

# Linux Plumbers Conference 2024



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## Power Management and Thermal Control MC

### CFP closes on July 7th.

The Power Management and Thermal Control microconference is about all things related to saving energy and managing heat. Among other things, we care about thermal control infrastructure, CPU and device power-management mechanisms, energy models, and power capping. In particular, we are interested in improving and extending thermal control support in the Linux kernel and utilizing energy-saving features of modern hardware.

The general goal is to facilitate cross-framework and cross-platform discussions that can help improve energy-awareness and thermal control in Linux.

Since the previous iteration of this microconference, several topics covered by it have been addressed, including:

- Writable trip points support:

<https://lore.kernel.org/linux-pm/6017196.IOV4Wx5bFT@kreacher/>

- Limiting thermal netlink messaging to the cases when there are subscribers:

<https://lore.kernel.org/linux-pm/20240223155942.60813-1-stanislaw.gruszka@linux.intel.com/>

- Support for runtime-modifiable Energy Models:

<https://lore.kernel.org/linux-pm/20240117095714.1524808-1-lukasz.luba@arm.com/>

- Thermal control diagnostics and debug support:

<https://lore.kernel.org/linux-pm/20240109094112.2871346-1-daniel.lezcano@linaro.org/>

<https://lore.kernel.org/linux-pm/20240109094112.2871346-2-daniel.lezcano@linaro.org/>

and there is work in progress related to some of them:

- Temperature sensor aggregation support:

<https://lore.kernel.org/linux-pm/20240119110842.772606-1-abailon@baylibre.com/>

- Virtualized CPU performance scaling:

<https://lore.kernel.org/linux-pm/20240127004321.1902477-1-davidai@google.com/>

The topics that we would like to cover this year include, but are not limited to:

- Support for user-defined trip points.
- Remaining rough edges in thermal control.
- Latency-oriented CPU idle time management improvements.
- Energy-aware scheduling limitations and possible improvements.
- Support for performance QoS in non-frequency domains.
- cpufreq without frequency.

- Selecting target power state for system sleep.

and the key people we would like to participate in the session are Rafael Wysocki, Daniel Lezcano, Łukasz Łuba, Srinivas Pandruvada, Ulf Hansson, and Viresh Kumar.

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**Track Classification:** LPC Microconference Proposals