

First Steps in Energy

FOSDEM 2026
Energy Devroom

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Mixed background

2003-2007	electronics	university
2008-2016	embedded	startups, ARM
2017-2023	open source	Collabora, KernelCI
2024-now	kernel, energy	freelance

A steep turn of events

Starting from scratch at FOSDEM 2024

Making connections in the Energy world

Blog posts

...blog posts

...more blog posts

gtucker.io



This is fine

High-voltage electrical grids *are* dangerous

Writing energy-related code is not

Virtual environments

Hardware models

Self-contained libraries



Find your space

The Energy sector is deep and wide

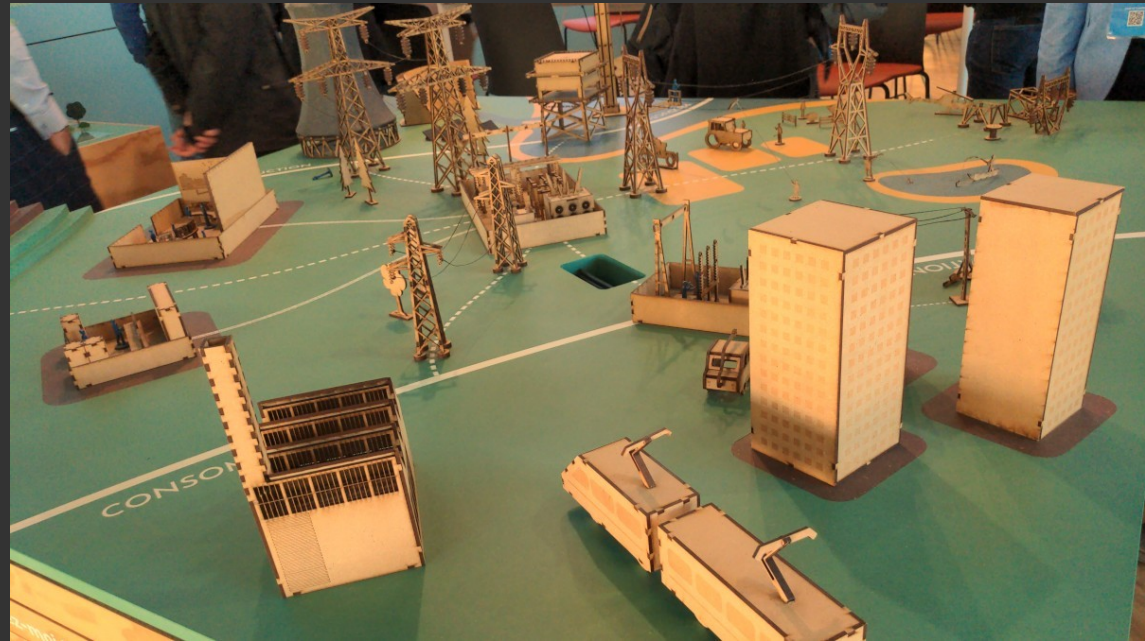
Grid simulation

Battery technology

Electric vehicles

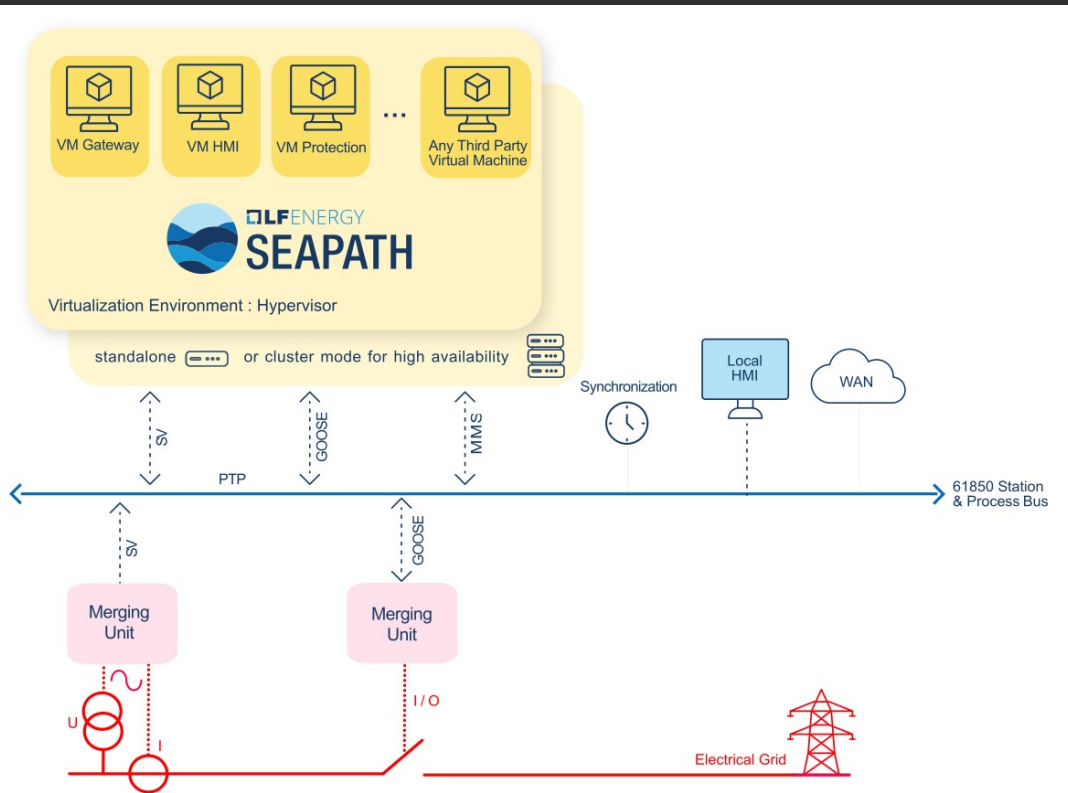
Solar forecasting

Digital Substations

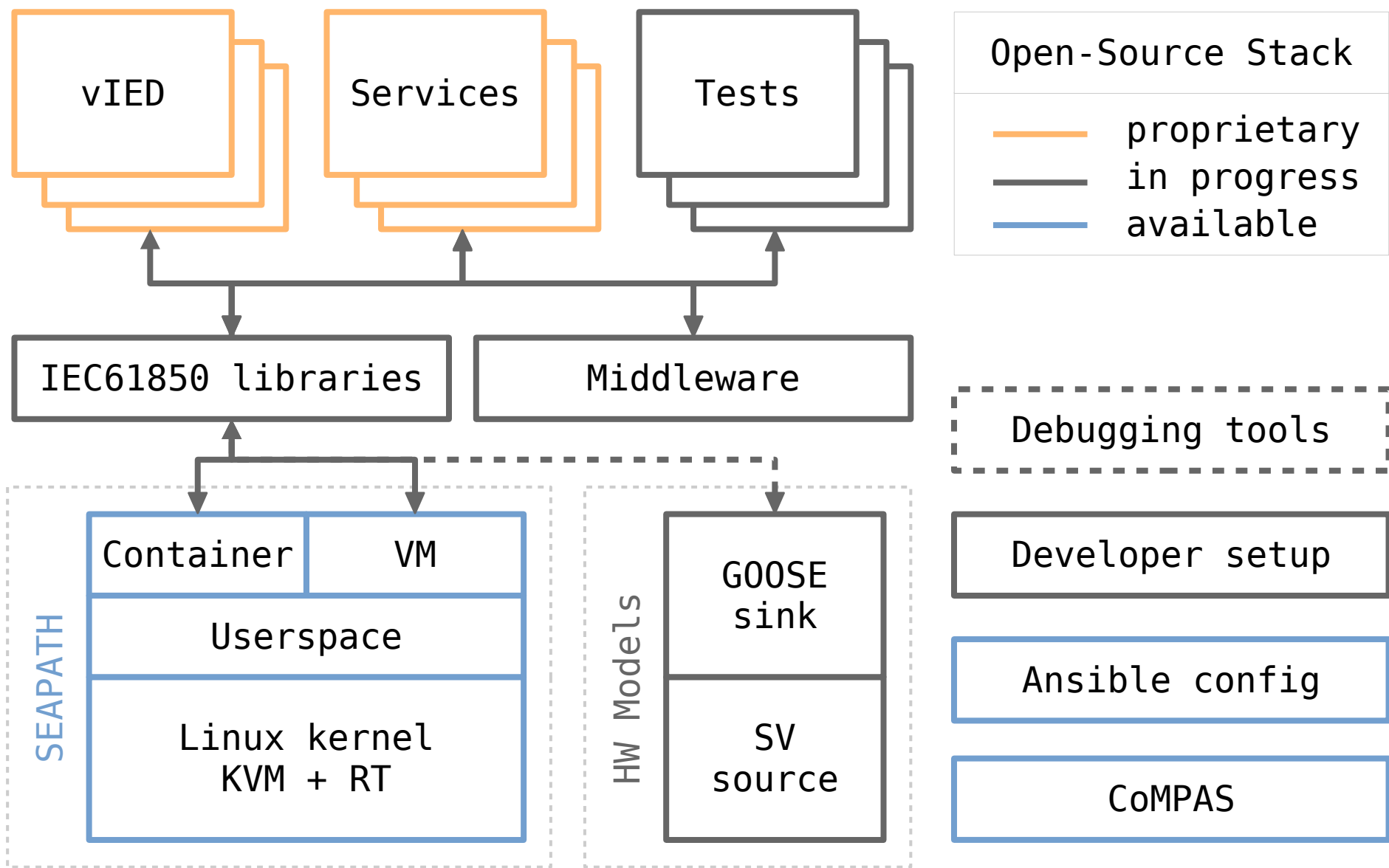


SEAPATH & IEC61850

Backbone for Digital Substations



Replace hardware protection
Simplify equipment
Enable new features
Real-time



A humbling experience

Learning new tech from scratch

- What's an IED?

...while sometimes feeling ahead of the game

- Yes, I have contributed to the Linux kernel

Listening to others on so many levels

Different industry, companies, culture, people

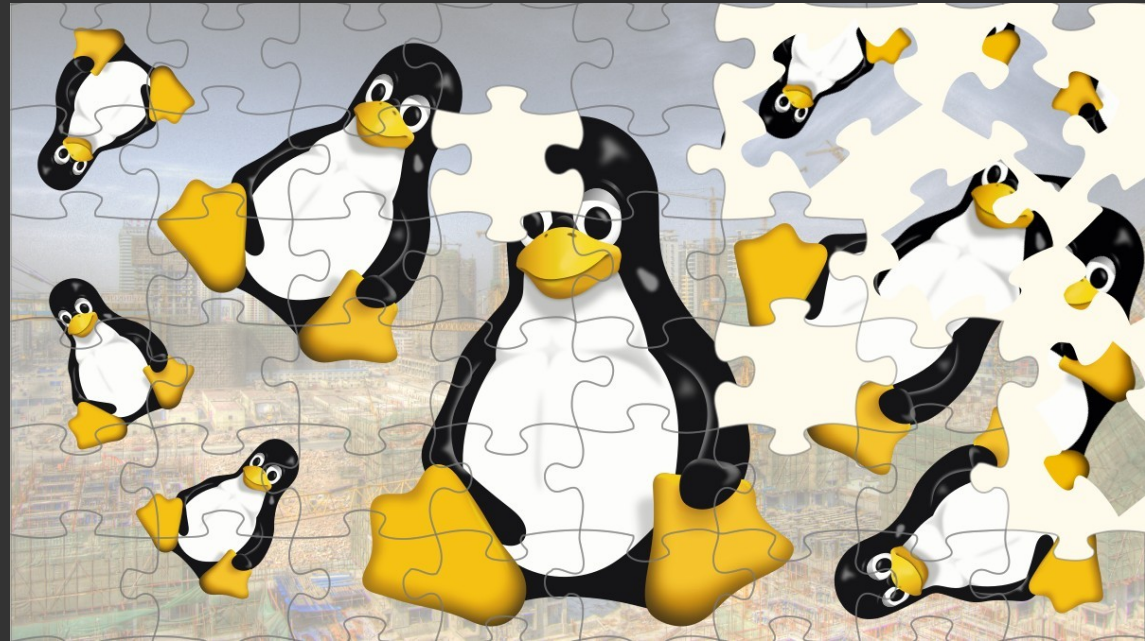
Cultural gap

Hardware culture is miles away from a Unix shell
A welcoming and open-minded ecosystem

Physics & Maths

Century-old industry

Recent software history



Answering the call

You must be interested in Energy and FOSS!

Yes you can ⚡

I went freelance with some fallback options

How about you?

Keep moving but don't panic

The industry has more inertia than you



★ Thank You ★

FOSDEM Energy Devroom volunteers 2024~2026

Boris, Maxime & RTE / RTE-i

Dan & LF Energy

Fellow Energy hackers

My university teachers

My coach Dave

My younger self for having a dream 20 years ago