Tools to analyse scheduling and energy efficiency

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**Idlestat**

- **Git:** [https://git.linaro.org/power/idlestat.git](https://git.linaro.org/power/idlestat.git)
- **LKML posting:** [https://lkml.org/lkml/2014/8/19/528](https://lkml.org/lkml/2014/8/19/528)
- **Design Principle:** C-state and P-state residency along with wakeups an indicator of system behaviour
  - Workload progress measures performance
  - `sudo idlestat --trace -f /tmp/mytrace -t 100 -- rt-app mp3.json`

**Features**
- Carefully designed to avoid impacting measurement during a trace capture
- Capture P-state and C-state transitions
- Identify wakeup sources (IPI, IRQs)
- Calculate mispredictions
Upcoming features

- energy model (RFC patches being reviewed)
- diff mode (Patch being tested)
- arch-specific hooks to correlate HW state?
- histogram of residency instead of min, max, avg?
- topology data not included along with trace - prevents post-processing on different machine (WIP)
- ?
Thank you!

Questions?