1E NightWatchman – Extending System Center Configuration Manager 2007 R3 for Advanced Power Management

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Contents

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Today, enterprises everywhere are seeking ways to conserve energy and reduce environmental impact. For business today, conserving energy can also result in substantial cost savings.

Microsoft and 1E together offer a best-of-breed PC power management solution. Microsoft's System Center Configuration Manager 2007 R3 gives organizations the tools they need to achieve power savings through better management of IT infrastructures. Using it, organizations can monitor machine usage, plan and create a power-management policy, apply power-management policies that enforce different power settings during peak and off-peak periods, create reports on power consumption and savings, and more.

1E's NightWatchman extends the core PC power management capabilities offered by Microsoft's System Center Configuration Manager 2007 R3. 1E offers deep support for Windows 7, older operating systems and Macs; helps fix "sleepless" PCs; and includes outstanding patching tools. Users can remotely wake up their work PCs for remote access as well as opt-out of power management during important tasks. NightWatchman also comes with a comprehensive PC make and model power database, senior-management dashboard and baseline energy management capabilities to help gain proven savings over time. According to 1E, since releasing their first version of NightWatchman over 10 years ago, they have cumulatively saved their customers more than $530 million (U.S.) in energy savings – that has led to a reduction of 4.3 million tons of CO_2 emissions that would otherwise have entered the atmosphere.

Together, System Center Configuration Manager 2007 R3 and 1E NightWatchman give organizations a powerful way to manage today's power-intensive IT systems. They deliver three key tools that organizations need:

- Administrative flexibility, so that organizations can better manage a diverse IT environment.
- User empowerment, so that organizations can tailor power management without an adverse effect on employee productivity.
- Advanced reporting, to create a clear and highly accurate picture of cost savings and energy-use reductions.

With Configuration Manager and 1E NightWatchman, organizations can develop power-management strategies that make sense. Global corporations today are using these products to reap benefits from power management.

Administrative Flexibility

Most organizations have an IT environment that consists of multiple operating systems. and have varying needs for patching and powering PCs on or off. System Center Configuration Manager 2007 R3 and 1E NightWatchman offer organizations the flexibility needed to handle a complex IT infrastructure.

For instance, one barrier to effective power management has been the concern that data may be lost during forced shut-downs. To avoid this, power management with System Center Configuration Manager 2007 R3 takes a conservative approach to enabling power savings with hibernate or sleep modes. Power policies can be created that save similar amounts of power, but do not completely shut systems off. Instead, they lower power consumption on components during idle periods and put systems into sleep modes. Configuration Manager 2007 R3 provides the necessary engine to set and configure Windows power policies centrally on clients, ensuring that PCs go into a sleep mode after a period of inactivity.

1E's NightWatchman extends that capability to manage an organization's specific needs. For instance, most enterprises require a range of power-management exceptions so that important processes are not disrupted. NightWatchman allows IT managers to set power-down rules so that PCs performing key tasks are exempted from scheduled sleep or hibernate periods. At the same time, rules can be set so that PCs not currently performing key tasks can be powered down.

NightWatchman enhances the standard Windows power settings by repairing "sleepless" PCs, where rogue applications and drivers prevent PCs from sleeping when they should. Together with System Center, it can identify and repair sleepless PCs. System Center Configuration Manger 2007 R3 and 1E NightWatchman together squeeze savings out of an organization's power-management scheme – including servers when used with NightWatchman Server Edition.

Empowering Users to Effectively Manage Power Needs

Another barrier to power management adoption has been a worry that remote users will not be able to access their office PCs. And there are concerns that forced "sleep" sessions could interrupt important tasks. Configuration Manager 2007 R3 and 1E NightWatchman give IT managers the control they need to ensure that power management does not interfere with critical business needs.

Most organizations have at least some systems which fall into the exception category. In certain cases, there are systems that are required to be turned on and fully available at all hours. Other systems may not have necessary compliant hardware for power management.

Configuration Manager 2007 R3 allows different departments or business units to have different policies, depending on their needs. In addition, two power management policies can be set for all clients: one for peak periods and one for non-peak periods. This allows for more aggressive power management policies to be enacted at night during non-peak periods, with more lax settings to be in place during the day.

1E's NightWatchman adds capabilities so that employees can take further control of their power consumption. PC users performing critical tasks can choose to temporarily "opt out" of power management. In addition, 1E's Web Wake Up – a part of NightWatchman – allows workers who

are traveling or telecommuting to navigate to a secure Web page and turn on their office PCs when remote access is required. NightWatchman also checks PCs for applications that are in use and is designed to securely save data before rebooting for a patch application or other process.

Advanced Reporting Completes the Picture

One key aspect to a power-management solution is to offer concrete evidence of the possible savings. NightWatchman measures PC usage and uses 'what-if' analyses to predict the eventual power savings that could be achieved by putting PCs into a low power state when they are not being used. This information gains reliability by drawing upon make- and model-specific power consumption values and location-specific energy costs and carbon tariffs.

Moreover, once policies are in place, Configuration Manager 2007 R3 and NightWatchman continue to track power consumption and settings on all managed clients. This information can be stored for years in the data warehouse, giving a long-term look at power reductions and CO2 emission savings. The Configuration Manager 2007 R3 environmental impact report can be run across all systems or a collection of systems using a specific CO_2 rating as an input parameter.

NightWatchman also provides a dashboard that shows high-level management information at a glance. It is customizable and can be tailored to individual organization and managers' needs.

Conclusion

Effective power-management tools can help an organization make the right choices when it comes to power management settings. System Center Configuration Manager 2007 R3 and 1E NightWatchman give IT managers insight into trends and settings and providing the tools necessary to make educated decisions about power settings. The potential result: Reduced power use, reduced costs, and reduced C02 emissions. It's a win for organizations and the environment.