Energy-Aware Processor Management for Virtual Machines

Jan Stoess

PerfCtr

Drivers instrument and report

energy consumption per VM

energy dissipation

Hypervisor track per-driver CPU

reported in user-accessible logs

Gauged by thermal temperature sensors

Christian Lang

Marcus Reinhardt

VCPU hot-plugging

as an "energy valve"

• Enables energy-aware

self-balancing of quests

at application level

✓ Virtual Machine Architecture powered by L4Ka

http://l4ka.org http://l4ka.org/projects/virtualization

processor energy

imbalances

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