



Howard Community College Discovers Intelligent Energy Management

Case Study
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Intelligent Solutions for ABSOLUTE Control

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Abstract

Howard Community College Saves \$50,000 Per Year By Reducing Computer Energy Waste

Rising energy costs and the growing desire to be environmentally-responsible led Howard Community College on a mission to green their campus. Recognizing that there was room for savings in their computing technology, Howard Community College is helping to reduce their carbon footprint and their energy bill by using Faronics Power Save.

Learn how Howard Community College discovered the benefits of Power Save—a software solution that ensures workstations are available when system resources are required, while conserving power during productivity downtimes. Power Save provides organizations with real financial and energy savings on every computer deployed, as well as centralized workstation power status control. Power Save is easy to deploy and manage, non-disruptive to both users and IT, and is able to prove its return-on-investment through detailed savings reports.

The annual savings generated by HCC running Power Save on their computers are enough to:

- Light 36 homes
- Remove 64,380 lbs of CO₂ from the atmosphere
- Take 5.5 cars off the road

HCC: Leaders in Education and Technology

Howard Community College is an award-winning higher education institution located in Columbia, Maryland. Among its many awards, HCC has been recognized as a Top-Tech Savvy Community College by the Center for Digital Education and the American Association of Community Colleges. In 2006, Howard Community College celebrated its 35th anniversary with nearly 21,000 students enrolled.

In addition to the computers used by the 500+ employees of HCC, the IT department of HCC maintains 2020 student workstations and 27 servers campus-wide.

The Problem That HCC Faced

Like most IT professionals, Sung Lee knew that there were financial and environmental benefits to reducing computer energy waste. As the Director of Student Computer Support for Howard Community College, Sung recognized that there was no need for HCC's computers to be running during periods where computer labs were not being used. Sung began experimenting with the power saving settings that his Windows computers had—just like most IT administrators who want to deploy computer energy management do.

Initial attempts to reduce computer energy waste were limited to nightly workstation shutdowns. “We used to shutdown our computers every night at midnight,” recalls Sung. “While this did provide HCC with some measure of power and cost savings, it came with some problems as well.”

One major problem was that the shutting down of computers at midnight was not very reliable. Often, Sung and his team would in the morning find computers that failed to shutdown overnight. Since HCC was trying to go green, and every computer counted, this simply would not do.

Another major problem occurred when trying to implement energy management during daytime hours. The problem was that the power saving settings that come with Windows were too rigid and disruptive for HCC's needs. Since the operating system's power management settings are strictly based on time, they cannot be set to revolve around user activity. Once the operating system's power management is enabled, Windows recognizes a computer as in use only if there is keyboard or mouse activity. One can imagine the frustration teachers and student felt when computers would power down in the middle of PowerPoint presentations and lessons that involved watching video clips through Windows Media Player. Clearly the computers were in use, but since Windows did not detect keyboard or mouse activity for a period of time, it blanked the monitors and then powered down the computers.

HCC needed a power management solution that allowed them to maximise energy savings while computers were not in use, while still allowing users to quickly wake computers up when they were needed. It needed to be smart enough to recognize when computers were in use, and it had to allow IT administrators to retain their ability to service enterprise computers and deploy system updates with ease.

Since Faronics was able to provide HCC with bulletproof workstation consistency in the form of Deep Freeze, Sung decided to turn to Faronics once again—this time for an intelligent computer energy management solution. After visiting Faronics' website, Sung Lee had his answer—Power Save.

The Solution That HCC Needed

The intelligent energy management features of Faronics Power Save was exactly what Howard Community College needed. Power Save has a unique feature that no other energy management software has—the ability to initiate energy conservation policies based on CPU, disk, and application activity. By basing energy management on activity, rather than fixed time values, Power Save is better able to match energy management with user activity. Power Save also enables IT administrators to prevent any energy management from taking place when certain applications are running. “If Power Save detects that PowerDVD or Windows Media Player is running on our Instructor stations, it prevents the computer from blanking the screen or powering down,” says Sung. **These features make Power Save non-disruptive to IT and the end user.**

“Initially, we installed Power Save on two computers and then evaluated it for over a month,” says Sung Lee. “In September of 2007, we deployed Power Save campus-wide on all student workstations.” HCC did evaluate alternative energy management solutions, but found Power Save to be the best balance between staff, student, and IT needs. Unlike other server-based technologies, Power Save is workstation-based. **Power Save helps organizations gain the benefits of energy management without any investment in expensive server technology.**

Howard Community College has currently instructed Power Save to shutdown monitors after 20 minutes of inactivity and computer after 2 hours of inactivity. Based on their current settings, HCC is saving \$4200 per month—that works out to **over \$50,000 in energy savings per year!** That’s \$50,000 that Howard Community College now has to buy new IT equipment and software, hire more personnel, or invest into employee training.

HCC knows exactly how much they are saving every year because **Power Save features detailed enterprise reporting.** With the ability to track monitor and computer uptime at the workstation level, HCC can measure exactly how much Power Save is helping them. “Reporting really sealed the deal for us,” says Sung. “It makes it easy to associate a dollar value to the energy management methods we have deployed.”

Howard Community College currently has Power Save installed on their Windows-based computers only. Once Power Save is deployed on the Mac computers in September 2008, they expect to see their savings increase.

Real-World Benefits

Energy Savings

Thanks to Power Save, HCC now has an energy management solution that is easy to use, non-disruptive, and is able to prove its financial and environmental savings. Computers using less energy means HCC’s carbon footprint and energy bill are now significantly smaller.

Centralized Control

Power Save provides HCC with enterprise control of their workstation power status. With Power Save, Sung Lee and his colleagues are able to power up, power down, and sleep computer labs with ease.

Workstation-based Solution

Since Power Save is a workstation-based solution, it does not require any server hardware to operate. This is a significant cost and energy saving for Howard Community College, as the addition of a new server is counter-intuitive to reducing financial and energy expenditures.

Enterprise-wide Reporting

Power Save features built-in power consumption reporting that details how long workstations have been powered on, powered off, and how much energy and money is being saved based upon the regional electricity cost.

Key Features

Intelligent Configuration Settings

- Definitions can be based on CPU, disk, keyboard, mouse and application activity
- Shutdown without the loss of user productivity

Flexible Scheduling

- Turn off the monitor, and standby, hibernate, or shutdown the computer
- Schedule Wake-on-LAN, shutdown, or restart events
- Promotes user productivity in tandem with energy conservation

Compatibility Options

- Customize, update, and control client workstations
- Localized in five languages: English, French, German, Spanish, & Japanese

Power Save Report

- Power Save features a built-in power consumption reporting tool
- Detailed workstation utilization reporting allows you to see how much power you are saving based upon your regional electricity cost

Customized Inactivity Definitions

- Employ energy saving actions when Disk activity falls below a defined level
- Activate power saving actions when CPU activity falls below a defined level
- Prevent the workstation from employing power saving actions when a particular application is running

Evaluate Power Save Today

Download a free, fully functional evaluation copy of Power Save from www.faronics.com. Power Save is available for the Microsoft Windows and Mac OS X operating systems.

About Faronics

Faronics delivers market-leading solutions that help manage, simplify, and secure complex IT environments. Our products ensure 100% workstation availability, and have dramatically impacted the day-to-day lives of thousands of information technology professionals. Fueled by a customer-centric focus, Faronics' technology innovations benefit educational institutions, healthcare facilities, libraries, government organizations and corporations.

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