

Linux Plumbers Conference 2024



Contribution ID: 383

Type: **not specified**

Kernel func tracing in the face of compiler optimization

Thursday, 19 September 2024 16:00 (30 minutes)

Bpf provides ability to trace kernel functions (kprobe, kretprobe, fentry and fexit) and users often use such features to do kernel function tracing in order to gather information for their particular needs. But compiler optimization may make kernel func tracing difficulty. For example, complete inlining may make function going away in symbol table. Partial inlining may leave functions in certain original call site but not others. Compiler may also make changes to function parameters or introduce suffix to original function name in order to signal scope/functionality change for those functions. In this talk, we will discuss different cases how compiler optimization impacts kernel function tracing and if possible how to cope with them.

Primary authors: SONG, Yonghong (Meta); MAGUIRE, Alan (Oracle)

Presenters: SONG, Yonghong (Meta); MAGUIRE, Alan (Oracle)

Session Classification: eBPF Track

Track Classification: eBPF Track