Programmable debuggers and the Linux kernel
(drgn, GDB+poke)

Wednesday, 14 September 2022 12:00 (45 minutes)

This activity is about programmable debuggers and their usage in the Linux kernel. By "programmable debugger" we understand debuggers that are able to understand the data structures handled by the target program, and to operate on them guided by user-provided scripts or programs.

First we will be doing a very brief presentation of two of these debuggers: drgn and GDB+poke, highlighting what these tools provide on top of the more traditional debuggers.

Then we will discuss how these tools (and the new style of debugging they introduce) can be successfully be used to debug the Linux kernel. The main goal of the discussion is to collect useful feedback from the kernel hackers, with the goal of making the tools as useful as possible for real needs; for example, we would be very interested in figuring out what are the kernel areas/structures/abstractions for which support in the tools would be most useful.

I agree to abide by the anti-harassment policy

Yes

Primary authors: ZANNONI, Elena; MARCHESI, Jose E. (GNU Project, Oracle Inc.); BRENNAN, Stephen (Oracle)

Presenters: ZANNONI, Elena; MARCHESI, Jose E. (GNU Project, Oracle Inc.); BRENNAN, Stephen (Oracle)

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