

Intelligent Power Software

Manage your power easily



Powering Business Worldwide

Intelligent Power Software

Intelligent Power® Software is a suite of productivity tools for power management from Eaton®. It greatly simplifies the supervision of power conditions and devices in today's enterprise environment, scaling effortlessly from local area networks with a few UPSs and ePDUs to the most critical virtualised data centres.

Administrators will value the many automatic functions of Intelligent Power Software. Installation requires just a few clicks and a couple of minutes; once the software starts, it will automatically discover manageable equipment.

Intelligent Power Software architecture makes it very flexible. Completely network-based communications make the server part very suitable for virtualisation, and the web interface allows access from any device with a browser, anywhere in the network. The Web 2.0-compliant dynamic interface presents database contents in text, graphs and colours, highlighting the essential points.

The software can take automatic action as well. Events can be set to trigger email sending, notifications and command execution. This way alarms with exact data reach the right people in seconds, giving maximum time for action to prevent downtime, reduce mean time to repair and minimise the impact.

Intelligent Power Software incorporates two important applications that ensure system uptime and data integrity: Intelligent Power Manager and Intelligent Power Protector.

Product snapshot

- Intelligent Power Manager for monitoring and managing power equipment in IT environments
- Intelligent Power Protector for graceful shutdown of operating systems
- Reduces total cost of ownership for the whole monitoring system

Use each software independently or as a powerful combination. Together with your UPS, they provide end-to-end power management for maximum uptime and data integrity.

Features:

- Auto discovery enables fast installation by automatically detecting manageable devices in the network
- Password protection and encryption ensure data privacy
- Alerts via email and mobile devices minimise downtime
- Multilingual interface with automatic recognition of browser language
- Intuitive, Web 2.0-based user interface
- Compatible with Eaton and other manufacturers' UPSs as well as Eaton's ePDU products and environmental sensors



Virtualisation

Virtualisation is driving the deployment of many new applications and data centre demands. It changes the way IT facilities are operated, bringing substantial savings and increasing availability and flexibility.

Managing the power infrastructure within a virtual platform is vital for increased uptime and reliability of those applications. To facilitate the management of power devices, the Intelligent Power Manager plugs into leading virtual machine management systems, including VMware® vCenter™, Microsoft SCVMM™ and XenCenter™, and integrates power management functions to these systems so that all UPSs and ePDUs in the virtual network can be viewed within the same application, together with network, physical server and storage information. In case of a local power failure, it can also trigger vCenter's vMotion™, SCVMM's Live Migration and XenCenter's XenMotion™ to transparently move virtual machines from a server affected by a power interruption to an available server on the network, ensuring data integrity and enabling zero downtime.

If controlled graceful shutdown of hypervisors and their guests is sufficient in case of a prolonged power outage, Intelligent Power Protector is ideal for the task. IPP invokes shutdown or hibernation of virtual machines, signals the hypervisor to shut down and powers off the physical server. It supports VMware, Hyper-V, Xen and KVM platforms.



IPM vCenter plug in



Intelligent Power Manager

Intelligent Power Manager is a productivity tool for administrators of several power devices and shutdown applications. It delivers the big picture and highlights key factors by concentrating information from multiple sources and displaying it in a single view. It also centralises alarm propagation making sure that important events are brought to those who need to know.

Intelligent Power Manager simplifies many routine maintenance tasks, including its own updates. It has an automatic update function which will notify the operator of available upgrades, download and install them. In addition to that, it also checks if there are new versions of shutdown software. Mass upgrade and configuration of cards and applications saves a lot of valuable operator time and reduces the chance of human error.

Intelligent Power Manager manages up to 10 devices at no charge. Simply purchase a full license and enter the corresponding license key to raise this limit and enable management of 100 or more devices.

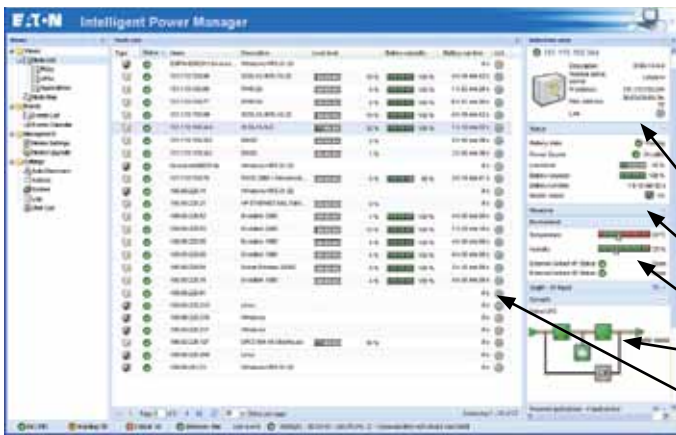
Features:

- Easily monitor hundreds of power and environmental devices
- User-definable tree structure enables grouping, access and management of multiple devices in several locations
- Minimises the effort required in power management system maintenance through mass configuration and firmware management
- Manages all Intelligent Power software instances in the network



Global view

Intelligent Power Manager scales easily from a local area network to a global view, keeping an eye on power conditions and equipment status. In addition to the default maps, it's possible to upload more maps, floor plans and other images. There can be separate views for multiple geographical areas and buildings.



Main list view

- With Intelligent Power Manager list view, the key operational parameters of multiple devices can be seen at a glance. Users can create their own views and apply several different filters, such as location, equipment type, function and so forth. Activating an entry provides more detailed data in the information panes:
- Identification of the device, including equipment type, serial number and user-defined information
 - Operational status
 - Readings from optional environmental probe
 - Synoptic view of power flow
 - For each node, there is a hyperlink to the web interface of that device



Graphing tools

List and map views give an excellent real-time snapshot of a large number of devices, but very often time series data is needed for analysis, planning and problem mitigation. Intelligent Power Software has powerful graphing tools which help in visualising large amounts of data stored in its database. The user can choose which data is graphed and which timescales are used. Exact values are displayed when the pointer is moved over the graph area.

Intelligent Power Protector

Uninterruptible power systems are designed to protect your network devices from power anomalies, including surges, sags and frequency variations. But when the power goes out for longer than your available battery runtime Intelligent Power Protector software facilitates automatic, graceful shutdown of computers, servers and network devices powered by a UPS, saving all work-in-progress and ensuring data integrity.

Intelligent Power Protector has also monitoring and alarm handling capabilities making it a complete solution for a single UPS.

Intelligent Power Protector has comprehensive choices for shutdown triggers, timings and modes. User can choose whether the operating system should shut down, hibernate, power off or run a custom script. The start of shutdown can be based on an instant event, delay or remaining runtime on the UPS.

There could be hundreds of UPSs in a network, each powering multiple servers running shutdown software. Managing that kind of setup could easily become a nightmare, especially because new computers are added and old ones moved all the time. Intelligent Power Manager comes to the rescue by clearly showing which Protectors are connected to a particular UPS.

Intelligent Power Protector introduces the concept of Virtual Power Source. That could be multiple UPS systems in parallel or several power supplies powering a server. It could be also a combination of other virtual power sources, which allows very complex power schemes to be made understandable to both IPP and the administrator. It is also possible to set the required level of redundancy.

Intelligent Power Software can perform actions when events of any given type or criticality occur. These actions include notifications on computer screens, command execution and email sending. To limit the amount of emails, it is possible to combine several events into a single message. This is a particularly valuable feature in large installations.

Features:

- Graceful shutdown of operating systems in case of an extended power failure or other condition that threatens the availability of IT equipment
- Supports Eaton Powerware® and Pulsar series UPS through network, RS232 serial and USB communication
- Supports redundant power supplies and parallel UPS configurations
- Silent unattended installation option
- Manageable with Intelligent Power Manager



Shutdown settings



Powered applications



Support for redundant power



Event configuration

Specifications

Intelligent Power Manager

Licensing	Part number
Base licence for 1-10 nodes*	Free
Silver licence for 11 – 100 nodes*	66925
Gold licence for unlimited number of nodes*	66926
* (UPS or ePDU with network interface)	
Supported operating systems	Windows 2000/XP (Home or Pro)/2003/Vista/2008/7 Server grade OS recommended
Supported virtualization management systems	VMware vCenter 4, 5 XenCenter Microsoft SCVMM
Supported browsers for viewing	Google Chrome 4, 5 Mozilla Firefox 3.0, 3.5, 3.6 Microsoft Internet Explorer 6, 7, 8, 9 Opera 10
Supported devices	Eaton Pulsar series UPS + Network management card Eaton Powerware series UPS + Web/SNMP card Managed ePDU Switched ePDU Monitored ePDU In-line Monitored ePDU APC UPS + SNMP card UPS with IETF MIB SNMP adapters (Liebert, Socomec, ...) Intelligent Power Protector

Intelligent Power Protector

Licence	Free
Supported operating systems	Windows Server 2011, 2008 R2, 7, 2008, Vista, 2003, XP 2000(x86 32 bit only) Linux (x86/x86_64) Debian GNU Linux: Lenny, 6 SUSE/Novell: SLES 11, 11.1, OpenSUSE 11.2, 11.4 RedHat Enterprise Linux: RHEL 5.3, 5.4, 5.5, 6, Fedora core 12, 15 Ubuntu: 10.04, 11.04 Virtual Environments: VMware: ESX 4, ESXi 4 (pay version only), ESXi 4.10 (pay version only), ESXi 5 Hyper-V: Hyper-V and Hyper V Server R1, R2 Xen: Citrix XenServer 5.6, OpenSource Xen 2.6 on RHEL 5, OpenSource Xen 3.2 on Debian 5.0 KVM: KVM 0.12.1.2 on RHEL 6 and Debian 5
Supported browsers for viewing	Google Chrome 4, 5 Mozilla Firefox 3.0, 3.5, 3.6 Microsoft Internet Explorer 6, 7, 8, 9 Opera 10
Supported communication methods	USB RS232 serial Web/SNMP cards: Network card - MS, Network and ModBus card - MS, NMC P/N 66102; Connect UPS MS; Connect UPS X, BD and E; PXGX UPS
Supported UPS	Eaton Powerware and Pulsar series

In the interests of continuous product improvement all specifications are subject to change without notice.

www.eaton.com/powerquality



© 2011 Eaton Corporation
All Rights Reserved
Printed in Finland
00BROC1018120 rev E, September 2011
eaton.com/powerquality

Eaton is registered trademark of Eaton Corporation.

All trademarks are property of their respective owners.