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When kdump is way too much

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For some lightweight systems, triggering a kdump could be a bit painful - it requires a generous amount of RAM to be pre-reserved, not available for regular usage at kernel runtime. Also, the panic kernel boot process takes time, and is prone to non-deterministic failures due to HW status or related to the cause of the panic event. So, despite kdump is a pretty standard way for collecting debug information when kernel panics, sometimes is not the best fit for some cases.

Alternative ways of kernel debugging not relying on kdump includes hypervisor debug data collection (as present in qemu, which can collect a vmcore in fact, but not through kdump) or pstore. The goal of this presentation is to talk about the pstore technology, some brief introduction to the backends and the Steam Deck use case, but more important, to bootstrap some discussions: what data could we

collect in pstore that is useful but not currently collected? What improvements could be done in the kdump/debug tooling for distros to support pstore for lightweight data collection on panic? Any other correlated topic or feedback from the audience is very welcome, as it will only make the discussion richer and more useful!

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