

PowerPlug Pro Technical Overview

PowerPlug Pro is a best-of-breed power management software solution for PCs running the Microsoft Windows operating system. The product provides unique capabilities and innovative features, and delivers important benefits and savings to companies of all sizes.

This document details the key technical highlights of PowerPlug Pro.

Centralized Management of PC Power Management

PowerPlug Pro enables organizations of all sizes to rapidly implement power management on all of their PCs from a single centralized management console. The product supports computers running the Microsoft Windows operating system (Windows 2000 and up) and enables the IT department to perform all operations from a single point, including:

- Remotely installing power management agents on all computers.
- Defining and applying power-savings plans to all computers in the organization.
- Waking up computers from sleep or power-off states: on a schedule, on demand, and even by users remotely connecting to their corporate PCs.
- Analyzing a wealth of information regarding power consumption, power savings and money saved.

Independent Power Management Mechanism (IPPM)

Unlike other power management software tools, PowerPlug Pro implements an independent power management mechanism (IPPM) and does not rely on the power management features that are built into the Windows OS. IPPM adds advanced power management features that are designed to address critical IT operational concerns, including:

- Eliminating 80% of “Windows insomnia” cases (inability to enter power savings mode).
- Ensuring that power management does not interfere with user productivity or IT operations by preventing PCs from shutting down while critical applications are running. For example, backup programs, software distribution agents, etc.
- Eliminating interruptions to group activities by preventing PCs from shutting down while other designated PCs are being used. For example, preventing student PCs from shutting down while the instructor’s computer is running.
- Controlling the precise thresholds for determining computer inactivity (CPU use, Network I/O, etc.), thereby maximizing power-savings potentials while minimizing disruptions.

Wake-On-LAN Mesh

One of the most critical operational requirements for implementing power management in the enterprise is the ability to remotely wake-up any PC at any time. Without this capability, power management will conflict with standard and emergency IT operations. While Wake-on-LAN features have been available in practically every business-class PC for many years, they are not widely used because of security and network configuration issues. In fact, many IT organizations do not ever implement power management precisely because they lack the ability to reliably wake up PCs from sleep or power-off states.

PowerPlug Pro solves this problem once and for all through the use of a unique patented Wake-On-LAN Mesh (WOL Mesh) technology. WOL Mesh enables organizations of any size and any network structure to wake-up any computer in the network without changing their network or router settings. PowerPlug Pro Agents automatically create the WOL Mesh by autonomously and dynamically designating a “Relay Agent” in each VLAN or subnet that acts as a WOL Proxy. The Relay Agent stays powered-on and listens for WOL commands, which it then routes to their intended destinations. The key difference between this technology and other WOL Proxy implementations is that the selection of the PowerPlug Pro Relay Agent is performed automatically and dynamically by the mesh, and without the need for IT to explicitly specify the Relay PCs in advance. Moreover, the mesh can automatically designate new Relays if existing ones have been turned off, dramatically improving the reliability and resiliency of the operation even in cases of power failure.

Wake-Up Portal

PCs are, first and foremost, productivity tools for employees. The implementation of power management should not result in any productivity loss for end-users and should not prevent them from doing their jobs – anywhere and anytime. Employees that travel to remote offices or connect to their corporate PCs from home should have an easy and accessible way to wake up their corporate PCs in order to perform their work.

The PowerPlug Pro Wakeup Portal is a web-based service that presents employees with the PCs they are allowed to access, and enables them to wake-up each PC with a single mouse click.

PowerPlug Pro uses Business Intelligence features to eliminate the guesswork from associating employees with PCs. The product analyzes historical data of employee computer access in real time and determines which computers should be presented to each user.

System Integration

PowerPlug Pro stores data received from PowerPlug Pro Agents in an industry-standard database and creates a data warehouse of power consumption, power savings and usage analysis information. The data is used for two purposes:

1. Calculating potential power savings, actual power consumed and actual power saved.
2. Providing the system administrator with usage analysis information in order to make the right decisions when creating power saving plans.

The PowerPlug Pro database uses open industry standards and is fully documented, enabling 3rd party applications to access the information and interact with the system. For example, a Business Intelligence application can use the usage analysis data to provide decision makers with accurate information regarding actual end-user PC usage, or a 3rd party systems management software can use PowerPlug Pro to wake-up or shut-down PCs as part of its management workflows.

Power Consumption and Power Savings Reports

PowerPlug Pro includes an intelligent reporting solution with pre-created reports that present information on all aspects of the software. Each report can be customized with pre-defined filters in order to allow the user of the system to get any and all required information.

The reporting system provides the following types of report:

- Actual power consumption and expenses.
- Actual power savings, including both the origin of the savings (end users vs. PowerPlug Pro) and the translation from KW/h to financial figures.
- Potential savings that can be reached based on actual PC usage data from PowerPlug Pro Agents. These reports can aid organizations in understanding the impact the system will have on their electricity consumption and expenses even before creating the first power savings plan, as well as the impact of each change to their existing power savings plans.

PowerPlug Pro was designed from the ground-up to enable any organization to implement efficient PC power management and solve the most critical operational issues involved in PC power management.

To learn more about the product, please visit us online at www.powerplugltd.com.

To request a free trial version or more product information, please contact us at info@powerplugltd.com.