



TOKYO, JAPAN / DECEMBER 11-13, 2025

Welcome to the sched_ext MC

- Discuss open issues / work in progress
- Prioritize interaction
- Be concise (15 min per slot)
- Remote attendees: enable your cam if you have a question



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sched_ext: current status and future plans

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Current status

- sched_ext
 - Host-wide kernel CPU scheduler as BPF program
- Upstream in v6.12
 - First framework for BPF-based CPU schedulers
- Distro support
 - Most distributions now ship a kernel with sched_ext enabled
 - User-space is still catching up (packaging Rust schedulers)
- Usage
 - Workload specific / topology specific schedulers (specialization)

Open issues

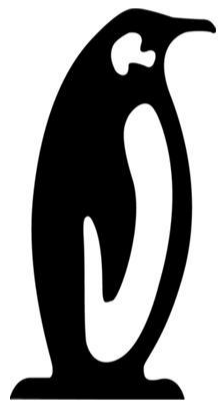
- High priority sched classes starving SCHED_EXT tasks: deadline server (Andrea / Joel)
 - <https://lore.kernel.org/all/20251029191111.167537-1-arighi@nvidia.com/>
 - <https://git.kernel.org/pub/scm/linux/kernel/git/arighi/linux.git/> branch scx-dl-server
- Tracking wakeups across sched classes: inform a sched_class it no longer has access to the CPU (Peter)
 - <https://lore.kernel.org/all/20251127153943.696191429@infradead.org/>
- sched_ext & proxy execution (John)
- Missing a proper ops.dequeue() semantic (who's working at this?)
- Which scx scheduler is the best for me?
- PREEMPT_RT? (need more testing)

Future plans

- Hierarchical schedulers (Tejun)
- Improve built-in SCHED_EXT scheduler (Tejun / Andrea)
- Composable schedulers / BPF scheduling libraries / BPF arenas (Emil)
- Duplicate code with fair sched (Andrea)
- Re-implement kernel/sched/ext_idle.c in Rust (Joel / Andrea)
- GPU awareness (Andrea / Patrick)
- Energy aware abstractions (Changwoo)
- BPF hot-path optimization: make kfunc filters support struct_ops context (Juntong Deng?)
- Paravirt scheduling (anyone working at this?)

Development

- Kernel (Tejun's branch)
 - https://web.git.kernel.org/pub/scm/linux/kernel/git/tj/sched_ext.git
- scx repository
 - <https://github.com/sched-ext/scx>
 - Schedulers
 - Libraries
 - Tools
- Community
 - Discord server
 - <https://discord.gg/b2J8DrWa7t>
 - CachyOS
 - <https://cachyos.org>



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