

# Rust in the Linux ecosystem

*Monday, September 20, 2021 7:00 AM (45 minutes)*

Rust is a systems programming language that is getting stronger support by many companies and projects over time, thanks to its memory-safety innovations (e.g. the safe/unsafe split, the borrow checker, etc.).

This talk covers:

- A quick introduction to the Rust language.
- What exactly means “safety” in the context of Rust, and which kind of issues Rust prevents (e.g. data races, use-after-free, etc.) and which not (e.g. race conditions, memory leaks, etc.).
- What is undefined behavior, how modern optimizers exploit it and how Rust reduces the risk via the safe/unsafe split.
- How many CVEs are due to memory safety and what companies say about their cost.
- Where Rust is being used today, e.g. Rust for Linux, Rustls, inside companies, etc.
- Who supports Rust, e.g. the Rust Foundation, the Prossimo project, major companies, etc.

## I agree to abide by the anti-harassment policy

I agree

**Primary author:** OJEDA, Miguel

**Presenter:** OJEDA, Miguel

**Session Classification:** LPC Refereed Track

**Track Classification:** LPC Refereed Track (Closed)