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A new API for robust futex list

Emulators and translation layers have been pushing the limits of the existing syscalls and Linux APIs, creating the need for new interfaces. One of such interfaces is the get/set_robust_list() syscall.

This syscall gets as an argument a user pointer to a user linked list. This syscall assumes that the pointer size is the native size, depending on the kernel build. This doesn't works when running a x86-32 bit application in an ARM64 kernel, that doesn't have the compat entry point as x86-64 does.

Also, only one list per task is allowed, so any emulator that wants to support robust lists needs to give up either their own list or the emulated app list.

This goal of this session is to share a proposal for a new interface for this syscall, as shared in the LKML:

https://lore.kernel.org/lkml/20250626-tonyk-robust_futex-v5-0-179194dbde8f@igalia.com/

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