

## Linux Plumbers Conference 2024



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# Tooling for semantic probing based on BPF and kernel tracing

*Wednesday, 18 September 2024 17:00 (40 minutes)*

The availability of BPF and various other tracing features in the kernel, along with upcoming features, make it possible to be very creative. Higher level tracing tools like DTrace can combine the available probes and probing mechanisms to present users with semantic probes that hide the ugly implementation details that are often quite kernel release specific.

This is especially significant during development and in terms of interactions with the toolchain to maximize functionality and ease-of-use.

The talk will describe some of the techniques (as used in DTrace, but applicable to other tracing tools as well), the pitfalls, failed attempts, and success stories. The main focus is on the technical aspects, with a view on future developments and hoped-for features that could make this even more powerful.

Feedback and suggestions from the participants are welcome and encouraged.

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**Session Classification:** Toolchains Track

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