

# Opportunity Open Source Conference



**Saturday, August 24, 2024 - Monday, August 26, 2024**

## Tracks

With the talks, panels, workshops, demos, discussions, ... on Saturday and Sunday we cover a wide range of topics for everyone who is interested to contribute to the exciting world of free software. This is not only about development and coding, but also non-programmers can do a lot: Design, documentation, community work ...

## OpenPrinting

OpenPrinting is responsible for printing in Linux and other Posix-style operating systems and so also in free software operating systems in general. We are maintaining CUPS, cups-filters, legacy printer driver database, Printer Applications, Common Print Dialog Backends, ... we are working closely together with the Printer Working Group, consortium of printer manufacturers and software vendors and maintainer of the Internet Printing Protocol (IPP).

In the 23 years from the beginning of OpenPrinting up to now we have achieved many nice things, but there is always a lot to do, especially currently, on the way to the New Architecture for printing and scanning, to make everything completely standards-conforming and get rid of obsolete methods and technologies. And this also needs to get integrated in all kinds of systems without loss of any functionality.

We will also talk about our participation in the Google Summer of Code (GSoC) every year and how you can participate, our contributors will tell about their work, we will have a questions-and answers session, ...

Video: Michael Sweet and Till Kamppeter about OpenPrinting

## Zephyr

Zephyr OS is an RTOS and IoT Infrastructure designed for resource-constrained embedded systems. It has been adopted across various industry sectors and applications, ranging from simple embedded environmental sensors and LED wearables to sophisticated embedded controllers, smartwatches, and IoT wireless applications.

Zephyr's various subsystems and network stacks position it as much more than just an RTOS. A completely open source Bluetooth Low Energy Stack, Networking Stack, including support for LwM2M and BSD sockets, OpenThread, and more, enables efficient product development over various silicon vendor platforms and MCU architectures.

If you are already familiar with Linux on Embedded Systems, you will recognize similarities in Zephyr such as the devicetree concept.

We invite you to share your RTOS experiences and discover how to explore Zephyr on one of the many supported development boards and platforms.

## OS Distributions and Packaging

In free software you have a huge diversity of operating system distributions, it did not take long that after principal distributions got released, distros derived from them came out, to make really everything absolutely free in them, to replace the desktop by another one, to not use certain newer packaging methods, to aim to special use cases, like content creators or schools, ...

And nowadays, we are looking at the ease of how applications are distributed for smartphones and on the ease of updating the software on them and see the shortcomings of classic software packages on Linux distributions.

So immutable distros and sandboxed packaging (which are in fact immutable apps) got into the center of interest.

In this track we will show interesting distributions, discuss packaging methods and help you get familiar with the operating system of the future ...

## Security

Everything about software security: Vulnerability handling, fuzz testing, memory-(un)safe languages, ...

## Artificial Intelligence, Machine Learning, Data Science

Artificial Intelligence and Machine Learning are a hot subject matter, especially for free software.

## Development/Coding

You are a coder and want to contribute to the world of Open Source? You have an app which you want people to use? You want to participate in the development of existing apps, desktop environments, system components, operating systems? You want to participate in the Google Summer of Code?

Then this is the topic for you.

## Design

Not a programmer? But you have great ideas about the design of the user interface for great user experience? Then get involved here.

## Documentation

We have many amazing coders in the free software community, but often they make great things work but do not take the time for and have the motivation to write the appropriate documentation for programmers, administrators, and users.

But many people are great technical writers but not necessarily coders, and these are very welcome in our teams. This topic will help you get started: Types of documentation, audiences, integration, and automation ...

We will also present the Open Documentation Academy here, where you can learn about documentation writing and contribute documentation to free software projects.

## Community

Most important for getting people involved with free software is a healthy community. If you want to help in community management, community building, organizing conferences and meetings, form local community organizations, ... here we will discuss these subjects.

## Others

You have a great idea for a session but it does not fit into any of our tracks? Do not hesitate to submit it. Just mark "Others" as the track. If there are several submissions which could make up a new track, we will create such a track.