

# Linux Plumbers Conference 2024



Contribution ID: 330

Type: **not specified**

## Atomic code patching and ftrace

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

The upcoming series of ftrace code patching reduces the reach of each patch-site to a +/- 2KB range. This might be the unavoidable option we must take, as we move on to wave `stop_machine()` away, support preemption, and maintain an acceptable code size. Thus, we are going to focus our discussions on what options are there for us to support direct calls and various ftrace optimizations. Besides, we would like to collect requirements for generic code patching, and discuss any possible ways for us to do atomic code patching generally.

Some discussion items:

- Should we require such a general extension name `ziccif` for us to enable dynamic code patching?
- Can we reduce `patch_text` to `patch_callsite`? Is there any room for us to get rid of `stop_machine` under this assumption?

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**Session Classification:** RISC-V MC

**Track Classification:** RISC-V MC