

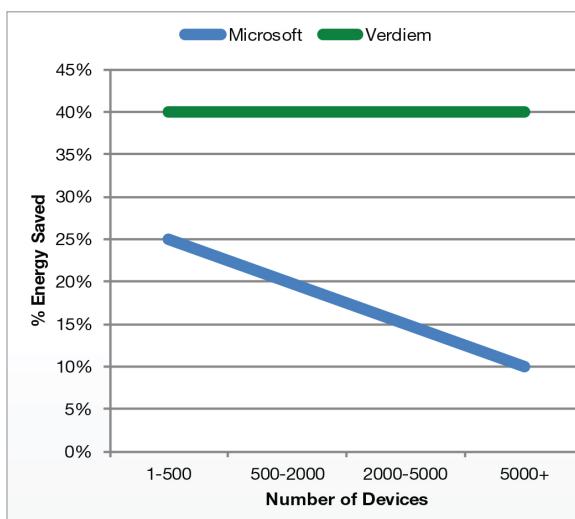
# SEPARATING FACT FROM FICTION MICROSOFT & POWER MANAGEMENT

## DON'T BE FOOLED: "FREE" WILL COST YOU...

While Microsoft Windows and System Center include power management features, their capabilities are rudimentary and collectively fail to deliver an enterprise-class solution. As a consequence, energy savings will be nominal – typically less than 15%. Using a best-of-breed IT energy management solution such as Verdiem Surveyor can increase your energy savings by an additional 30-50%. The result is missed savings that could add up to hundreds of thousands of dollars per year, easily justifying the purchase of an enterprise-class energy management solution.

Independent analysts agree that Microsoft does not deliver an enterprise-class PC Power Management solution. With the System Center 2012 release, Microsoft merely added a few minor features related to excluding devices from power management and copying settings between collections of PCs. Power management functionality is a 'checkbox' requirement – part of a long list of unrelated product features.

An analysis of PC power management solutions by Ovum Research did not include Microsoft due to its rudimentary functionality.



Microsoft's approach is limited to homogeneous Microsoft environments. It does not include Macs or Windows PCs managed by other desktop management systems from HP, IBM, or Symantec.

"Many IT administrators have inflated expectations about the effectiveness of desktops' built-in power-saving technologies...The typical savings of 40% or more that can be achieved with PCPM versus built-in power-saving features also applies to PCs managed by Microsoft's latest System Center Configuration Manager (ConfigMgr). While Microsoft's ConfigMgr R3 includes improved power management, it falls short of leading PC power management solutions on the market."

- **Ovum Research,**  
December 2011

## SIGNICANT MONEY LEFT ON THE TABLE

The number one business driver for adoption of an IT energy management solution is cost savings. However, a Microsoft-only approach significantly limits the savings opportunity.

### TROUBLE FALLING ASLEEP

Most organizations can expect greater than 50% of their Windows machines to exhibit inconsistency entering sleep or standby (aka PC insomnia). Windows - whether XP or Win 7 - does not properly address this issue. With such a large percentage not effectively responding to power saving policies, you will quickly sabotage efforts to reduce energy costs. At best, System Center provides a report that simply lists how many PCs suffer from insomnia and the reason why, but it does not resolve the underlying problem.

Verdiem has worked with over 600 enterprise customers and understands this problem well. Surveyor cures PC insomnia, ensuring compliance with your energy savings program.

### ONE SIZE DOES NOT FIT ALL

System Center's approach to saving power is extremely limited and must be applied to all PCs in the same way. System Center supports one power saving policy during "peak" hours and another during "non-peak" hours. There is no concept of weekends or holidays. This approach also fails to reflect varying work patterns by department or location.

Verdiem monitors actual device utilization which is then used to create a variety of power policies that match the work patterns of various groups – balancing energy savings with user productivity. Verdiem also distinguishes working hours from evenings, weekends and holidays. The closer association of work patterns and corporate schedules with power saving policies is the most critical factor to increasing energy savings as the majority of the savings come in the evenings and weekends.

### WAKING UP IS HARD TO DO

Managing PCs for software maintenance is also a challenge due to System Center's limited policy options. All PCs, whether 1,000 or 100,000 in the fleet, must be turned on at the same time and left on until all machines are updated. This approach wastes significant energy. Also, System Center only supports one scheduled maintenance wake up, which requires the wake to happen every day, causing further energy waste. Further, it cannot wake up or shut down PCs on demand, which can be critical during emergency situations such as virus outbreaks.

Verdiem can wake PCs – in more manageable size groups – and get them back to sleep with minimal uptime by aligning the software maintenance schedule with flexible power policies. Verdiem also supports on demand wake up or shut down of part or all of your PC fleet.

### LIMITING THE AUDIENCE

System Center is a PC only solution and provides limited support for Windows XP, the largest market share version of Windows. That means you are giving up a substantial portion 50%+ of your potential savings. Plus, if you want a solution for growing energy management needs, System Center does not support other IT devices including Macs, servers, IP phones, wireless access points, switches, routers, and Power over Ethernet network devices.

You will miss even more of your PC fleet if you employ other desktop management systems. Many enterprise organizations maintain a heterogeneous IT environment. Choosing System Center as the power management solution, your organization will forgo savings potential with devices under management of other systems like Symantec Altiris, LANDesk, and Marimba.

With Verdiem, you invest in a platform for IT energy management that includes a broad range of IT devices to measure energy consumption and save energy. Today, Verdiem manages Microsoft Windows PCs (XP and Win 7), Macs, and network attached devices using Cisco EnergyWise; more device types will be available soon.

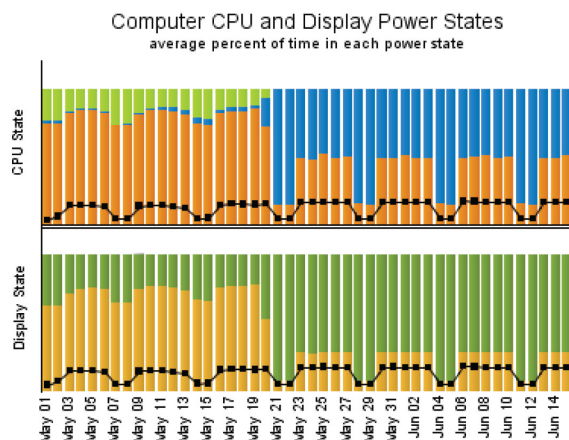
## WHERE ARE THE SAVINGS?

If you are serious about saving energy, you likely have goals for money saved, energy conserved and/or CO2 emissions lowered. In order to calculate savings results, it's essential to perform an energy baseline with a sampling of your PCs. System Center provides a rudimentary approach, establishing a baseline for a small subset of your PC fleet. It then generalizes those results across your entire PC fleet, resulting in an apples-to-oranges comparison. In addition, System Center does not include out-of-the-box savings reports. Producing savings results is a manual process. Even then, given Microsoft's approach to power and savings calculations, the results will present accuracy issues. Microsoft makes global settings for energy rates and PC power consumption. Accurate results require accurate inputs for per-location energy rates and per-model watt consumptions.

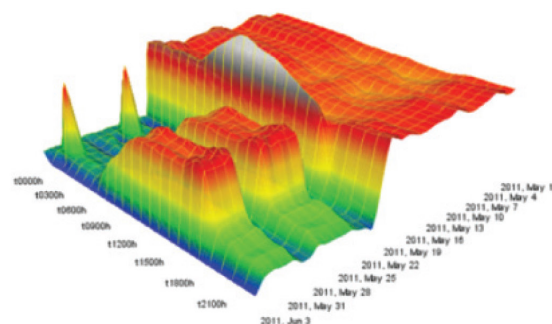
To further exacerbate its reporting limitations, System Center only maintains 31 days of detailed historical data. Microsoft suggests you create separate spreadsheets to save historical data. Only with significant effort will you be able to track trends in your organization's energy consumption patterns.

Verdiem provides the most accurate approach to energy measurement. We uniquely monitor actual activity for PCs and Macs – tracking keyboard usage, mouse clicks, and CPU usage among other measures. We work with you to establish a baseline energy usage profile across your PC fleet before implementing your power saving program. We also support energy data for multiple makes and models of devices and energy rates for multiple locations. Our approach is the only independently verified and validated solution by utilities and energy consultants. If your local utility or government provides incentive funding, you will qualify for those funds which will cover a substantial portion of your software purchase.

Verdiem's reports provide easy to understand quantitative results for dollars saved, energy consumption reduced, and CO2 emissions lowered. With our built-in world-class business intelligence (BI) engine, powered by Information Builders – a leading BI provider, you can conduct deeper analysis such as visualizing opportunities for additional savings. Plus, with access to all historical data, you can track trends over time and by different energy policies, departments, locations, and other key areas of your operation. Our analytics engine also allows you to estimate savings opportunities for alternative energy policies, letting you determine the best approach before implementing changes. With our robust reporting platform and highly accurate measurement approach, you can easily share energy savings results with confidence to your executive team or across the entire company.



**Power-On States and User Activity**  
peaks indicate power is on with low user activity



## ANGRY & FRUSTRATED END USERS

Implementing an IT energy management solution is a moot point if end users lose productivity. A critical requirement is the ability to access PCs from remote or home office sites. System Center does not support remote web access for waking up a PC. Also, System Center relies solely on the native Office applications to save data when putting machines to sleep or shutting them down. This is not a foolproof approach and does not account for non-Microsoft applications: it is a recipe for data loss. Further, System Center does not provide a mechanism for users to opt out of power management. While you would like everyone to be on board with power management, there are situations where it is appropriate to exclude machines such as security kiosks or specific users running critical applications.

Verdiem provides several capabilities that support user access, data integrity, and exception scenarios. With Verdiem, users can wake up their machines anytime, anywhere from the Internet. When putting machines to sleep or shutting them down, we gracefully close applications and save open work for a variety of applications – both Microsoft and 3rd party. Plus, we provide tools for IT to easily handle exceptions whether for particular applications, locations, or users.

## HIDDEN COSTS TO IT

Many organizations take an oversimplified view on the total cost of ownership (TCO) for System Center as it relates to power management. The easy thinking is that System Center is already paid for, and IT staff is familiar with using it. True, but misleading when it comes to power management. There are many hidden costs that when totaled make Verdiem the lower TCO option, while improving IT efficiency.

### HELP DESK COSTS RISE

With System Center, expect higher help desk call volumes. As discussed earlier, end users will have issues that System Center cannot address including the ability to wake up a machine remotely or opting out of power management. Also, there's a real risk of data loss when System Center attempts to sleep or shut down a machine while an application is open. Even if IT tries to proactively address application management, their ability to customize System Center is limited. With Verdiem, IT empowers end users to access their machines remotely and if necessary to opt out – making these self-service activities that help to minimize IT involvement and costs.

Another concern is the impact on network performance which can reduce end user productivity and be another source for an uptick in help desk calls. System Center requires a network-wide broadcast to communicate with the PC fleet. IT is loath to allow such communications that slow down your internal network. With Verdiem, communication between the PC and the central server is very efficient and aligns with best practices of network architects.

### BUSINESS RISK INCREASES

Keeping PCs updated with the latest software patches and security updates is business critical to avoid exposure of sensitive customer data or access to other internal data or systems. However, if a PC cannot be woken up during maintenance updates, the PC becomes vulnerable. As mentioned previously, the majority of Windows PCs have issues waking up, and System Center is limited in its approach - most concerning is the inability to wake up or shut down the PC fleet during emergencies.

Further, power management for maintenance windows is a manual process. System Center power management is not aware when patch or software updates are scheduled.

Surveyor can guarantee that software updates reach their intended targets, ensuring the security of your PC fleet. Surveyor is aware of the System Center software maintenance schedule which automates the process for IT and minimizes the time that machines need to be on for maintenance. IT can even make these Surveyor configurations from within the familiar System Center interface.

## EXPENSIVE REFRESH CYCLES

Many organizations are facing a multi-million dollar PC refresh cycle as Microsoft has ended mainstream support for Windows XP. Does IT know how well all of those devices are being utilized? Are there little used machines in your fleet – perhaps second or third machines for an information worker or a little accessed kiosk machine? IT has a critical lack of data to help them make this important decision on how to rightsize their end user computing fleet. System Center does not provide any data since it does not measure actual device utilization.

Verdiem provides data that can help IT make a smarter, more cost-effective decision. Since we monitor actual usage for all of your devices, we can easily identify under-utilized devices that are candidates for elimination, consolidation, or virtualization. Soon, we will also provide application utilization data. With both device and application usage metrics, we'll be able to provide prescriptive analytics to assist with the shift toward more mobile and energy-efficient devices.

## SUMMARY

Look beyond the course of least resistance with System Center for reducing energy costs. You will leave significant dollars on the table. End users will be frustrated. IT will soon be frustrated too. Do not let yourself get sold on a “do nothing” strategy.

Best of breed IT energy management solutions like Verdiem are built to deliver savings, keep end users productive, and help improve IT efficiency in managing a large PC fleet.

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## ABOUT VERDIEM

Verdiem helped define the PC power management market and has now extended its leadership into IT energy management and efficiency software. Verdiem was acquired in January 2015 by Aptean, a global business applications provider with more than 5,000 global CRM, ERP and Supply Chain customers.

Verdiem's technology has helped more than 750 organizations reduce their carbon footprint by increasing energy efficiency for more than 2.5 million devices. Verdiem's proactive power management for PCs, Macs, network and print devices reduces energy consumption by up to 60 percent and has helped save customers more than \$250 million.

For more information, visit [www.verdiem.com](http://www.verdiem.com) and [www.aptean.com](http://www.aptean.com).