

# PC Power Management FAQ

## *Your Questions Answered*

### ***What is Verismic Power Manager?***

Verismic Power Manager is a powerful web-based PC Power Management Software that enables people to benefit from the carbon and energy savings that can be made through implementing power savings. With savings of over \$60 per PC in some cases being available, PC Power Management can be a highly cost-efficient and environmentally beneficial project to undertake.

Verismic Power Manager is highly scalable, multi-currency, multi-lingual, and therefore the ideal solution to achieve the environmental, cost saving, and positive publicity benefits associated with Green IT.

Verismic Power Manager delivers market-leading features and functionality no matter what size your business or institution. Our solution support both on-premise and hosted implementations to provide the best features in the delivery and cost model that best suits the size and working practices of the target environment.

### ***What is PC Power Management?***

PC Power Management is the practice of enabled and enforcing power savings on personal computers (PCs). PCs and Monitors can account for over 30% of IT Energy consumption in a typical business and is a significant source of wasted energy due to unused systems or devices being left powered on after working hours.

PC Power Management can range from using the basic capabilities included within the operating system to advanced functionality intelligently understanding what defines activity or inactivity for a device and acting accordingly.

With IT emissions contributing a similar percentage of worldwide carbon emissions as those in the airline industry, PC Power Management is an important component in environmental and Green IT initiatives to meet corporate and legal obligations for carbon emission reduction.

PC Power Management is also a significant contributor to lower costs as energy consumption is a 'Hard Cost' where cost is directly affected by consumption. Reduction in energy usage directly corresponds to reduction in costs and with energy costs expected to continue to rise, effective energy management is becoming more of a necessity than an option.

### ***What systems are supported by Verismic Power Manager?***

Verismic Power Manager supports the following platforms:

- Microsoft Windows Server 2008R2 - 64 bit
- Microsoft Windows Server 2008 - 32 & 64 bit
- Microsoft Windows Server 2003 - 32 bit
- Microsoft Windows 7 – 32 & 64 bit
- Microsoft Windows Vista - 32 & 64 bit
- Microsoft Windows XP - 32 bit
- Microsoft Windows 2000 - 32 bit

### ***How do I install Power Manager?***

Verismic Power Manager is a simple to implement a solution that can be up and running within minutes or hours for evaluation or production purposes.

For those not wishing to invest in on-site infrastructure, Power Manager evaluation and production systems can be hosted simplifying the process and minimising both investment and administration overhead.

For those requiring onsite facilities or potentially delivering a hosted solution themselves the software can be downloaded and installed to a supported server system running Microsoft's IIS. Verismic Power Manager also provides Microsoft's SQL Express R2 database for high performance at zero cost to simplify installation.

Managed clients can be deployed using the single-file MSI to immediately begin collecting usage metrics for devices and ultimately deliver effective power management policies.

Verismic is happy to support self-evaluations or provide assisted pilots or saving assessments to help you prove the business case to management.

### ***How much money can I save from PC Power Management?***

The savings available will vary based on how much inactivity is in your environment, if your users normally power systems off themselves, the type of PCs you use, and the cost of your power. A normal range is between \$20-\$60 potential saving per PC per year but a more accurate value can be reached by undertaking a zero cost Power Management Assessment to gather your real metrics and to help justify the business case.

### ***How do I configure consumption values for PCs and Monitors?***

Verismic Power Manager allows you to assign generic values against each type of device, manually add specific values against each unique make and model, or you can use the automatically provided information from Verismic's Content Service and 'Peer Community'. As part of your software maintenance you are entitled to participate in our program that allows your installation to automatically update consumption values from our central content service and optionally you can upload consumption information for devices you have researched to help update the database for other members of the Verismic Power Manager community. Only Verismic Power Manager provides this kind of content service for our customers.

### ***Can Power Manager Handle Multiple Power/Utility Vendors and Different Currencies?***

Yes. Verismic Power Manager supports an unlimited number of power/utility vendors to be entered into the system so that cost and carbon data is accurately recorded for each location. Uniquely, Verismic Power Manager supports true multi-currency where exchange rates are updated automatically and costs stored at their value in each appropriate currency at that time. Unlike other solutions, historical cost data will not fluctuate as exchange rates change nor will you be required to manually enter power prices in local currency each time you run a report. Verismic Power Manager supports more than 15 currencies out of the box and can include as many additional currencies as required.

### ***How Do I keep agents up to date?***

Verismic Agents automatically update with new and modified policy settings as well as changing the way in which they report their data using centrally configured values so now agent re-deployment is necessary to change these.

When new versions and functionality are released, the Power manager agents can self-upgrade themselves so that it is not necessary to perform an agent re-deployment at all, the system self-maintains.

### ***How do I license Power Manager?***

Verismic Power Manager is licensed by 'Active Managed Devices' meaning that you only require a license for each PC that is actively reporting data into the system. Metrics collected are stored in the database to allow historical reporting but never require you to purge devices to recover licenses. Automatically, devices that have not reported for X number of days can be marked as inactive recovering their licenses but ensuring that their data remains to maintain a complete historical record.

### ***How does Verismic Power Manager operate?***

Verismic Power Manager uses a client-server architecture with all communication happening over http/https for scalability and internet awareness. The agent operates silently in the background collecting information about the devices you have and how they are being used in order to provide detailed metrics for analysis and reporting purposes.

Data is linked to reference data such as power costs, vendor carbon emissions and PC and Monitor consumption levels so that the data is translated into useful metrics for you automatically. Much of this reference data is provided for you automatically via our unique Verismic Content Service to minimise administration overhead.

One or more granular policies can be created to control system behaviour and deployed using multiple targeting methods and applied and enforced automatically by the agents themselves. Agents are responsible for the intelligent application and adjustment of power policies based on the rules and conditions that you can provide.

Documents and applications are kept safe using Safe Shutdown and Pre/Post Scripting features.

### ***What are Power Manager Pre/Post Event scripts?***

Verismic Power Manager is a professional enterprise-class solution that knows how to deal with complex environments. To successfully implement power management, the state of a PC and its applications needs to be taken into account and Pre/Post Event Scripts does just that.

Where an application is not-compatible with power management or conditions exist where applications need to be handled differently, Pre-Event Scripts enable the system to control the shutdown or the state change of an application exactly the way an organisation requires it using custom scripts. In a similar way, systems may also be required to re-establish a known state when resuming for a power event such as re-opening a closed application.

Uniquely, Verismic Power manager can run both Pre & Post scripts to managed this desired state enabling greater control over PC Insomnia/Sleeplessness so that PCs can be managed and user impact can be lessened to an extent previously not possible.

Some example events allowing Pre/Post Scripts:

- System Startup/Shutdown
- User Logon
- Standby/Resume from Standby
- Hibernate/Resume from Hibernate
- Publish Now/Later for ad-hoc script launches and configuration distributions

All scripts can be run as a local administrator or the currently logged on user.

### ***Can I shutdown all PCs in the evening?***

Yes, Verismic Power Manager policies can ensure that all PCs that should be power off can be forced to do so using rules that you define. Open documents and applications can be handled using Safe Shutdown and Pre/Post event scripting.

### ***Can I Wake Up My Machines?***

Yes. Using a combination of technologies, Verismic Power Manager can wake your systems up so that they are available for maintenance or to users at the appropriate times in the working day.

### ***Do I Need Wake-On-LAN?***

No. Verismic Power Manager uses Wake-On-LAN but does not rely on it. For pre-scheduled events, a locally scheduled wake timer is set on the device allowing it to wake from sleep or hibernation modes without the requirement for a remote command.

### ***Can I Use Wake-On-LAN Across the WAN?***

Absolutely. Unlike many other solutions, Verismic Power Manager clients act as part of the management infrastructure and can make sure that Wake-On-LAN messages are sent from within the subnet on which target machine resides. This mechanism is fully automated (no need to manually select representative machines) and even combines with locally scheduled wake-ups so that the best possible coverage is achieved without the requirement to reconfigure routers between networks.

### ***Are We Able to Use Wake-On-LAN/WAN over the Internet in the Hosted/MSP Versions?***

Yes. The remote wake capabilities are identical between On-Premise and Hosted implementations and are fully internet aware. Unlike the more common competitor implementations, Verismic Power Manager clients are internet aware and the use of our local subnet representatives does not require the central server to be able to see the representative directly across the network. With this functionality, VPNs or direct network connectivity is not required, and remote wake up (ad-hoc or scheduled) can be performed wherever the management server resides, whether that is on-premise, at Verismic, or in your MSP's data centre.

### ***How granular can my policies be?***

Power Management actions can be included in policies to control when and under what conditions PCs are placed into Standby and Hibernate. These actions can be set to occur at any point in time or based on system inactivity and actions can be modified based on the day of the week and even the individual minute of the day.

Granular policies mean that system behaviour is appropriate to the purpose of the system and the point in time where it is operational. Schools can be aggressive during non-lesson times but passive during lesson times, and business can target known breaks and shift changes.

### ***What is PC insomnia/sleeplessness?***

Using standard OS power management settings where systems enter sleep modes due to inactivity is not always successful. Microsoft Windows generates a PowerQuery event effectively asking permission to power down from running applications and resets inactivity timers based on application activity levels such as disk and cpu activity. With such an open definition of activity and with applications able to deny permission, windows is often unable to send a machine to sleep. As an example, Windows Media Player left running a video or playing music will deny the right to power down a device or a background anti-virus scan may do the same. Where some things might be classed as critical or important to a home user, the same things may not be classed as critical for a business system; as such, where in one situation a denial is valid, under other circumstances the same denial is invalid.

PC Insomnia/Sleeplessness is a major cause of wasted energy in business or government institutions and can render standard OS policy settings ineffectual. Verismic Power manager provides extensive capabilities to detect and overcome this condition including Policy Enforcement and Pre/post Event Scripting.

### ***Can my users opt-out of policies?***

If you want them to be able to then yes. Each policy can be configured to allow users to opt-out and the maximum period of opt-out configured. This gives users the flexibility they desire without the ability to disable power management completely. Opt-out events are recorded and available for reporting and analysis.

### ***Can I protect critical systems or just collect data without applying a policy?***

Yes. Individual systems or groups of systems can be excluded from power management entirely (such as critical servers) while still retaining the ability to collect their metrics. When excluded, even if accidentally targeted with a policy they will not apply those settings.

### ***Can I protect critical applications?***

Yes. Individual applications can be protected fully, so that when in memory power management will be suspended, but once closed power management will be resumed. This facility avoids exceptions causing systems never to be power managed.

In addition, 'busy' applications can be defined so that only if an application is detected to be processing at the time an event should occur will power management be suspended and once the application is not busy will it be resumed.

### ***Can I include the agent in a base image?***

Yes, it is possible to include the Verismic Power Manager agent in a base image. Install Power Manager, stop the Verismic Power Manager Service, delete the client database (db.vdb3) and delete both the registry key HKLM\SOFTWARE\VERISMIC\PowerManager\DeviceID

### ***How do I recover if I accidentally put the client into a base image?***

If an agent was accidentally included or the unique ID was not deleted, then only one device will appear in the management database. Verismic Power Manager includes an ability to handle this. Simply copy the ID that was accidentally duplicated and add this in the Duplicate Device ID section of the console. Now any client that attempts to send data using this ID will immediately be forced to re-generate an ID.

This feature also includes metrics of how many clients needed the ID regenerating and when the last time this happened was.

### ***How do I recover if I have Duplicate Device Ids?***

If an agent was accidentally included or the unique ID was not deleted, then only one device will appear in the management database. Verismic Power Manager includes an ability to handle this. Simply copy the ID that was accidentally duplicated and add this in the Duplicate Device ID section of the console. Now any client that attempts to send data using this ID will immediately be forced to re-generate an ID.

This feature also includes metrics of how many clients needed the ID regenerating and when the last time this happened was.

### ***How many policies can I have set up at any one time?***

You can create and apply as many policies as you like although it recommended to keep this to as small a number as you can to keep things simple and effective.

### ***Can I use Power manager to support my customers?***

Yes, Verismic Power manager is internet-capable meaning you can host this and support internet connected devices. Verismic Power Manager MSP is a specific implementation that allows you to deliver this as a shared service to your internal or external customers with flexible licensing models to suit including fully transferrable licenses.

### ***Can I Use Active Directory to manage my PCs?***

Verismic Power Manager leverages Active Directory as a reporting structure and a targeting model for policies but does not rely on it being present in order to function. Power Manager does not use Active Directory to deliver policies as this contains restrictions that prevent effective management and therefore delivery and enforcement of policies is done by Power Manager's own technology. Did you know that Power manager doesn't even need to connect to Active Directory to use it? Unlike other solutions that require a permanent connection or a regular import of Active Directory to use it, Power Manager automatically collects and builds the Active Directory structure using data provided by the client agent. This means that even in a system that is hosted by us or by an MSP, each customer's Active Directory can be used to target and report without the system ever needing to see, connect to, or put load on the Active Directory itself!

### ***How do I educate my users about PC Power Management?***

The User Awareness & Education features of Verismic Power Manager allow for users to see how Power Manager is saving energy on their behalf by informing them of the activities/events performed by the solution. Information presented highlights how behavioural changes by users would increase efficiencies.

Each user also gets an 'Efficiency Score' that helps them to understand how well they are doing and if their performance is improving or declining. Each user is able to compare their performance with their peers to help them see how well they are doing.

### ***What about other Environmental or efficiency initiatives?***

PC Power Management is only one aspect of a coherent energy reduction strategy and Verismic Power Manager can help promote other initiatives through the 'Tip of the Day' feature. This feature allows other areas of the business to promote their activities or remind users of desirable activities (such as turning off peripherals) that will contribute to overall efficiency improvements.

Recognising the need to involve users is an important aspect of any coordinated environmental policy and Verismic Power Manager allows for integration of PC Power Management into this overall strategy and allow its coverage to be leveraged effectively.

### ***Do I have to turn my devices off to save energy?***

Traditionally powering off (or down) of systems is the only recognised way to save energy and this can mean many users object to the impact or critical systems are excluded to avoid impact. Verismic provides the 'Dynamic Efficiency' feature to automatically take advantage of the power saving capabilities inherent within modern hardware and processors to reduce consumption while devices remain online and fully available.

This capability has multiple uses such as saving energy on devices that can't be powered off such as servers or other critical systems, or extending the productive use period of mobile laptops.

### ***Should I use Verismic to manage my laptops?***

Some organisations exclude laptops due to their perceived lower consumption levels. It is our experience that there are still substantial savings to be made from laptop systems, but this is not the most attractive benefit.

Verismic 'Dynamic Efficiency' applied to laptops makes sure that energy usage is kept at the optimum levels to maximise battery life and minimise charging requirements. By providing full performance when a user is active but intelligently reducing speed and consumption when the user is not active, the overall battery life can be extended.

When we consider the financial cost of a user's time against the energy savings available, the benefit of a 20% increase in productive time far outweighs the financial benefit of the saved energy. Power managing laptops therefore becomes a double benefit as energy cost savings can still be made, but more value from the user's time can also be obtained.

***Can I use Verismic to manage my servers?***

Absolutely. Yes. Servers historically are not power managed as they are perceived as 24/7 availability systems. The 'Dynamic Efficiency' feature of Verismic Power Manager allows for performance/energy throttling to be performed during off-peak periods where responsiveness is less important and/or can dynamically throttle the system speed based on the activity levels of any identified critical applications.

Servers can remain 24/7 available but within the same solution (no addition product or license types required), Verismic Power Manager can reduce the consumption levels of your data centre with zero performance impact.

***What makes Verismic different to its competitors?***

A lot of the FAQ items listed here help to clarify this due to the breadth and especially the depth of our capabilities. This document summarises some of the main capabilities and how this compares to the general market place for PC Power Management Solutions.