A Vision of FOSS @ Mercedes-Benz

OW2Con 2023

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FOSS Ambassador

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)

OSPO

- OSPO Lead
- Technical Expertise
- Community Management
- Governance
- Organizational Staff

← FOSS Coordinators
← Business Streams
Crucial Steps

00
Create Internal Awareness

01
Create an OSPO

02
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

SYNOPSIS 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.
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!
Crucial Steps

00  Create Internal Awareness
01  Create an OSPO
02  Embrace FOSS
03  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**

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.
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FOSS Manifesto

04
Train Your Employees
FOSS and Inner Source Driver’s License

AWARENESS
Mindset Awareness about benefits and risks of FOSS

USE
Train the established standards, processes and policies for Use, Contribute and Create, to certify software developers and relevant staff

CONTRIBUTE

CREATE

INNER SOURCE
Train particularities of inter group collaboration

Wolfgang Gehring - A Vision of FOSS
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04 Train Your Employees

05 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
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!
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Foundations and Sponsorships

06
Have Fun!
Have Fun with FOSS!
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02. Embrace FOSS
03. FOSS Manifesto
04. Train Your Employees
05. Foundations and Sponsorships
06. 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
Thanks – and May There Always Be Wind in Your Sails!