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From Tool To ToolBox: How bpftrace is evolving to become more composable and expressive

This talk will cover the on-going effort to evolve bpftrace from an observability tool into a flexible, composable framework that can make many observability tools and drive the larger BPF observability ecosystem - instead of trailing behind it.

Over the past year, the bpftrace development team has focused on removing obstacles that hinder users from efficiently observing and debugging their systems. From a clunky type system that doesn't play well with BTF, to one-off features that don't compose with each other, to the slow process of adding access to new BPF features and kfuncs, bpftrace can be as frustrating as it is helpful. We're working to change that by providing primitives for code reuse, developing a standard library, and adding the ability to interop with raw/custom BPF C code. In this session, we'll discuss the technical hurdles we've encountered, share our progress so far, and outline our vision for the future of bpftrace as a composable, expressive toolbox for the BPF observability community.

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