

PowerMAN saves University of Liverpool £300,000 per year



The University of Liverpool has always tried to reduce IT energy costs. They were one of the first universities to develop an in-house software solution for turning off unused computers and were keen to compare their existing approach to Data Synergy's PowerMAN Power Manager.

"We had an in-house solution but it had some limitations. We reached the point where we wanted to do more..."

The university has approximately 7,500 computers under central management with around 2,000 used in student walk-in centres and the remainder by staff. The IT Team initially installed PowerMAN in the walk-in centres and followed this up six months later with a deployment in the staff areas.

"PowerMAN is really powerful. Pretty much every configuration and setting you can think of is available. It is really easy to change configuration and you can often see the results next day."

"I only know one power management product that truly addresses our problems...PowerMAN"

Student Computers

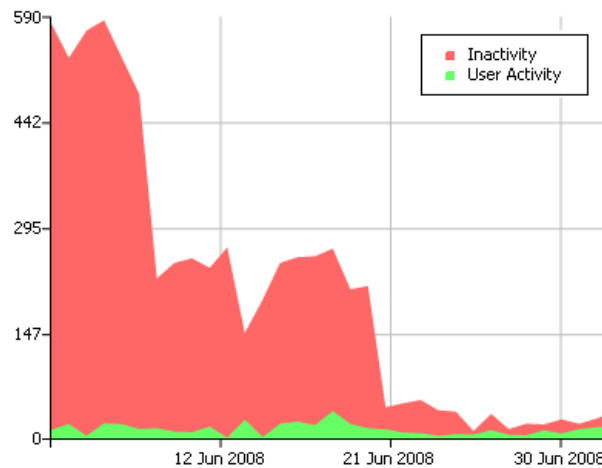
PowerMAN was easily deployed using the university's bespoke deployment system and has been successfully reporting data for over twelve months. The IT Team initially decided to use a low-impact 'No User' policy that turned off computers when nobody was logged on. This approach was designed to replicate the behaviour of their existing system and to achieve significant savings without disrupting any user activity or risking any data loss. The team recognised that this would not achieve the maximum possible energy saving but felt this initial approach would have the fewest drawbacks for users.

The BHLC computer room was selected as a pilot area and carefully monitored to determine the effectiveness of the software before the full deployment. BHLC has around 30 Pentium 4 based PCs with CRT monitors. Several computers were measured and found to use around 100W each with a further 50W used by the monitor. The monitors were already placed in a low power state when not in use and therefore this was not available as an additional saving.

Over a period of several weeks PowerMAN was used to turn off used computers in the BHLC area. The results were monitored using the PowerMAN reporting suite.

PowerMAN was highly effective reducing waste from over twenty hours per day per PC to less than one. This was a saving of around 90%. The university estimate that this is equivalent to a financial saving of approximately £70 per annum per computer.

BHLC Activity / Hours



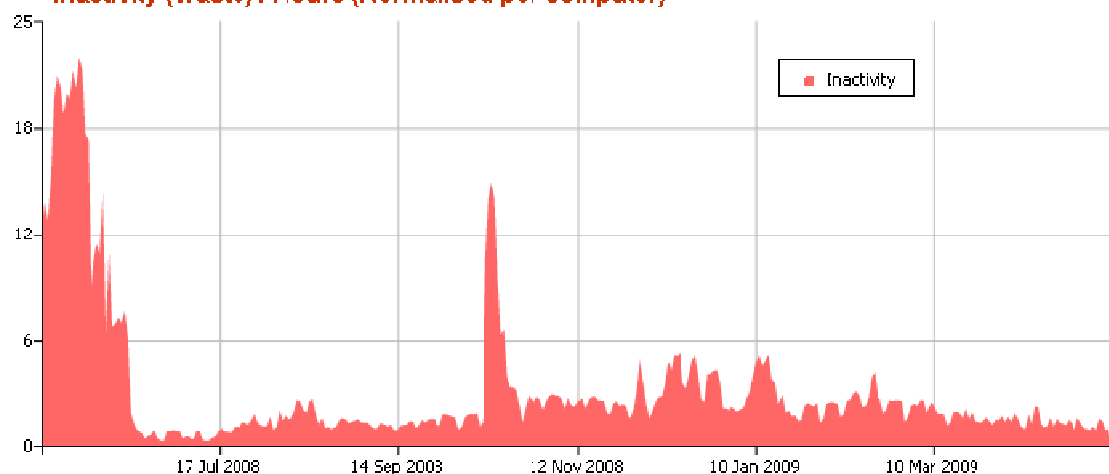
“PowerMAN really worked. The support and advice we received was first class”

The IT Team followed the BHLC pilot with a full scale deployment to all 2,000 student area computers. Initially this used the same low-impact approach used in the BHLC area but over time, this has been improved by:

- Logging out inactive users after 3-hours
- Hibernating computers with no logged on user after only 10 minutes.

“You can see why we consider this a move well worth making. Overall, we hope to halve the amount of idle time”

Inactivity (Waste) / Hours (Normalised per computer)









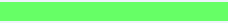



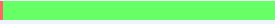




Left unmanaged the student computers could have produced up to 48,000 hours of waste every day but, using PowerMAN, this has been reduced to less than 2,000 hours. The university estimate that, compared to doing nothing, this saves over £300,000 per annum.

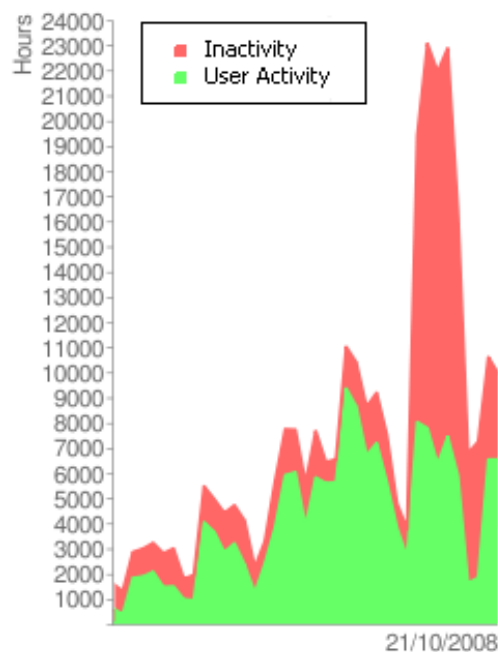
“Teaching Centre computers are now idle on average less than one hour per day”

Saving money with PowerMAN reporting

The university have made extensive use of the PowerMAN reporting system to divide the organisation into over 90 separate monitoring units. These are arranged in a tree structure that matches both the use of the computers and their physical location.

Site	Computers	Inactive Hours	Active Hours	 Inactive  User Active  Other Active
SUTC	109	264.75	628.75	 
ERTC	78	305.25	273.25	 
HCC6	56	312.00	2171.50	 
ETC3	162	470.25	1674.75	 
HCC4	81	482.50	2404.00	 
AGC2	122	510.50	4450.00	 
Export	Show <input type="text" value="best"/>	<input type="text" value="500"/>	sub-sites from <input type="text" value="29/04/2009"/>	until <input type="text" value="06/05/2009"/> <input type="button" value="Refresh"/>

This configuration allows the IT Team to quickly drill down to specific operational areas, trial separate policies and monitor the efficiency of each area. The IT Team can quickly download the reports in Excel format and analyse them further.



In October 2008 the importance of the web-based reporting was highlighted by an issue with a new corporate screen saver.

The screen saver was deployed to the student walk-in centre computers to promote services to users. A new version had been deployed and it was artificially preventing the computers from becoming idle. **This was a classic example of PC 'Insomnia'.**

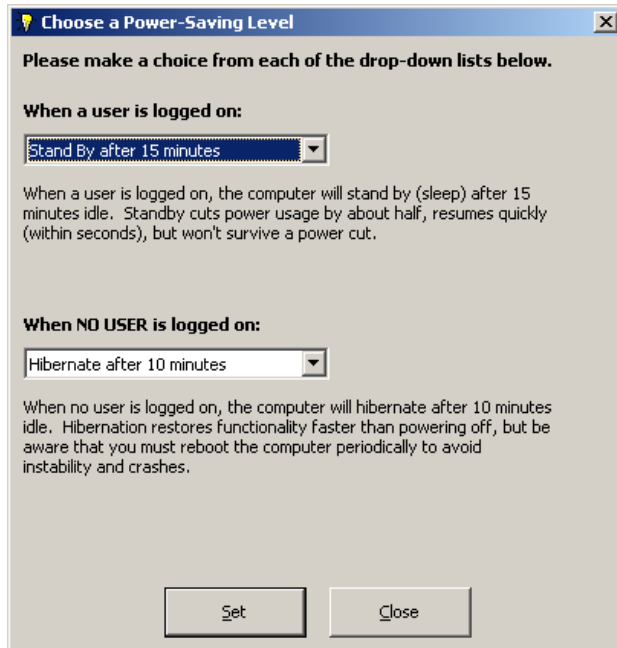
The screen saver deliberately inhibited the low-impact PowerMAN policy and resulted in a large increase in idle hours and associated energy costs.

The IT Team were immediately able to spot the fault in the PowerMAN reports and quickly determined that the screen saver was the cause of the problem. Unchecked the problem could have cost thousands of pounds. Instead, PowerMAN allowed the team to stop it before the electricity bill arrived.

Staff Computers

PowerMAN was quickly introduced on the student computers and over time has significantly improved on the previous in-house solution. This worked so well because the student computers were centrally controlled and used by different users (churn) every day. The university IT Team knew that the 5,500 staff computers would be a much bigger challenge.

The team needed to find a way to motivate the staff and get them on-board. The solution they used was a combination of PowerMAN and a little gentle persuasion.



The IT Team developed a small utility that prompts the user to select their power requirements from a pre-defined list of PowerMAN settings.

This quick tool allows the user to feel that they are part of the process and opt-out if necessary.

Gentle Persuasion

The IT Team used some gentle persuasion to get maximum compliance - The utility asks users to justify if they want to opt-out and tells them that their justification will be recorded. This gentle push in the right direction means that most users comply whilst knowing they can opt-out if necessary.

Since it was introduced PowerMAN has reduced inactive staff computer hours by over 25%. The project is on-going but current savings are estimated to exceed £30,000 per annum.

About Data Synergy

Data Synergy is a UK company based in Nottingham. We are not a reseller and do all of our development, sales and support in the UK. Our product, PowerMAN Power Manager, gives you unparalleled control over your enterprise PC energy consumption saving up to 70% of running costs and up to £60 per PC / Year. PowerMAN typically pays for itself (ROI) in around 4 weeks.