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Rust in the Kernel (via eBPF)

Monday, 12 September 2022 18:00 (30 minutes)

We are very excited (and impatient) to have Rust supported in the Kernel. In fact we are so impatient we decided to develop a means of getting Rust in the Kernel today, using eBPF!

Aya is an eBPF library built with a focus on operability and developer experience. It allows for both user-land and kernel-land programs to be written in Rust - and even allows for sharing of code between the two! It has minimal dependencies and supports BPF Compile-Once:Run-Anywhere (CO:RE). When linked with musl, it creates a truly portable, self-contained binary that can be deployed on many Linux distributions and kernel versions.

In this talk we would like to deep dive into the present state of Aya, with focus on:

- How it works
- Currently supported features
- How Rust for Linux and Aya can benefit from each other
- Our future plans, which include changes in Rust ecosystem

I agree to abide by the anti-harassment policy

Yes

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