

Mercedes-Benz
Tech Innovation

A Vision of FOSS @ Mercedes-Benz

OSPology live Germany 2023

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FOSS Ambassador / OSPO Lead

Mercedes-Benz



Beginnings are
challenging

2016. From
Inner to Open
Source.

To FOSS or not
to FOSS?!

Crucial Steps

00

Create Internal
Awareness

Crucial Steps

00

Create Internal
Awareness

01

Create an OSPO

Establish an Open Source Program Office (OSPO)

“The Open Source program office is an essential part of any modern company with a reasonably ambitious plan to influence various sectors of software ecosystems.”

“Whether you know it yet or not, Open Source is very much at the center of your business. A centralized Open Source Program Office is simply the realization of that reality, and the best way to yield the most benefits from Open Source participation.”

- John Mark Walker -

Typical task of an Open Source Program Office

- Define Corporate OS **Strategy**
- Define OS **Policy** and Rules
- Establish OS **Processes**
- **Tools** for automation, development
- Foster internal **knowledge** through trainings
- **Community management** and communication
- Foster OS publication
- **Memberships** in foundations
- External visibility

Structure of OSPO at Mercedes-Benz Tech Innovation (MBTI)



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Embrace FOSS

What is “Embrace FOSS”?

USE

- USE (also called CONSUME) means that you use Open Source software during your daily work

CONTRIBUTE

- If during your software development you modify an OS component that you USE and you CONTRIBUTE your modifications back to the Open Source community

CREATE

- You have a cool idea or already created some nice software that you want to share – CREATE an Open Source project and become a Maintainer; build an active community



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“Embrace”
means:
All of this!
And more.

USE - FOSS is everywhere

SYNOPSYS OPEN SOURCE SECURITY AND RISK ANALYSIS REPORT 2022

97%

of 2,409 codebases audited
contained Open Source

78%

of code in codebases was Open Source



Open Source in 97% of codebases, 60% of
total code was composed of Open Source

60% of code had Open Source vulnerabilities

Data Source: <https://www.synopsys.com/software-integrity/resources/analyst-reports/open-source-security-risk-analysis.html>

CONTRIBUTE and CREATE

Giving back ...and more!

Frank Nagle

“Companies who actively *contribute back* benefit twice as much as compared to companies who only *use Open Source*”.

Reasons

When you contribute you go through a feedback process → You learn from experienced developers

It's like an internal training program

→ Making you better and better – Learning by doing



Why should you embrace FOSS?



And don't spill your sugar.

Why should you embrace FOSS?



And don't spill your sugar.

Embracing FOSS has many benefits

- Speeding up **innovation**
- Higher **efficiency** in software development
- **Influencing** the Open Source projects you depend on
- Attracting **new talent**
- **Learn and get better**: Companies which don't only use FOSS but actively contribute back benefit twice as much
- ...and many more!



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FOSS Manifesto

The Mercedes-Benz FOSS Manifesto

- Set of guidelines which proclaim the **importance of FOSS** for a modern tech organization
- Consists of three parts: Preamble, Company Principles, Employee Principles
- Goal: **Facilitate the cultural change** in Mercedes-Benz IT & our subsidiaries towards Inner and Open Source
- Sends our engineers on their **FOSS Mission**





Preamble

THE MERCEDES-BENZ AG FOSS CENTER OF COMPETENCE AND THE CIO,

RESOLVED to incorporate Free and Open Source Software in our daily software development to improve the quality of our software as well as the speed of delivery,

DESIRING to be an active member in Open Source communities to benefit company, employee, and customer,

CONFIRMING the will to pave the road for their realization,

HAVE DECIDED to establish these FOSS guiding principles:



Company Principles

- I. Mercedes-Benz shall support and encourage its employees to use, contribute to, and create FOSS projects both in Open and Inner Source endeavors. [Encourage FOSS]
- II. Mercedes-Benz shall allow the appropriate time for its employees to participate in FOSS activities. [Facilitate FOSS Participation]
- III. Mercedes-Benz shall encourage and facilitate learning and advancement of its employees through FOSS activities. [Advancement through FOSS]
- IV. Mercedes-Benz shall promote visibility in Open Source communities. [FOSS Visibility]



Employee Principles

- I. An engineer shall look for Open and Inner Source alternatives before writing custom code or using proprietary alternatives. [Prefer FOSS]
- II. An engineer shall strive to be active in the Inner Source communities. [Active FOSS Citizen]
- III. An engineer shall contribute to Open Source projects within the scope of his or her day-to-day work. [Contribute FOSS]
- IV. Any employee shall always act responsibly in Open and Inner Source communities, with care and respect in both content and communication, in order to uphold a positive image for both himself / herself and the company. [Responsible FOSS Citizen]

Where to find



Mercedes-Benz AG - FOSS Manifesto

<https://opensource.mercedes-benz.com/>

CC0 1.0 Universal (CC0 1.0)
Public Domain Dedication

FOSS Manifesto Adaptations (that we know of)

Continental AG

Continental Automotive
FOSS Manifesto

Press Release

Continental Actively Promotes the
Development and Use of Open Source
Software

Siemens AG

The Siemens Open Source Manifesto

Siemens has resolved to be an active and reliable member in the Open Source ecosystem. We aim to benefit our customers, employees, and the company, while contributing to the wider community. We recognize the central role of Open Source in promoting software reuse in our growing digital world, which is an increasingly important contribution in our effort to responsibly handle resources.

Porsche AG

FOSS Movement: Porsche anchors open
source in software strategy

ETAS (Bosch)

The ETAS Free
and Open Source
Manifesto

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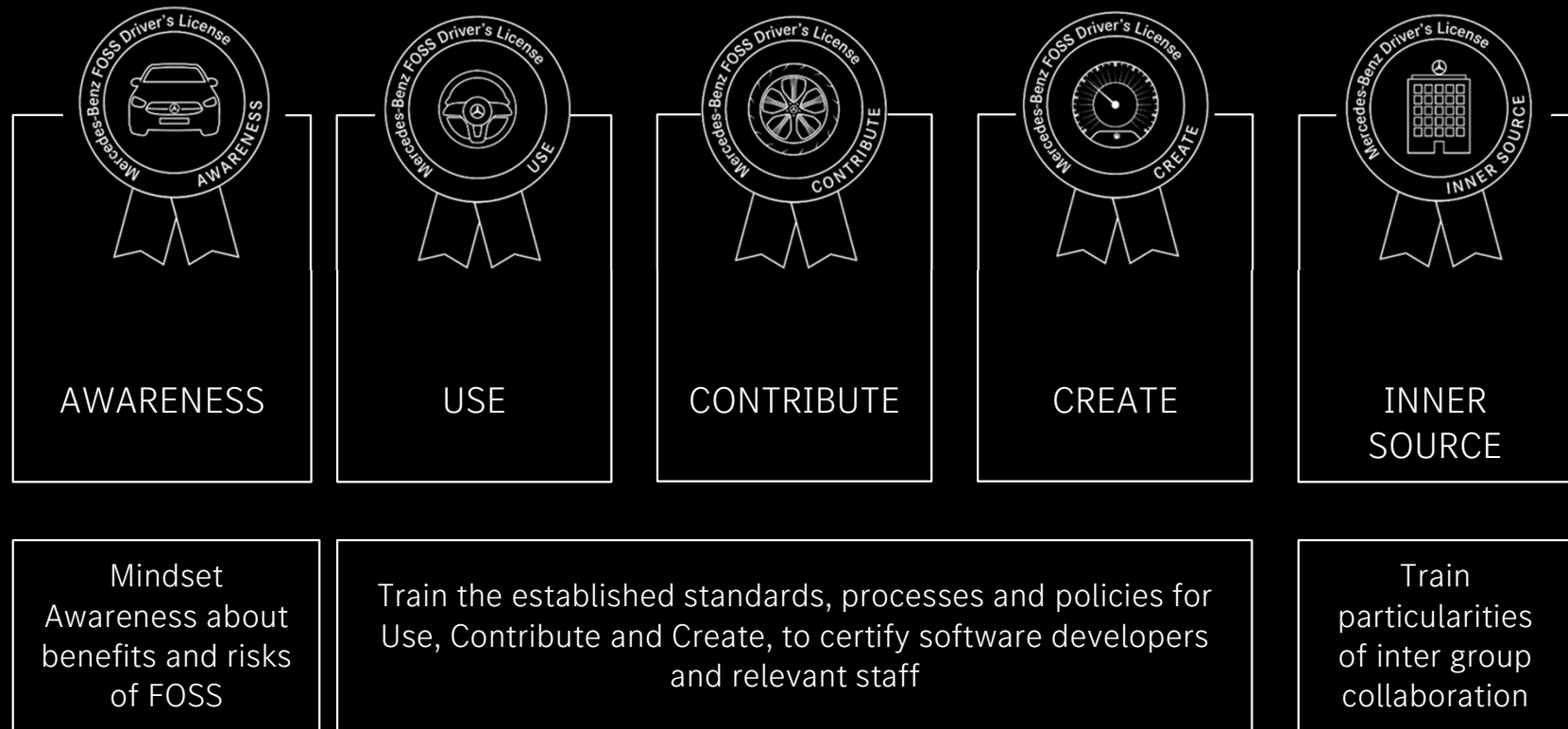
03

FOSS Manifesto

04

Train Your
Employees

FOSS and Inner Source Driver's License



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Foundations and
Sponsorships

Foundation Memberships

Foundations are a great part of the FOSS ecosystem!

We are e.g. members of

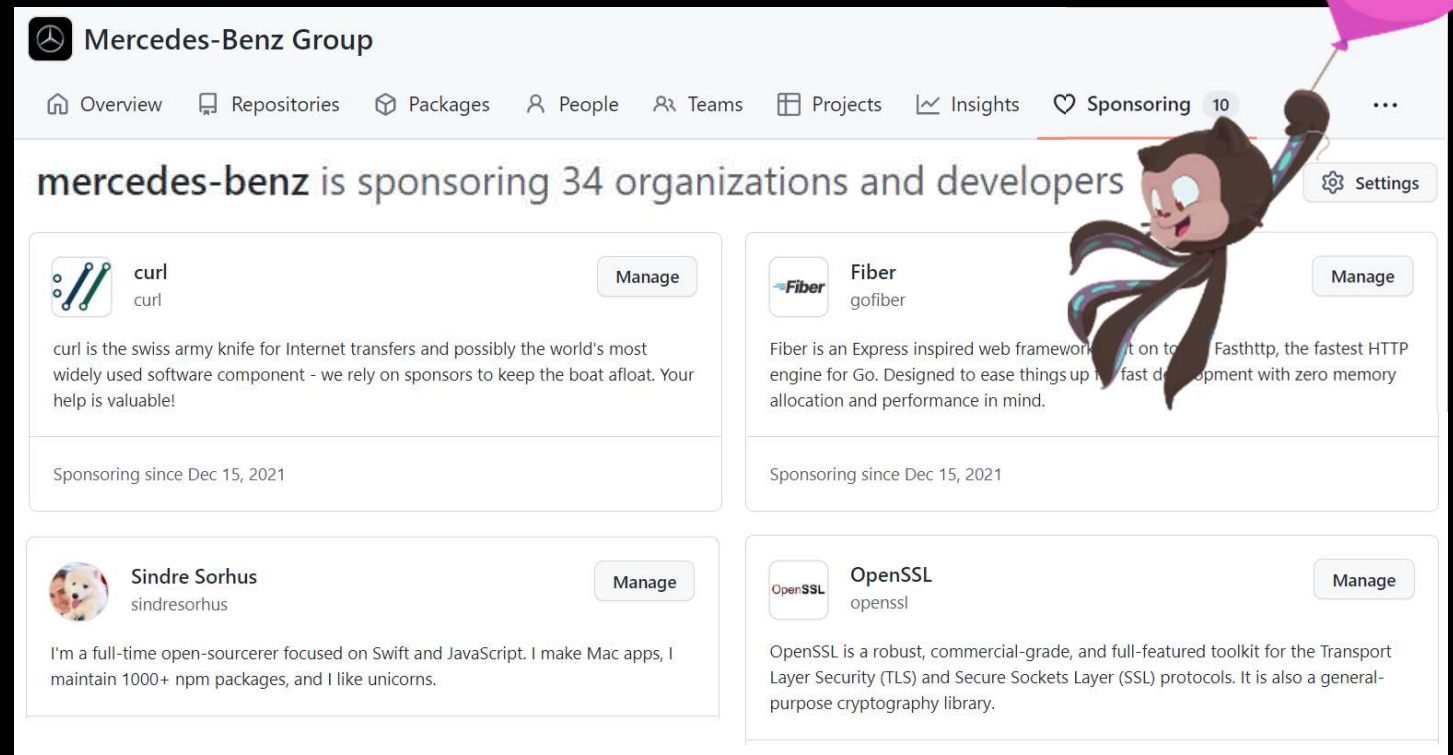
- Eclipse Foundation (Strategic Member)
- SDV Working Group (Strategic Member)
- Linux Foundation
- Cloud Native Computing Foundation



FOSS Sponsorings

We sponsor Open Source Projects through [GitHub Sponsors](#)

Sponsoring Open Source is about [appreciation](#) and [giving back](#), but also helps to [ensure](#) that the projects you use are [still around tomorrow!](#)




Mercedes-Benz Group

Overview Repositories Packages People Teams Projects Insights Sponsoring 10


mercedes-benz is sponsoring 34 organizations and developers

Settings

**curl**
curl
Manage


curl is the swiss army knife for Internet transfers and possibly the world's most widely used software component - we rely on sponsors to keep the boat afloat. Your help is valuable!

Sponsoring since Dec 15, 2021


**Fiber**
gofiber
Manage

Fiber is an Express inspired web framework built on top of Fasthttp, the fastest HTTP engine for Go. Designed to ease things up for fast development with zero memory allocation and performance in mind.

Sponsoring since Dec 15, 2021

**Sindre Sorhus**
sindresorhus
Manage

I'm a full-time open-sourcerer focused on Swift and JavaScript. I make Mac apps, I maintain 1000+ npm packages, and I like unicorns.

**OpenSSL**
openssl
Manage

OpenSSL is a robust, commercial-grade, and full-featured toolkit for the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols. It is also a general-purpose cryptography library.

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Have Fun!

Have Fun with FOSS!



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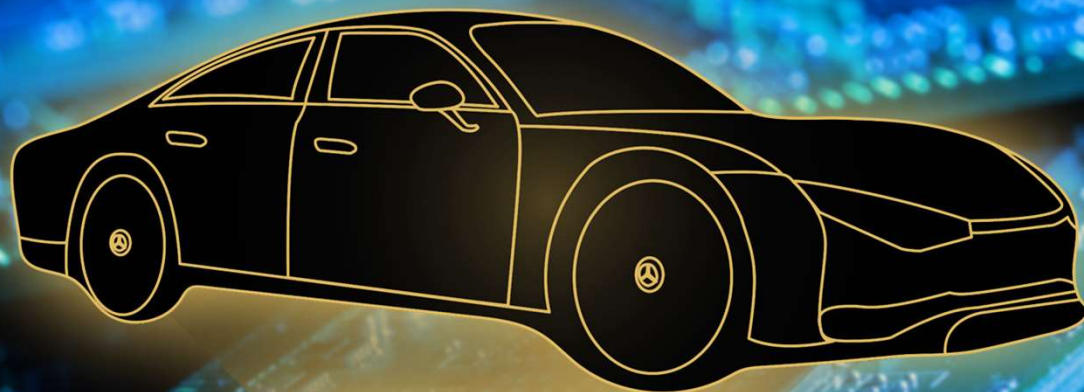
05

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Have Fun!

Mercedes-Benz
Tech Innovation



We're hiring!



www.mercedes-benz-techinnovation.com/en/jobs/

and <https://group.mercedes-benz.com/careers/>

Mercedes-Benz



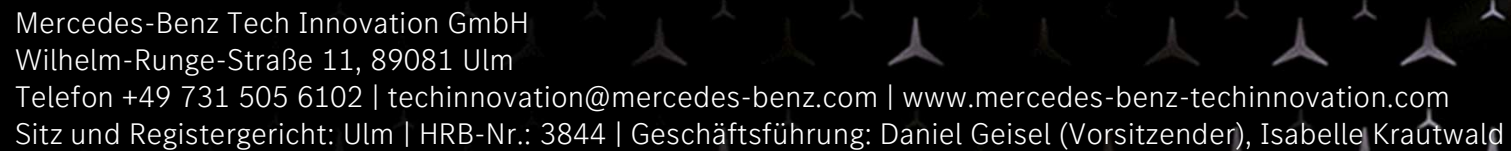
We shape the digital future of Mercedes-Benz

We are professional software engineers, product-oriented project managers, strategic partners, creative visionaries, reliable initiators, change enablers and tech innovators.
We are a proud part of the Mercedes-Benz family.

As a wholly owned subsidiary, we develop technological innovations, digital products and advanced software solutions exclusively for Mercedes-Benz. We drive the transformation towards "100% digital" while setting new standards in the context of car connectivity and the digitalization of vehicles and sales.

Thanks - and May There Always Be Wind in Your Sails!



The background of the slide is a dark grey to black gradient, featuring a repeating pattern of the Mercedes-Benz three-pointed star logo. The logos are arranged in a grid and vary in opacity, with some appearing as light grey and others as a bright, glowing yellow-gold. The contact information is positioned in the lower-left area of the slide.

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