runtime-level instrumentation where needed. While Beyla works on bare metal installations, virtual machines, etc., the tool is also fully Kubernetes-aware and can be deployed as a daemonset or as a sidebar. Beyla is used by a number of customers in production, including Grafana Labs itself for the Grafana Cloud hosted offering.
Some of the main uses of Beyla are:

- Provide auto-instrumentation for programming languages where OpenTelemetry SDK zero-code auto-instrumentation is not supported, such as Rust, C++, Erlang, Zig, Ruby, Swift, Perl, Lua, Dart, R, Java GraalVM Native, Julia.
- Provide auto-instrumentation for legacy applications, where it's not easy to migrate the codebase to the OpenTelemetry SDK compatible frameworks.
- Provide auto-instrumentation for applications where the source is not available or are proprietary and/or distributed in binary form.
- Provide a unified way to capture application-level metrics across all different technologies used by a customer.
- Provide network-level metrics, regardless of the L3/L4/L7 protocol used for the purpose of building service graphs and reachability reports.
- Provide process-level metrics for instrumented applications.

Some of the core features of Beyla include:



No minimices las contribuciones sin código

Diana Todea 2:41 PM
@krol Hola, por ese PR no entiendo muy bien el ultimo comentario para añadir los heading IDs, es la misma cosa que falla por mi ultimo PR. Si sabes de que va o como se soluciona, podemos hacer una llamada. MGTV

#6134 feat: [es] Create docs/contributing/style-guide.md
open-telemetry/opentelemetry.io · Jan 31st · Added by GitHub

#6371 feat: [es] Create docs/contributing/pr-checks.md
open-telemetry/opentelemetry.io · Feb 18th · Added by GitHub

1 reply · Last reply 2 months ago

open-telemetry/opentelemetry.io · feat: [es] Create docs/contributing/pr-checks.md ✓ lang:es · 49
#6371 by didiViking was merged yesterday · Approved

open-telemetry/opentelemetry.io · feat: [es] Create docs/contributing/style-guide.md ✓ lang:es · 38
#6134 by didiViking was merged on Feb 19 · Approved

open-telemetry/opentelemetry.io · feat: [es] Create docs/contributing/issues.md ✓ lang:es · 51
#6088 by didiViking was merged on Feb 14 · Approved



Apostrar las comunidades locales



CLOUD NATIVE
COMMUNITY GROUPS

Upcoming KCDs ▾ Chapters Events Apply ▾ Log in

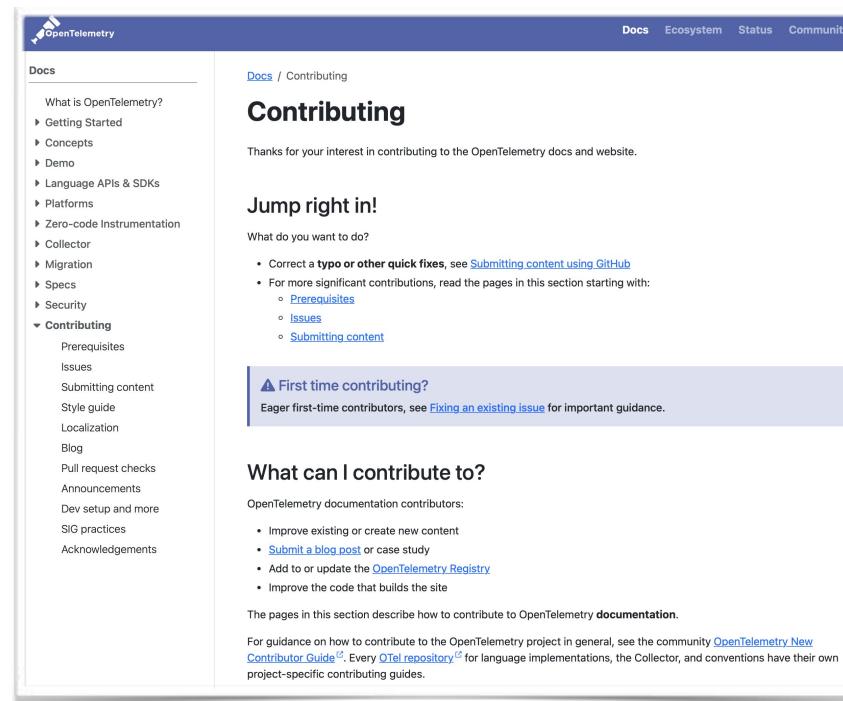
Europe
Cloud Native Valencia [Join](#) 54 members

- otel-docs-localization
 - otel-localization-es
- <https://community.cncf.io/cloud-native-valencia>



Responsabilidad por la comunidad

Nuestras contribuciones
resuenan en otros proyectos
y comunidades open source



The screenshot shows the OpenTelemetry documentation website. The top navigation bar includes links for Docs, Ecosystem, Status, and Community. The left sidebar has a "Docs" heading and a list of topics: What is OpenTelemetry?, Getting Started, Concepts, Demo, Language APIs & SDKs, Platforms, Zero-code Instrumentation, Collector, Migration, Specs, Security, Contributing, Prerequisites, Issues, Submitting content, Style guide, Localization, Blog, Pull request checks, Announcements, Dev setup and more, SIG practices, and Acknowledgements. The main content area shows the "Contributing" page under the "Docs / Contributing" path. It features a "Contributing" section with a sub-section "Jump right in!" and a list of things to do like fixing typos and reading the section. A callout box for "First time contributing?" advises new contributors to fix existing issues. Another section, "What can I contribute to?", lists ways to improve the documentation, such as creating new content or updating the registry.



Compartir con la comunidad



DIANA TODEA
Developer Advocate at Aircall

Diana is a Developer Advocate at Aircall. She has worked as a Senior Site Reliability Engineer focused on Observability. She is passionate about serverless, DevOps and machine learning. She is an active contributor to the OpenTelemetry open source project and supports women in tech.

Sessions

> From zero to developer: my one year serendipity journey with OpenTelemetry

[Go back](#)

OSMC

SUBMIT A TALK

FROM ZERO TO DEVELOPER: MY ONE YEAR SERENDIPITY JOURNEY WITH OPENTELEMETRY

Becoming a contributor to an open-source project is a transformative step in any developer's career. This session explores the journey from first-time contributor to active developer, covering best practices for navigating project communities, understanding codebases, and making meaningful contributions. Learn strategies for selecting the right project, mastering collaboration tools, and embracing the culture of open-source development. The audience will be inspired about my one year journey with the open source project OpenTelemetry, how I have built a proof of concept for it and achieved developer status for this project. By the end of this talk, the public will gain insights into the tools to become a better developer and how to build more engagement with the community.

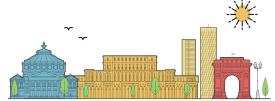
SPEAKER

Diana Todea
Aircall

5-6 MAY 2025

Cloud Native Days Romania

The Kubernetes & Cloud Native community will gather at the Radisson Blu in Bucharest, Romania. Join us for one day technical event loaded with exciting talks and networking opportunities. Cloud Native Days Romania is aimed at developers, platform people, and other IT professionals with an interest in cloudnative technologies.



June 26
Denver, Colorado
#OpenOillyCon #OTelDay



DEVOPSDAYS AMSTERDAM

Schedule Sessions Speakers

From zero to developer: my one year serendipity journey with OpenTelemetry ⭐

2025-06-19 15:05–15:30, Grote Zaal

Becoming a contributor to an open-source project is a transformative step in any developer's career. This session explores the journey from first-time contributor to active developer, covering best practices for navigating project communities, understanding codebases, and making meaningful contributions. Learn strategies for selecting the right project, mastering collaboration tools, and embracing the culture of open-source development. The audience will be inspired about my one year journey with the open source project OpenTelemetry and how I have built a proof of concept for it and achieved developer status for this project. By the end of this talk, the public will gain insights into the tools to become a better developer and how to build more engagement with the community.



Virginia Diana Todea

Diana is a Developer Advocate and a Senior Site Reliability Engineer. She is passionate about observability, machine learning and open source projects. She is an OpenTelemetry contributor and loves sharing her knowledge with the community by participating to tech conferences and writing articles.



Educar a través de contenidos escritos

Why feedback matters for open source

Diana Todea · 3 min read · Jan 7, 2025

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 OpenTelemetry's popularity and the fact that so many organizations already adopted it into their production environments. When I started drafting my [GenerativeAI talk](#), 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.

Cloud Native Days Romania 2025 - tales from the field

Diana Todea · 4 min read · May 8, 2025

I had the honor to participate at [Cloud Native Days Romania](#)'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.



OpenObservabilitySummit and OTEL Community Day 2025 recap

Diana Todea · 6 min read · 2 hours ago



Resumiendo

- Diversificar las contribuciones
- Distinguir entre las contribuciones sin código y con código
- No minimizar las contribuciones sin código y tomar responsabilidad de las contribuciones
- Priorizar y apoyar las comunidades locales y los proyectos para traducir la documentación oficial
- Comparte tus comentarios y ideas en varios plataformas y canales
- Mantener la colaboración entre distintos proyectos y comunidades open source



Buscamos colaboradores!



Únete al canal
Slack de CNCF



#otel channels



- 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/>



MUCHAS GRACIAS!



PREGUNTAS? COMENTARIOS?



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