

Linux Plumbers Conference 2025



Contribution ID: 365

Type: **not specified**

Clean-up on Aisle "fsconfig(2)"

Friday 12 December 2025 13:00 (30 minutes)

While the “new” mount API has been a massive improvement in the flexibility of mount infrastructure on Linux (and has allowed us to develop all sorts of new features over the past 7 years) there are still a handful of usability issues which should be addressed.

Container runtimes in particular would probably like to be able to use the completely-unused `FSCONFIG_SET_PATH{,_EMPTY}` to avoid race attacks, but the infrastructure for using it is quite baroque. There are also been some recurring issues around the uAPI surrounding singleton superblocks (`FSCONFIG_CMD_CREATE_EXCL` no longer makes this implicit but doesn’t provide much help to userspace to know what is going on).

This talk will go these and a few more issues I’ve found so far (while working on the long-awaited **and finally merged** man pages for the “new” mount API) and open into a discussion of any other pain-points folks have had which should also be addressed.

Primary author: SARAI, Aleksa (SUSE LLC)

Presenter: SARAI, Aleksa (SUSE LLC)

Session Classification: Containers and checkpoint/restore MC

Track Classification: Containers and checkpoint/restore MC