Power Management

White Paper

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Why is it important?

Many IT managers may not realize how much money they're actually spending on electricity to power their computer environment since electricity costs normally fall into the facility budget. If you needed to know, do you have the tools today that reveal departmental or building breakdown by wattage consumption? Without these tools you will be unaware of the substantial electric savings that you could be achieving in meeting your business' Green goals.

As you consider whether you can really achieve power savings from your computers ask yourself three questions:

- *Do my PCs need to be running during off-hours when nobody is using them?*
- *Do I have to leave them on just to install updates?*
- *Do I know how much money I'm spending per machine?*

These concerns are common and are usually not addressed, much less mentioned. IT infrastructures are expensive to maintain and run, and businesses are spending thousands of dollars extra during off-hours. Put that in perspective with your own business. Do you feel comfortable knowing that your business is costing you money while you sleep? Or when you're trying to enjoy a long holiday weekend?

Many IT departments think that taking the step to saving money on energy is a difficult process but it is actually very simple with SyAM Software's power management solution. We offer a simple, non-disruptive, yet intelligent solution to manage and report on computer asset power consumption. Operating Systems like Windows and Mac simply don't have the means to report on if computers are actually powering off and if savings are being achieved. As a result they don't compare with solutions from SyAM.

This paper will examine:

- Power consumption and how much you're really spending
- Where to cut back on unnecessary expenses
- How SyAM Software can help lower energy costs
- SyAM vs. your current computer operating system
- How you can start reducing energy costs tomorrow

Power Consumption

The average work-day is about 10 hours, or 50 hours a week. A week, however, has 168 hours. This means that even in power-save modes, systems are drawing energy for about 118 hours where no one is using them. This equates to 6136 hours for one machine in just one year. Let's think about how much that adds up. Take a company that operates 100 systems on a daily basis. That is 100 systems multiplied by 6136 hours where they aren't even being used! That is 613,600 hours of unnecessary power usage the company is paying for each year.
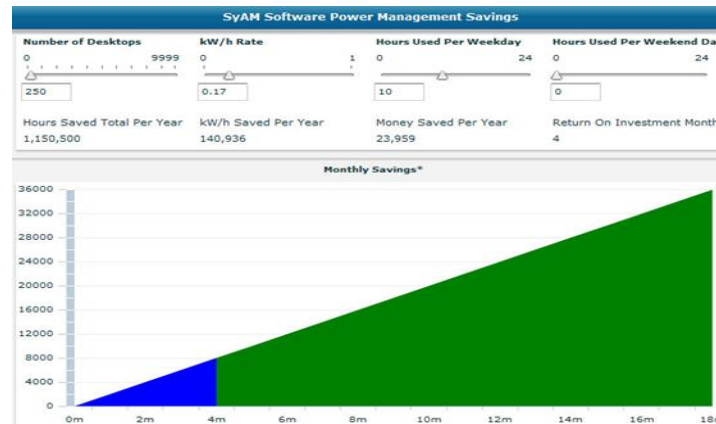
How much can I save?

The amount that can be saved is totally unique to each environment, however, it is dependent upon several factors: how many computers you have, how long they are currently powered on each day, how long they need to be powered on each day and how much you pay per kilowatt from your utility company (Electricity generation + distribution).

Here are a few examples of real customer networks and their savings calculations

- Pennsylvania School District - **3,000** desktops Audit identified - **95%** were on more hours than they should be. Savings per year - **956,114** KW/Hours - **$114,000** dollars (12c per KW/Hour)

- New Jersey School District - **2,000** desktops Audit identified - **72%** were on more hours than they should be. Savings per year - **356,908** KW/Hours - **$42,000** dollars (12c per KW/Hour)

- Texas School District - **1,000** desktops Audit identified - **90%** were on more hours than they should be. Savings per year - **314,515** KW/Hours - **$28,000** dollars (9c per KW/Hour)

- Connecticut Regional Hospital – **500** desktops Audit identified -**73%** were on more hours than they should be. Savings per year - **115,635** KW/Hours - **$23,000** dollars (20c per KW/Hour)

- Massachusetts Regional Bank – **225** desktops Audit identified - **89%** were on more hours than they should be. Savings per year **- 85,534** KW/Hours - **$17,000** dollars (12c per KW/Hour)

Our online Power Savings Calculator accessible on our web site can allow you to see potential savings and the return on investment for your defined factors.

How to solve the problem

What many companies don't realize is that it is really very simple to reduce energy costs. Some IT organizations are reluctant to pursue power savings systems as their efforts for implementation and managing them are not directly rewarded from the company's financial savings on electricity cost.

We understand you want to test the waters before a full roll out so SyAM provides a free of charge, no obligation Power Audit that provides you with a full understanding of the power savings potential for your unique environment. After the audit we can enable a defined rollout to prove the simplicity of deploying and using our technology.

Why SyAM is the best solution to lowering energy costs

SyAM Software has an Intelligent Automated Power Management solution that can cut energy costs by as much as 40% or more. Our products have empowered administrators to create and enforce power policies without any intervention or interruption to end-users. Think of the peace of mind you'll have in knowing daily, through charts and reports, the numbers of systems powered on and off across your network, and monthly executive reports summarizing achieved savings verses goals and monthly trends.

SyAM Software solves three common concerns regarding power management:

- Enabling off-hour maintenance while still saving energy
- Reducing costs while not affecting system or user performance
- Transitioning IT infrastructure to a more energy efficient future

The SyAM client is silently deployed to all the computers across your network and self-configures without disrupting users and without requiring disruptive system reboots. Each device is managed through a centralized interface and can be quickly configured with your defined schedules and power policies, enabling intelligent automated daily-scheduled graceful shutdown. Policies can be modified at an individual system level for unique setup. New policies can be programmed to groups of systems across the network through unattended jobs, simplifying the IT manager's role.

SyAM's solution can also be programmed with monitor off, hibernation or sleep policies to further reduce power during the day when computers are not being operated by the user. Most importantly intelligent checks and balances are implemented as part of the power policies, allowing IT Managers to define critical applications if running and stopping the system from being shutdown at a defined time. Virus scans and disk defragmentation can continue without disruption but once complete the system will gracefully shutdown to save power.

Should a user need to work late the intelligent user activity check makes sure the scheduled shutdowns don't disrupt the user. The shutdown schedule is postponed until the user has completed their work and left for the day, enabling power savings after they have left.

We realize systems may need to be turned on after scheduled shutdown periods. Users can power on their system as normal through the power button and IT managers can power a system or group of systems on remotely through the SyAM software interface.

Since certain days may be scheduled for patching or virus scanning those days can have their policy set for a later scheduled shutdown time to enable the patching or scanning to take place. Another way is to utilize SyAM software to power on systems over the weekend to perform the patching, virus scanning and powering down when completed.

With automatic shutdowns being implemented to reduce energy consumption, businesses will never see any shortfall in performance. Our software doesn't interfere with daily operations and simply makes sure that devices are only being used when needed. Having computers running during off hours is like throwing cash that can be allocated in other parts of the business down the drain. The SyAM solution will help business executives sleep better at night knowing that computers aren't running and wasting energy every minute of off-hour activity.

The software we provide is a giant leap into a world of being "green." However, it only takes one small step to get the systems up and running with our Software. Administrators can easily set up times of which computers need to be powered off. It is a system proven to work and is not only quick, but easy. Businesses can start saving money from day one and stop wasting kilowatt hours of energy.

Wake-on-LAN over a Virtual Private Network

In many instances, employees may need to access their work computers from home. A teacher may decide to correct homework or create a lesson plan on a snow day but needs access to something on their work computer. Whatever the reason, there is always a time when employees need to access their computers remotely.

Computer power management software can help companies save substantial amounts of money. The only issue becomes when power policies turn computers off that may need to be accessed by employees from a remote location. The business may be saving money by implementing these policies, but they are restricting access to employees who may need to work from home.

SyAM Software offers Wake-on-LAN over a Virtual Private Network. By offering this technology, companies are able to maximize power savings on their computers without limiting access to employees who may need to power them on remotely.

The difference between SyAM's solution and your current operating system options

Operating Systems such as Apple OSX and Microsoft Windows can be programmed individually or to groups through Active Directory to set up times to power off a PC; however, they do not contain the intelligence not to disrupt users or critical applications if in use. They do not save nearly the amount of money that our System Area Manager is capable of. When Apple OSX or Microsoft Windows makes a computer go to "sleep" it really isn't completely off. It is still consuming energy. To save the most money, you must shut down the entire system in order to put less of a drain on energy.

Feature	SyAM	Windows	OSX
Power Audit Identified/Achieved Savings Reports	✓	✗	✗
Centralized Dashboard View of Power Savings	✓	✗	✗
Cross Platform Power Policy Support	✓	✗	✗
Silent Client Deployment	✓	✗	✗
Remote Power Policy Change	✓	✗	✗
Remote Power on for off hour Patching and Maintenance	✓	✗	✗
Intelligent Activity and Application checking before shutdown	✓	✗	✗
Configurable Daily Shutdown Schedule at different times	✓	✗	✗
Enable Hibernated and Standby Sleep Timers	✓	✓	✓

Get Started Today

Now that you know about the rising costs of IT systems, how you can eliminate those costs, and why SyAM Software has the best solution you can take advantage of our Power Management solution using just three simple steps.

Step 1: Set up a Power Audit

Systems are discovered on the network and organized into groups. For each group create a Power on Hours template with the range of hours to specify the time those systems are expected to be powered on, and when they are normally shut off.

Step 2: Deploy the SyAM System Client

Schedule jobs to deploy the Client to the groups of systems and apply Power Management settings (e.g. your defined Power Policies) to the systems so they will be powered off at the desired time for each day of the week.

Step 3: Review Reported Savings

Review the Achieved Savings report to see how much you have saved by reducing the amount of powered on hours for the systems that you deployed the client software and applied the Power Policies to. After reviewing the actual savings being achieved you can license the software, roll out to the rest of your network and start saving across all of your systems.

Energy Efficiency Rebates available

Every industry today has experienced increasing pressure from consumers, government, and activists to be more "Green." A concern with this growing concept in today's world is that most IT managers want to reduce energy usage but don't want to cut back on performance. Many utility companies are now offering significant rebates for reduced energy usage. However, to take advantage of these rebates, firms typically have to cut energy consumption by a defined percentage over the previous year, often as much as 20% or more. It is just a matter of actually cutting back on energy usage while maintaining the service levels necessary to be competitive.

SyAM will work with you to verify your eligibility for this rebate. We have already been qualified with many utility companies throughout North America, and can work with your local utility company for your rebate qualification. Our software will enable you to exceed the minimum standards of energy efficiency, helping you qualify for this rebate.

Summary

SyAM Software can help you understand and take control of your computer power consumption. Our software will quickly give you an understanding on how much unnecessary power you are consuming and where policies can be implemented to maximize how much you can save. Now, instead of worrying about high energy costs, you can think about how you can allocate all the money you will save into other parts of your business.

SyAM continues to expand its power management intelligence across all computing devices including high-end desktops, servers, notebooks and tablets, enabling you to easily manage and adapt your power management processes to your changing IT environment.

To learn more or request your power audit

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