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Idmapped Mounts

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File ownership is a global property on most systems that have a uid and gid concept. On POSIXy systems the chown*() syscall family allows to change the owner of a file or directory. If the ownership of a file is changed it will be changed globally affecting each user on the systems equally. But various use-cases exist where this can be problematic:
- Portable home directories that are used on different computers where the user is assigned a different uid and gid.
- Filesystems that allow to merge or unionize multiple filesystems are often shared between different users.
- Containers making use of user namespaces also affect file ownership.
- Avoiding the cost of recursive ownership changes.
Idmapped mounts solve these problems and others by allowing mounts to change file. This talk we will take a look at how idmapped mounts work, outline the work we've done and what is still left to do and potential new ideas to make this an even more powerful concept.

I agree to abide by the anti-harassment policy

I agree

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