

Linux Plumbers Conference 2025



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Kernel Memory Management MC

Memory management keeps on being exciting. With a lot of activity on all different kinds of projects, some more controversial subjects that might be worth discussing this year:

- Making Transparent Huge Pages more ... transparent (toggles, policies, khugepaged, ...)
- Making (m)THP/large folios a first-class citizen in MM
- What other improvements might we see from mTHP?
- Where to use eBPF in MM, and where not
- Ongoing challenges with memdescs (e.g., allocation/freeing/walking)
- How might we make allocations guaranteed to not fail?
- Which CXL use cases do we want to support, and how far should we go?
- Challenges with hypervisor live-update, and the integration into other subsystems (MM, drivers, etc)
- guest_memfd and the interaction with other MM subsystems (hugetlb, GUP, ...)
- Making hugetlb less weird

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