Watt the f*ck?!
# 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
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
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”)
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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