New Star Energy Services – FAQ's – PC Power Management

PC operating systems have incorporated power management functionality for years. Historically low U.S. energy costs and limited capabilities, however, have stunted power management adoption. Power management had been most compelling only to those mobile computing users who sought to tease out precious extra minutes of battery life. The world, however, has changed.

1. What are power management best practices and recommendations?

Each computing platform is expected to be optimized to add value to the enterprise in as efficient and low cost manner as possible. The U.S. government's ENERGY STAR recommendations advocate use of low-power settings (sleep, hibernate, etc.) to save energy, money, and reduce environmental impact.

Power management vendors have adopted those as core best practices and added features to adapt their centralized power management point solutions to different needs and environments.

2. What are the benefits of centralized power management solutions?

Several.

An initial benefit is the ability to quantify current PC energy consumption and the impact of implementing power policies. This is not only valuable for proving the value of the solution but also for qualifying for rebates and incentives increasingly offered by local utilities and states (click here for examples).

A second is to manage PC states without negatively impacting the user or automated IT support processes. Traditional, OS-embedded power management functionality is underdeveloped in this area.

Other benefits include reducing office cooling requirements, decreasing any utility peak-load demand surcharges, updating desktop policies remotely and gaining recognition and, perhaps, financial reward for environmentally conscious computing practices.

These benefits are ***not*** natively available in either Microsoft or Apple operating systems, including Windows 7.

3. What are common features of centralized power management solutions?

- **Power profile** (one or more) defined for each managed PC.
- **Auditing** of desktop power states and other activities.
- **Reporting** of savings from implementing power profiles.
- **Ability to wake computers for maintenance or remote user access.**
- **Ability to define computer inactivity** at more granular levels than basic keyboard or mouse-click activity, such as disk utilization, CPU usage, application operation.

4. What tips can you provide for evaluating and selecting power management software?

Understand enterprise needs — specifically, critical current and anticipated requirements. These will drive the selection criteria that determine which vendor's solution is the correct one for a particular enterprise. For example:

- How many desktops does the enterprise have? Are they in one or multiple locations? In how many countries? Can the vendor scale to support the requirements?
- Are there critical requirements, such as support for ultra-demanding functions (e.g, energy/financial trading) or required access to desktop computers from outside of the office during off-hours?
- Are the vendor solutions compatible/consistent with the IT tools currently being used? (e.g., third-party desktop management solutions, such as Altiris, LANDesk, SMS, etc.)
- Is centralized management of non-Windows PCs available?

The goal is to identify vendors that have the right functional mix, meet current and anticipated requirements, at a price point that can accelerate investment payback and meet the ROI hurdle.

Contact Gartner Research for their report dated March 25, 2009 - 'PC Power Management Tools Market Update'

5. What advice can you provide for deploying and maintaining the software and power management policies?

Take advantage of free vendor evaluation trials. At a minimum, these will allow an enterprise to benchmark current power consumption and cost. More than likely, they will also allow an enterprise to start enjoying cost savings and green IT bragging rights with **zero** initial investment! Enterprise-wide deployment can occur in waves, with successively more granular and fine-tuned profiles as the economic impact of power management is monitored, measured, and analyzed.

6. What is the estimated cost savings of a consistent, centralized power management policy?

Although each situation is different, ENERGY STAR estimates electricity savings per PC are roughly 50% or $25-75 per year based on a reduction of approximately 200 KWH per computer per year. Cost savings are driven by dropping computers into a reduced power state for an average of 15 hours a day without impacting business readiness or compromising automated IT maintenance processes.

A variety of calculators are available to tailor savings estimates to specific situations. Click here to view a sample ROI calculator. For example, a global financial services firm recently evaluated centralized power management alternatives with the expectation of realizing $1.5 million in annual savings from its 50,000 global desktops.

Other potential savings areas include reduced office cooling loads, saving an additional $5-10 per PC annually — as much as $10-25 or more in warm climates — and decreased peak load demand charges levied by some utilities.

Given the lack of historical attention to centralized power management, at this time both financial and environmental quick wins are relatively easy to achieve.

7. Why should IT make centralized power management a priority?

Although most IT organizations are not responsible for power consumption beyond their data centers, a compelling case exists for their broader involvement in green IT. Centralized IT power management benefits the enterprise, and even the IT organization, in several fundamentally important ways:

- **Increasing IT's value as a strategic partner**, an active contributor helping to advance the business goals of the enterprise.
- **Enabling the enterprise to realize new savings — a source of "found" money.** Implementing centralized power management in medium and large enterprises in current economic times can help organizations reduce layoffs, fund critical strategic initiatives, or just reduce operating costs.
- **Helping finance to better understand energy consumers within the enterprise, assign and allocate costs.** Additionally, this insight allows continual improvement programs to be implemented that will drive both cost and operational efficiency — vitally important as energy costs trend steadily upward.