Contribution ID: **88**   Type: **not specified**

Linux per cpu idle injection

Wednesday, 14 September 2022 17:50 (20 minutes)

Per core/cpu idle injection is very effective in controlling thermal conditions, without using CPU offline which has its own drawbacks. Since CPU temperature ramp up and ramp down is very fast, idle injection provides a fast enter and exit path.

Linux has support for per core idle injection for a while (https://www.kernel.org/doc/html/latest/driver-api/thermal/cpu-idle-cooling.html).
But this solution has some limitations as it blocks soft IRQs and have negative effect on pinned timers. I am working on a solution for unblocking soft IRQ issue but there is no good solution for pinned timers yet.

The purpose of this discussion is to find possible solutions for the above issues.

I agree to abide by the anti-harassment policy

Yes

Primary author: PANDRUVADA, Srinivas

Presenter: PANDRUVADA, Srinivas

Session Classification: Power Management and Thermal Control MC

Track Classification: LPC Microconference: Power Management and Thermal Control MC