

Linux Plumbers Conference 2025



Contribution ID: 424

Type: **not specified**

Files on Unmounted Mounts

Friday 12 December 2025 12:30 (30 minutes)

For CRIU to successfully checkpoint/restore a process, files must be opened correctly at the correct mounts. Generally, we get `mnt_id` for the mount from `/proc/<pid>/<fd>/fdinfo` and information about the mount from `/proc/<pid>/mountinfo`.

But, if a file is open on an “unmounted” mount, i.e, a mount has been unmounted using `MNT_DETACH` (we still have access to fds),

CRIU can’t do checkpoint/restore, since it can’t get `mountinfo` for these “unmounted” mounts.

They are not present in `/proc/<pid>/mountinfo`, and `statmount()` does not work on them.

This talk will discuss potential ways to extract `mountinfo` for these mounts.

1. Add a special kernel-only `unmount_mnt_ns` where all these can go to and later queried using `statmount()`.
2. Introduce `fd-based statmount()`, so that we can pass `fd` to `statmount` and get `mountinfo` of the mount the `fd` is opened on.

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Session Classification: Containers and checkpoint/restore MC

Track Classification: Containers and checkpoint/restore MC