Eaton® Intelligent Power® Manager (IPM)

Quick Start Installation Manual



Class A EMC Statements

FCC Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

ICES-003

This Class A Interference Causing Equipment meets all requirements of the Canadian Interference Causing Equipment Regulations ICES-003.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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Chapter 1 Installing the Intelligent Power Manager

This document provides Eaton® Intelligent Power® Manager (IPM) installation prerequisites and quick start installation procedures. The procedures include only those steps that are necessary for basic setup and operation. Refer to the Eaton Intelligent Power Manager (IPM) User's Guide for detailed configuration and operation instructions.

Procedures for uninstalling the product are also included.



Upgrade instructions are not included in this document. See the "Nodes Upgrade" section in the Eaton Intelligent Power Manager (IPM) User's Guide for information about upgrading the IPM.

Product Introduction

The Eaton Intelligent Power Manager (IPM) is ideal for monitoring and managing multiple power and environmental devices. The Eaton IPM delivers a global view across the network from any PC with an Internet browser. Exceptionally versatile, the software is compatible with any device that supports a network interface, including other manufacturer's UPSs, environmental sensors, other manufacturer's Power Distribution Unit (PDU) or Eaton Enclosure Power Distribution Unit® (ePDU®), and applications. The Eaton IPM can also organize a management table by groups, centralize alarms, and maintain events logs for preventive maintenance of the entire installed equipment base.



Figure 1 shows the Eaton IPM Main Page.



Figure 1. Eaton IPM Main Page

Installation Prerequisites

This section provides installation prerequisites for the following:

- Systems hosting the Eaton IPM
- · Systems that display the Web-based graphical user interface (GUI)

On the System Hosting Eaton IPM

The Eaton IPM can be installed on Microsoft® Windows 2000, Microsoft® Windows XP®, Microsoft® Windows Vista® 7, Microsoft® Windows 7 and 8, and on Microsoft® Windows Server® 2003, 2008 (including R2 revision), and 2012.

- For better performances with multiple nodes, Eaton recommends a Microsoft® Windows Server® OS (that does not have the limitation of 10 simultaneous network connections)
- To avoid network or serial port access conflicts, do not install the Eaton IPM on a machine that also hosts:
 - Network management system, such as HP OpenView® or CA Unicenter®
 - Eaton Intelligent Power Protector (IPP)
 - Eaton Enterprise Power Manager
 - Eaton Network Shutdown Module
 - Network Management Proxy
 - Eaton UPS Management Software



This is the previous Eaton software for managing UPSs. If you were using it previously, remove it before installing the new Eaton IPM software.

On the System that Displays the Web-based GUI

The Eaton IPM graphical interface can be accessed remotely using a simple Web browser. Access to this interface can be secured through Secure Socket Layer (SSL) connection and is also secured through login and password.

The Eaton IPM graphical interface has been tested with:

- Google[®] Chrome[™]
- Mozilla Firefox[®]
- Microsoft® Internet Explorer® (IE) version 7 and later



For optimal performance, Google Chrome or Firefox is recommended. For good performance, IE version 9 and later is recommended. IE6 performance is not optimal.

JRE Prerequisites

For all features correlated to the infrastructure connector (like VMware, UCS, NetApp) a JRE must be installed on the system hosting Eaton IPM (see "JRE Installation" on page 8). If this prerequisite is not installed, only virtualization features are available, such as the legacy API for VMware connectors.

Virtualization, Storage, or Server	Software	No JRE installed	JRE 1.6 or greater		
Virtualization	New Vmware vCenter	—	•		
	New Vmware ESX/ESXi	_	•		
	Microsoft SCVMM	• see NOTE	 see NOTE 		
	Citrix XenCenter	•	•		
	Citrix XenServer	•	•		
	Vmware vCenter (legacy API)	•	•		
	Vmware ESX/ESXi (legacy API)	•	•		
Storage	NetApp Storage	—	•		
Server	Cisco UCS Manager	_	•		

Table 1. JRE Virtualization, Storage, and ServerCitrix XenCenter

JRE Installation

The installation of the Java Runtime Environment (JRE) is Operating System platform-dependent. All new Eaton components have been developed and tested for the Java version 1.6 or later. After installing the correct JRE, the IPM must be reloaded, to take account this new environment.

Quick Start Instructions

This section includes quick start installation and configuration instructions.

Step 1: Graphical Installation

To install the Eaton IPM:

- 1. On a computer with a Windows OS, run the Eaton Intelligent Power Manager package under an administrator account. A Web browser displays the Eaton Intelligent Power Manager Installer Welcome screen.
- 2. Observe the prompt and verify that the communication device is connected. Click **Next** (see Figure 2). The Login screen displays.



Figure 2. Welcome Screen

3. Read the application description. Type the login and password and click Login (see Figure 3).

NOTE The default entry for login and password is **admin**.



Figure 3. Login Screen

Step 2: Configuration

When started, the application automatically performs a discovery using the "Quick Scan" option:

- Using the "Quick Scan" operation, you will discover the following through broadcast: Network Management Cards Network-MS (ex 66102 / 103006826) and Modbus-MS (ex 66103), PXGX2000, PXGX-UPS, ConnectUPS BD, ConnectUPS X, ConnectUPS MS, Intelligent Power Protector, Network Shutdown Module V3, new Eaton ePDU, new HP UPS Card, new Dell UPS Card, or new IBM UPS Card.
- Display the discovered nodes using *Settings > Auto Discovery* (see Figure 4).

iews 🤍	Node	List									R Quick scan
Views	Туре	Status	Name	Mac Addr	Description	Class -	Location	Contact	Access	Link	Range scan
Node List		0	VM-VIRTU-DEV-A		Windows NT/6.01.00	Intelligent Power Manage			"D adr		Address(es) scan
Events		0	nas05 mbt. lab.etn.c		FAS2040	NetApp Release 8.1.2 7			,o		
Events List	3	0			Eaton 5PX 3000	Network Management Ca	MBT Lab		,O ad		Set node access parameters
Management	3	0			Eaton 5PX 3000	Network Management Ca	MBT Lab		"D adr		Remove nodes
Nodes Settings		0			Eaton 5PX 3000	Network Management Ca	MBT Lab		JO adr		
Settings		0	vesxi10.mbt.lab.etn		VMware ESXI 5.5.0 bu	VMware ESXI			o,		Select all
Auto Discovery		0	vesxi11.mbt.lab.etn		VMware ESXI 5.5.0 bu	VMware ESXI			P		
Infrastructure Connectors		0	vesxI09.mbt.lab.etn		VMware ESXI 5.5.0 bu	VMware ESXI			,o		P Set as power source
System		۲	vesxi13.mbt lab etn		VMware ESXI 5.5.0 bu	VMware ESXI			0		User drivers editor
🚮 User List		٢	vesxi12.mbt lab.etn		VMware ESXI 5.5.0 bu	VMware ESXI			P		Change driver node
		0	vesxi14.mbt.lab.etn		VMware ESXI 5.5.0 bu	VMware ESXI			,o		Export to CSV file
		0	vesxI04.mbt lab etn		VMware ESXI 5.1.0 bu	VMware ESXI			,o		
		0	vesxI05 mbt lab etn		VMware ESXI 5.0.0 bu	VMware ESXI			ø		
		0	vesxI03.mbt.lab.etn		VMware ESXI 5.1.0 bu	VMware ESXI			"D		
	T.4		N. NI	-				-			

Figure 4. Quick Start - Auto Discovery Page

- For the other nodes, perform the discovery based on IP address ranges using the "Range Scan" option. Using "Range Scan" discovers the nodes that are outside of the network segment and nodes that are not compatible with the "Quick Scan" feature.
- Refer to the Compatibility list to determine if your node supports the "Quick Scan" feature.

(Optional) To set the computer running Eaton IPM to shut down in the event of a power failure:

- 1. Select **Settings > System**. The Edit modules settings dialog displays.
- 2. Select the Shutdown checkbox on the Edit modules settings dialog (see Figure 5). The Shutdown menu selection displays in the Settings menu hierarchy list (see Figure 6).



Figure 5. Edit Modules Settings Dialog



Figure 6. Shutdown Displays in the Settings Menu Hierarchy

- 3. From the *Settings > Shutdown* page, assign the following:
 - IP address of the UPS that powers the local computer (power source)
 - · Shutdown configuration parameters (timer, duration, type of shutdown, and (if needed) shutdown script
 - · Select or deselect (check or uncheck) the checkbox for standard shutdown sequence

Step 3: Enter the License Code

The Eaton IPM monitors up to 10 devices (including UPS Web Card, ePDU, or Eaton IPP Shutdown Controller) without a license key.

If there are more devices to be monitored, an appropriate license is needed. The license can also be upgraded later without reinstallation.

Only for "Silver" or "Gold" paid versions:

- In Settings > System > Edit System Information, enter the license product key that is printed on the commercial CD booklet (inside the CD case):
 - ref 66925 Eaton IPM Silver License (11 to 100 device nodes)
 - ref 66926 Eaton IPM Gold License (101 to unlimited devices nodes)

NOTE Nodes that are not managed due to license limitation appear with this icon: 🖉

Step 4: Operation

1

- Use the Views > Node List menu item to supervise the current state of the compatible power devices and applications.
- 2. Select a line in the list and the panels are updated with selected device information (see Figure 7).

	0 Node List							0	Selection view	
•	Type	Status	Name	Description	Location	Contact		Les	Information	
de List de liter	9	0	GREFR/NHP6009092 mehome net	Windows NT/6.01.01				ø	0 UDS #006	
		0	GREFRWHP9009815	Windows NT#.01.01				ø	C CF 3 MODO	P
nt	U	0	GREFRAMPS009059	Windows WDS 01.00				•	Nominal apparent	Evention and
ndar		0	UPS #001	Eaton ePOU AM 1P IN EC309 32A OUT				ø	power Raddrawa	800 PM
ps.	8	0	UPS #002	Evolution 650	Bureau Eric	the		•	Wat Address	60 20 85 FB 56 16
•	0	0	UPS #003	Evolution 650	1A09	Luc		ø	Serial number	AV2H370PD National Management Card J
	8	0	UPS #004	Eaton SPX 1500	Computer Room	Computer Room	m Manager	ø	Class	HD
	0	0	UPS #005	Eaton SPX 2200	Elit	IVE		D	Locaton	Computer Room Computer Room Matalan
	8	0	UPS #000	Evolution 850	Computer Room	Computer Room	m Manager	•	Les	0
		0	ST0 #001	NetApp Release 8.0.2 7-Mode: Mon Ju	WTB-LABCOM01	aurelienbegou	Geston.com	ø	Status	
		0	STO #012	BBH5 Webrew 107,81,91 Image: Second	Ø		0.000			
		0	STO #003	Linux nas-netpear2100 2.6.37.6.RNx86	Unknown	feet		D	Danery state	Courses
		0	STD #004	BUFFALO TeraStaten TS54000 Ver 2.0	Unknown	nobody@noad	bran	•	Load level	ALLINE STATE
		0	5T0 #005	Linux RS8125yne 3.2.30 #3202 SMP Fr	Labo Comm.	Aurelen		B	Battery capacity	40 min 45 s
	0 0	0	ePOU #001	Eaton ePDU AM 1P IN EC309 32A OUT				Ø	Battery run time	
								Load segment #2: Group2 Measures	e 6	
									Graph - 2 hours	0 -
						Date		00/0	52013-09:10:27	1
						Input Loss Data	t voltage Elevel ery capacity:		242 V 11111111 12 %	
						Bath	ety run time:		42 min 45 s	
									06/03/2013 - 08:35:28	08/03/2013 - 10:35:28
									Powered Applications - 0 application	ns 🗆 +
									Events	0 -
									Status Date	Message

Figure 7. Node List Main Page

- [Optional] If you have enabled the Shutdown module, the *Views > Power Source* menu item allows you to supervise the current state of the UPS that powers the server running Eaton IPM. This menu is available when you have enabled the Shutdown module in *System > Settings > Edit Modules Settings*.
- The *Events > Event List* view allows you to view the device events.
- The Management menu provides functions that allow you to mass configure and mass upgrade cards.

Installation Result

IMPORTANT

If you install a new Eaton IPM release without uninstalling the old one, you will keep your database and your product settings.

- At the end of the installation, the following shortcuts are created in the group *Start > Programs > Eaton > Intelligent Power Manager:*
 - Open Eaton Intelligent Power Manager: Starts the main Eaton IPM graphical interface
 - Start Eaton Intelligent Power Manager: Starts the service
 - Stop Eaton Intelligent Power Manager: Stops the service
 - Uninstall Eaton Intelligent Power Manager: Uninstalls the program
- A service called "Eaton Intelligent Power Manager" is also created for the Database Acquisition Engine.
 - This program continuously polls the status of Eaton devices and Applications connected on the network.
 - This service automatically starts on machine boot-up.
 - This service provides the Web Interface.
- A system tray icon displays the alarms on the local computer. Right-click this icon to display the same shortcuts as in the Windows Start menu.

Uninstalling the Eaton IPM

The following methods for uninstalling the Eaton IPM are available:

- Access the control panel selection for your operating system to uninstall programs and remove the Eaton
 Intelligent Power Manager Vx.xx package per your system instructions.
- You can also uninstall from the shortcuts to remove the product and custom files (if you confirm the action): Start > Programs > Eaton > Intelligent Power Manager> Uninstall Intelligent Power Manager

Upgrading the Eaton IPM Product

If you install a new Eaton IPM Release without uninstalling the old release, you will keep your database and your product settings. See "Nodes Upgrade" on page 74 for upgrade information. Also see "System Settings" on page 29 for information on configuring automatic upgrade.

Installing/Uninstalling the Eaton IPM (Command Line)

You can install or uninstall the Eaton IPM product from a command line in order to deploy the software in a group, with or without using the graphical interface. You can also configure protection settings from the command line.

Detail of available command options can be obtained using the following command:

```
<packageName> -help
```

<packageName> [COMMAND] [OPTION]...

The available commands are:

- install Launches the installation/upgrade process (default).
- uninstall Launches the process to uninstall the application.

The available options are:

- -debug Displays debugging information on the console.
- -silent Install the application silently.

Access the installation folder:

-dir <installPath>

Example

The command <packageName> -install -silent -dir "C:\Program Files\MyFolder" willinstall the Eaton IPM silently in C:\Program Files\MyFolder.

After the installation is completed, open a Web browser with the following URL:

http://<host>:4679/, where <host> is the host name or IP address of the machine hosting the Eaton IPM.

JRE Installation

The installation of the Java Runtime Environment is Operating System platform dependent. All new Eaton components have been developed tested for the Java version 1.6 or later. After installing the correct JRE, the Eaton IPM must be reloaded to take account this new environment (see "JRE Prerequisites" on page 2).

Chapter 2 Service and Support

If you have any questions or problems with the Eaton Intelligent Power Manager (IPM), call your **Local Distributor** or the **Help Desk** at one of the following telephone numbers and ask for a technical representative.

United States:1-800-356-5737Canada:1-800-461-9166 ext 260All other countries:Call your local service representative

Please have the following information ready when you call the Help Desk:

- Model number
- Serial number
- Version number (if available)
- Date of failure or problem
- Symptoms of failure or problem
- · Customer return address and contact information

If repair is required, you will be given a Returned Material Authorization (RMA) Number. This number must appear on the outside of the package and on the Bill Of Lading (if applicable). Use the original packaging or request packaging from the Help Desk or distributor. Units damaged in shipment as a result of improper packaging are not covered under warranty. A replacement or repair unit will be shipped, freight prepaid for all warrantied units.



For critical applications, immediate replacement may be available. Call the **Help Desk** for the dealer or distributor nearest you.

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