Eaton<sup>®</sup> Intelligent Power Manager<sup>®</sup> (IPM) **Quick Start Installation Manual** 











# **Class A EMC Statements**

## **FCC** Information

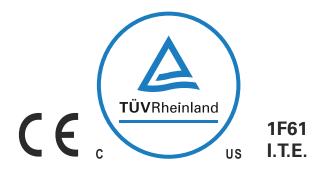
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, 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 Installation

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.

	NOTE 1	Please refer to the following installation information for operating system compatibility:
1		http://pqsoftware.eaton.com/install/common/eaton_os_compatibilities_cc.pdf
0	NOTE 2	Upgrade instructions are not included in this document. Refer to the "Nodes Upgrade" section in the <i>Eaton Intelligent Power Manager (IPM) User's Guide</i> for information about upgrading the IPM.

#### Introduction

The Eaton 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 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 computer 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



The UPS Management Software 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<sup>®</sup> Chrome<sup>™</sup>
- Mozilla Firefox<sup>®</sup>
- 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 Java Runtime Environment (JRE) must be installed on the system hosting Eaton IPM (see "JRE Installation" on page 14). 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	<ul> <li>see NOTE</li> </ul>	● see NOTE		
	Citrix XenCenter	•	•		
	Citrix XenServer	•	•		
	Vmware vCenter (legacy API)	•	•		
	Vmware ESX/ESXi (legacy API)	•	•		
Storage	NetApp Storage	—	•		
Server	Cisco UCS Manager	_	•		
	stem hosting is based on Microsoft operative operations for Microsoft" section.	iting system. Refer to <i>Eaton Intell</i>	igent Power Manager (IPM) U		

#### Table 1. JRE Virtualization, Storage, and ServerCitrix XenCenter

#### **JRE Installation**

The installation of the 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:

- 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 installation process begins and the License screen displays.

토 Eaton Intelligent	Power Manager Installer
FAT-N	Intelligent Power Manager
Powering Business	Worldwide V1.52
Welcome	Welcome to Eaton Intelligent Power Manager installer
License Select Path Installation Finish	Please check that your device communication is connected before proceeding with installation
	Cancel Next >

**Figure 2. Welcome Screen** 

3. Read the End-User License Agreement. Click Accept (see Figure 3). The Select Path screen displays.



Figure 3. License Screen

4. Browse your hard drive to select the product installation folder. Click **Install** (see Figure 4). After approximately two minutes, the Finish screen displays.

🗾 Eaton Intelligent	Power Manager Installer	
FAT-N	Intelligent Power Man	ager
Powering Business		v1.52
Welcome	Please select the product installation folder:	
License	C:\Program Files (x86)\Eaton\IntelligentPowerManager	
Select Path		
Installation		
Finish		
		_
	< Previous Cancel Install	

#### Figure 4. Select Path Screen

5. Click Finish (see Figure 5). The application launches and the Login screen displays.



**Figure 5. Finish Screen** 

6. Read the application description. Type the login and password and click Login (see Figure 6).

<b>NOTE</b> The default entry for login and password	d is <b>admin</b> .
<b>F:T•N</b> Intelligent Power Manager	
<ul> <li>What is Eaton Intelligent Power Manager?</li> <li>Ideal for monitoring and managing multiple power and environmental devices, Intelligent Power Manager software from Eaton delivers a global view across the network from any PC with an Internet browser.</li> <li>Exceptionally versatile, the software is compatible with any device supporting a network interface, including other manufacturers' UPSs, environmental sensors, ePDUs, shutdown applications and more.</li> <li>Intelligent Power Manager also offers the ability to organize a management table by groups, centralize alarms, and maintain event logs for preventive maintenance of the entire installed equipment base.</li> </ul>	Login: admin Password: •••••  Login

Figure 6. Login Screen

For security reasons, Eaton recommends that you change the default password immediately after 7. installation. Figure 7 shows the warning pop-up. Click **OK** to continue and change the default password.

1	NOTE	The new password must consist of eight or more characters.							
	ning u are using defau	It password. To enhance security, please modify it.							

Figure 7. Change Default Password Warning

### **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-MS (such as 66102 / 103006826) and Modbus-MS (such as 66103), PXGMS, PXGX-UPS, ConnectUPS BD, ConnectUPS X, ConnectUPS MS, Eaton Intelligent Power Protector (IPP) 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 8).

iews 🤍 🔕	Node L	ist								R Quick scan	
Rews         <           Ifews            Ifews	Type       Status       Name       Mac Addr       Description       Class ~       L         Image: Comparison of the comparison of t	Type Status Nam Status Nam O VM O nasc O nas	VM-VIRTU-DEV-A nas05 mbt lab etn c vesvi10 mbt lab etn vesvi11 mbt lab etn vesvi11 mbt lab etn	Windows NT/6,01.00         Infe           FAS2040         Net           Eaton SPX 3000         Net           Eaton SPX 3000         Net           Eaton SPX 3000         Net           VMware ESX 5.5.0 bu         VM           VMware ESX 5.5.0 bu         VM           VMware ESX 5.5.0 bu         VM	Intelligent Power Manage NetApp Release 8.127 Network Management Ca MBT Lab Network Management Ca MBT Lab Network Management Ca MBT Lab VMware ESXI VMware ESXI		Contact	Access a a dr a d	(a) (b) (b)	Address(es) scan Address(es) scan Address(es) scan Categories (es) scan	
G User List				م م م م م م م م م م م م م م م م م م م	(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)	Change driver node					

Figure 8. 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 9). The Shutdown menu selection displays in the Settings menu hierarchy list (see Figure 10).

Edit modules settings	×
🔽 Management	
Shutdown	
✓ Infrastructure Connectors	
Data Center Management	
☑ User drivers	
Redundancy	
Save Cancel	

Figure 9. Edit Modules Settings Dialog

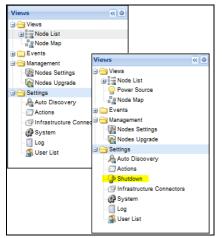


Figure 10. Shutdown Displays in the Settings Menu Hierarchy

- 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<sup>®</sup> Intelligent Power Protector<sup>®</sup> (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 11).

F:T·N	Intell	igent F	Power≋I	Manager						• Logout 'admin' • Help 📽	
Views	et @	Node List	-						0	Selection view	
3 🚭 Views		Type	Status	Name	Description	Location	Contact	t	Link	Information	- *
Node List			0	GREFRVMP6009092.mshome.net	Windows NT/6.01.01				۲	O UPS #006	
Contraction of the second seco		U.	0	GREFRVMP6009815	Windows NT/6.01.01				D		
Events List			0	GREFRVMP6009059	Windows NT/5.01.03				D	Description Nominal apparent	Evolution 850
Events Calendar			0	UPS #001	Eaton ePOU AM 1P IN EC309 32A OUT				۲	power P address	850 VA
Management     Nodes Settings			0	UPS #002	Evolution 650	Bureau Eric	Eric		D	Wac Address	00.20.05 / 8.56.16
Nodes Upgrade			0	UPS #003	Evolution 650	1A09	Luc		D	Serial number	AV2H370PD Network Management Card /
Auto Discovery			0	UPS #004	Eaton SPX 1500	Computer Room	Comput	ter Room Manager	•	Class	HB
Actions			٥	UPS #005	Eaton 5PX 2200	E lob	IVE		D	Location Contact	Computer Room Computer Room Manager
@ System		3	0	UPS #006	Evolution 850	Computer Room	Comput	ter Room Manager	D	Link	()
Log			0	STO #001	NetApp Release 8.0.2 7-Mode: Mon Ju	MTB-LABCOM01	aureler	nbegou@eaton.com	D	Status	-
an over clai			0	STO #002	Hardware: Intel64 Family 6 Model 26 St	Montbonnot	Aurele	nBegou	•	Battery state	Charging
			0	STO #003	Linux nas-netgear2100 2.6.37.6.RNx86	Unknown	reat		•	Power Source	On utility
			0	STO #004	BUFFALO TeraStation TS5400D Ver 2.0	Unknown	nobody	Gnoadmin	۲	Load level	111111111 12 % m
			0	STO #005	Linux RS812Syno 3.2.30 #3202 SMP Fr.	Labo Comm.	Aurele	n	<b>(b)</b>	Battery capacity	100 %
			0	ePOU #001	Eaton ePOU AM 1P IN EC309 32A OUT				<b>(</b> )	Battery run time	40 min 45 s
										Master output: Master Load segment #1: Group1 Load segment #2: Group2	
										Measures	•
										Graph - 2 hours	- 0
								Date:	05/0	3/2013 - 09:10:27	
								input voltage:		242 V	
								Load level		12 %	
								Battery capacity:	1	100 %	
								Battery run time:		48 min 45 s	
										08/03/2013 - 08:35:28 🥩	08/03/2013 - 10:35:28
										Powered Applications - 0 applications	a 🗆 +
										Events	0 -
										Status Date	Message
		14 4 Pa	ge 1 of 1 ≯	Pi 🤓 25 💌 Items per page					Displaying 1 - 15 of 15	07/03/2013-15:42:28	Communication failure
OK: 13	() Warni	ng: 0	Oritical: 0	O Unknown: 2 Last eve	ent: 🧿 08/03/2013 - 10:34:54 - GREFRWM	P6009815 - Reported communicati	on restored				

Figure 11. 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 when the computer boots 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. Refer to the *Eaton Intelligent Power Manager (IPM) User's Guide* "Nodes Upgrade" section for upgrade information. Also refer to the "System Settings" section in the same manual 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" will install 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 computer hosting the Eaton IPM.

# **JRE Installation**

The installation of the JRE is Operating System (OS) 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 6).

# 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.