



SMOA Devices

distributed power management utility for Green IT infrastructure

Features:

Cross platform

Support for Windows, Linux, Mac OS X

Network policy neutral - XMPP

Does not need open ports on machines

Support for shutdown/suspend

Autodetection of OS and H/W capabilities

Remote wake up

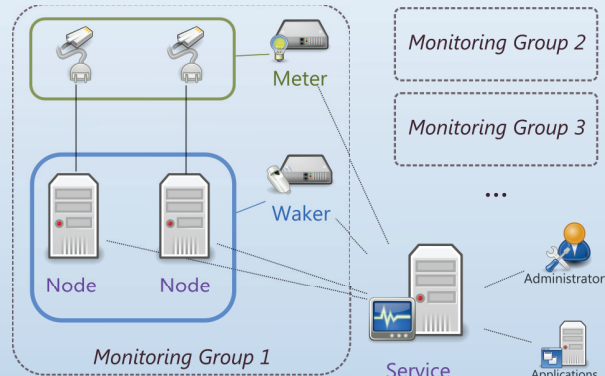
Using WoL, IPMI or vendor tools

Cpu voltage and frequency scaling

Providing information and control over network

Easily extensible - Python

Every sysadmin can script it!



Architecture:

Everything is based on the same software architecture written in **Python**. It's easily extensible either by **handlers**, feature-providing scripts, and **transport** for network interaction (HTTP, XMPP).

The type of handlers used determine roles:

Node

OS-level info and functionality

Waker

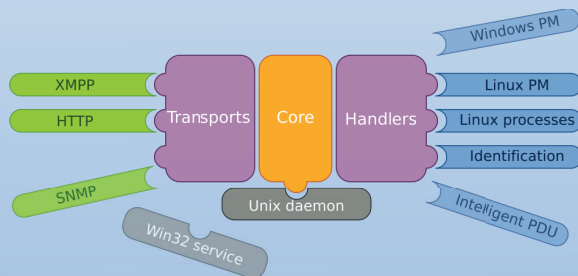
Bring up a group of Nodes

Meter

Provide socket-level measuring and control for Nodes

Service

Provide a unified interface for all the functions



Application scenarios:

General-purpose administration

Power usage monitoring and control for sysadmins. Allows to manage heterogenous systems with a unified interface.

Integration with job schedulers

Can be integrated with existing job schedulers to play the role of the PM tool, e.g. for Moab Green Computing

Integration with VM managers

Can be used as an instrumentation for bringing up/down machines when necessary

Office and institutions

A general solution to enforce network-wide PM policies and turn off unnecessary devices in after-office hours.



The solution is open-source. Alpha release available!

Site: <http://gforge.man.poznan.pl/gf/project/smoadevices/>

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