

# Intelligent Power Manager

Integrated power management  
software for virtual environments



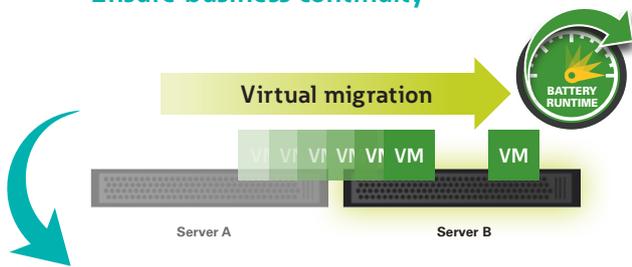
*Powering Business Worldwide*

[www.eaton.eu/intelligentpower](http://www.eaton.eu/intelligentpower)

# Bridging the gap between physical infrastructure and virtual IT

Eaton® Intelligent Power® Manager software (IPM) integrates seamlessly with your power hardware to provide unparalleled business continuity capabilities. It manages all network connected power infrastructure devices, including UPSs and rack based power distribution units (ePDU®s), triggers virtual machine migration plans and shuts down non-essential devices in order to keep your business running during power and environmental events.

## Ensure business continuity



## Automate business continuity

with flexible policies based on physical infrastructure events, including power and environmental conditions.

Define and execute sequential load shedding or disaster recovery policies for a VM, a vApp, or groups of VMs/vApps from directly within Intelligent Power Manager.

## Workload management

Remotely and gracefully shut down servers and select storage devices during a power event.

Prioritise and shed non-critical loads to extend runtime during an extended power outage.

Trigger VMware vMotion, Citrix XenMotion and other migration applications to transparently move virtual machines to an available server on the network.

## Failover

Trigger VMware Site Recovery Manager disaster recovery plans during a power outage.

## Power capping

Keep critical workloads running longer during a power outage by limiting server power consumption.

Install Eaton IPM and Infrastructure Management Pack for VMware vRealize® to manage the health, risk and efficiency of your power devices through vRealize.

Download at [www.eaton.com/downloads](http://www.eaton.com/downloads)

## Improve efficiencies and lower costs



## System integration:

Simplify setup and reduce the learning curve by conveniently integrating into existing virtual management systems, allowing you to spend time performing other critical tasks.

## Remote agentless host management:

Conserve valuable time when remotely shutting down servers by eliminating the need for agents that consume resources and slow performance.

## Integration into industry-leading virtualisation platforms

	VMware	Citrix	Nutanix Acropolis	Microsoft	Red Hat
Create flexible business continuity policies triggered by power and environmental events	★	★	★	★	★
Shutdown virtual machines	★	★	★	★	★
Trigger live migration	★	★			
Manage virtual machines and power through a single pane of glass	★	★			
Real-time notification of power outages	★	★	★	★	
Virtual desktop infrastructure integration	★	★			
Shutdown a host in a cluster without installing software on each host	★	★	★		
Virtual appliance	★	*	*	*	*
Disaster avoidance, recovery site backup	★				
Cost	Free up to 10 nodes (UPS or ePDU)				

\* OVF compliant; fully tested on VMware

# Intelligent Power Manager capability overview by license

Intelligent Power Manager (IPM) offers two editions — the Manage Edition and the Optimize Edition.

The Manage Edition is a free download for up to 10 power devices. Paid tiers are available for larger deployments.

The Optimize Edition—our premium offering—provides the most complete set of capabilities for implementing power

management strategies in virtual and hybrid environments including the ability to monitor and manage third-party power devices in addition to Eaton equipment.

Trial Licenses are available upon request. Please contact your local Eaton account representative or support team to obtain a trial license.

The table below outlines the capabilities of each edition.

Standard Power Management Features	Manage	Optimize	Benefits
Protected Servers (IPP) and Virtual Servers	✓	✓	Gracefully shutdown servers.
Storage Shutdown Module	✓	✓	Remotely shutdown select storage devices.
Generic Drivers and Third Party Devices	✓	✓	Monitor 3rd party devices via a generic SNMP driver.
Configuration Policy	✓	✓	Create power & environmental event business continuity policies for groups of devices.
Control ePDU outlets	✓	✓	Enable policy based control of ePDU outlets.
Advanced Event Action with Standard Events	✓	✓	Use standard power events in configuration policies.
Advanced Event Action with Custom Events	x	✓	Use custom user defined events in configuration policies.
Generic SSH action	x	✓	Easily configure custom actions on any SSH enabled device.
3rd party power device support	x	✓	Create business continuity policies on events generated by supported 3rd party devices.
Virtual Infrastructure Features	Manage	Optimize	Benefits
Plugin for VMware vCenter	✓	✓	Integrate power management into your vCenter environment.
Plugin for Citrix XenCenter	✓	✓	Integrate power management into your XenCenter environment.
Basic Power Actions: <ul style="list-style-type: none"> <li>• Shutdown Storage Devices</li> <li>• Shutdown Virtual Hosts</li> <li>• Shutdown Virtual Machines</li> <li>• Enter/Exit Maintenance Mode</li> </ul>	✓ *	✓	Perform basic graceful shutdown actions in business continuity policies by shutting down virtual machines, virtual hosts, shutting down select storage devices and/or by entering/exiting maintenance mode.
Advanced Power Actions: For VM/Volume: <ul style="list-style-type: none"> <li>• Load shedding</li> <li>• Shutdown Targeted Virtual Machines</li> <li>• Migrate Virtual Machines to Targeted Hosts</li> <li>• Automatic VM group assignment</li> </ul> For Hosts: <ul style="list-style-type: none"> <li>• Shutdown VMware vApp</li> <li>• Automate VMware SRM Recovery Plan</li> </ul>	x	✓	Reduce power load by integrating policy driven VM load shedding into your business continuity policies Target a specific VM or groups of VMs for shutdown and/or migration in load shedding policies Target VMware vApps for shutdown in load shedding policies Automatically trigger the execution of your VMware SRM Recovery Plan when runtime hits a predefined threshold.
Virtual IT Infrastructure Level: <ul style="list-style-type: none"> <li>• Fully virtualized VMware cluster shutdown</li> <li>• VMware vSAN shutdown</li> <li>• Nutanix Acropolis shutdown</li> </ul>	x	✓	Enable 100% safe shutdown and restore of VMs and host servers in high availability environments.
3rd Party IT Solution Connectors	Manage	Optimize	Benefits
Cisco UCS Manager	✓	✓	Dynamically power cap Cisco UCS devices in your business continuity policies
NetApp Storage	✓	✓	Trigger the shutdown of NetApp storage devices in your business continuity policies
VMware vCenter	✓	✓	Create business continuity policies to protect your vCenter clusters
VMware ESXi	✓	✓	Create business continuity policies to protect individual ESXi servers
Microsoft Hyper-V	✓	✓	Create business continuity policies to protect Hyper-V servers or clusters
Citrix XenCenter	✓	✓	Create business continuity policies to protect XenCenter environments
Citrix XenServer Pool	✓	✓	Create business continuity policies to protect XenServer Pool clusters
Nutanix Acropolis	x	✓	Create business continuity policies to protect Nutanix Acropolis clusters
OpenStack	x	✓	Power optimize the placement of VMs in Ubuntu OpenStack environments
HPE OneView	x	✓	Create business continuity policies to power cap HPE servers or groups of servers via OneView & iLO
Management Packs	Manage	Optimize	Benefits
Eaton IPM Management Pack for VMware vRealize Operations Manager	✓	✓	Monitor and analyze power information directly from within VMware vRealize

\* Not included for Eaton Essential UPS Models (9E and 93E) and all non Eaton UPS Models.  
 Competitor UPS support requires an Optimize Licence level to enable Basic and Advanced virtualization features.

# IT hardware integration

As virtualized environments grow in number, the demand for collaboration and integration among leading IT equipment providers becomes increasingly important. At Eaton, we have partnered with top IT vendors in the industry to provide customers a more unified, resilient IT architecture. Eaton's validated reference architecture provides customers with the peace of mind that these leading manufacturers have tested and validated our solutions.

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## VMware Technology Alliance Partner



- Eaton's IPM and Infrastructure Management Pack for vRealize Operations Manager are VMware Ready for Orchestration and Management



## Cisco Solution and DevNet Partner

- Cisco EnergyWise compliant managed rack PDUs
- Eaton's Intelligent Power Manager integrates directly with UCS server management to provide power-capping capability, enabling users to extend runtime by setting server consumption limits during extended power outages

[eaton.eu/cisco](http://eaton.eu/cisco)



## NetApp Alliance Partner

- Eaton's Intelligent Power Manager integrates directly with NetApp ONTAP operating systems to provide supervision and shutdown capability for FAS storage systems
- Reference designs and joint solution briefs for FlexPod systems

[eaton.eu/netapp](http://eaton.eu/netapp)



## Dell EMC Technology Connect Advantage Partner

- Eaton's Intelligent Power Manager, rack PDU and UPS are VSPEX Labs Validated
- Published VSPEX reference designs, solution overview, and joint solution brief
- Eaton's Intelligent Power Manager, rack PDU and UPS are Vblock Ready
- Only power vendor with reference designs for VxRail Systems

[eaton.eu/emc](http://eaton.eu/emc)



## HPE Alliance Partner

- Eaton IPM software is an HPE Composable Infrastructure Tested solution which integrates with HPE OneView to automate provisioning, configuration and monitoring of the power infrastructure.
- Reference design and joint solution brief for OmniCube and OmniStack solutions



## Nutanix Technology Alliance Partner

- Eaton's IPM, enclosures, rack PDUs and UPSs are Nutanix Ready, including AHV (Acropolis Hypervisor)
- Reference design and joint solution brief for Nutanix hyperconverged infrastructures

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