

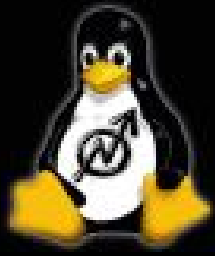


PowerTOP

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Watt the f*ck?!

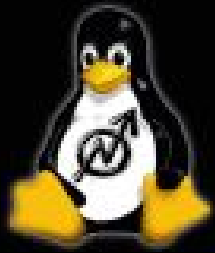
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Intro

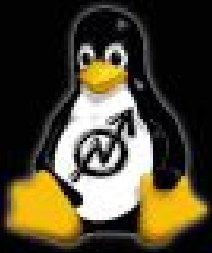
- # Measure, explain and minimise a computer's electrical power consumption
- # Analysing programs, device drivers and kernel options
- # Released by Intel 2007 under GPLv2
- # Works for Intel *and* AMD processors
- # Linux and Solaris
- # Goals:
 - # Help *users* to analyse and reduce the power consumption of their hardware
 - # Help *developers* to test and optimise their applications regarding power consumption
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Success stories

- # Firefox: Reduce activity when looking at blank page
- # Xterm: Add +sm option to prevent from waking up every second
- # Linux kernel: Several patches reducing timers
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Features

- # Show processor states (C0-C3: operating, halt, stop-clock, sleep) and frequency
- # Show wake-ups per second
- # Show current power usage and calculate time left on battery
- # List of top causes for wake-ups (similar to top)
- # Give optimisation suggestions for your system and activate them on key press
- # Disk activity is currently **not** traced (will be added in an “upcoming version”)
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Demo

Thinkpad X31, Pentium M 1.4GHz

From 16W to 10W or 8W?

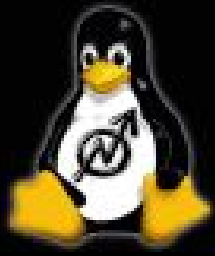
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Other LessWatts projects (selection)

- # Tickless Idle: Linux kernel patches greatly reducing power consumption
- # Power QoS: Kernel patches allowing prioritisation of power consumption
- # Battery Life Toolkit: Measure laptop battery life with automated tests
- # Display and Graphics Power Saving: Intel graphics driver patches for power saving
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Contact me: <http://benn.org/>

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