Bringing BPF developer experience to the next level

Wednesday, 11 September 2019 15:00 (23 minutes)

The way BPF application developers build applications is constantly improving. There are still rough corners, as well as (as of yet) fundamentally inconvenient developer workflows involved (e.g., on-the-fly compilation). The ultimate goal of BPF application development is to provide experience as straightforward and simple as a typical user-land application.

We'll discuss major pain points with BPF developer experience today and present motivation for solving them. Libbpf and BTF type info integration are at the center of the puzzle that’s being put together to provide a powerful and yet less error-prone solution:
- BPF CO-RE and how it is addressing adapting to ever-changing kernel and facilitates safe and efficient kernel introspection;
- consistent and safer APIs to load/attach/work with BPF programs;
- declarative and more powerful ways to define and initialize BPF maps;
- providing and standardizing BPF-side helper library for all BPF code needs.

I agree to abide by the anti-harassment policy

Yes

I confirm that I am already registered for LPC 2019