



Contribution ID: 200

Type: **not specified**

Ongoing Challenges of Large Page Sizes

Friday 20 September 2024 17:00 (15 minutes)

During the transition to a 16kb page size system, numerous instances were found where the kernel or userspace relied on the assumption of `PAGE_SIZE == 4096`. While many functional issues have been resolved, some inherent challenges persist, along with opportunities for optimization in systems with larger page sizes.

This work investigates the following key challenges and potential areas of optimizations:

- Alignment requirements of reserved memory CMA regions.
- VMA slab memory usage on large page size systems.
- ELF alignment and Pagecache readhead.
- User space Memory Accounting and Fault Around.
- Compatibility of 4kB ELF's on Large page size systems.

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Session Classification: Kernel Memory Management MC

Track Classification: Kernel Memory Management MC