FlexPod Powered by Eaton

Eaton helps enhance the value of the FlexPod® data center platform by offering fully integrated, scalable solutions that simplify power management complexity in virtualized environments. Eaton's complete range of power infrastructure solutions includes power protection, power distribution, rack enclosures, cable management, and power management software. With Eaton's award-winning power management software, you can control power and equipment from your current virtual platform. Integrated power management provides you with a comprehensive solution to maintain uptime and enhance business continuity.

Eaton's power management solutions position you to take full advantage of the rewards of virtualization while mitigating its risks; you can migrate virtual machines onto unaffected host devices automatically during utility service interruptions. These solutions also allow you to shut down physical servers smoothly when such measures are unavoidable. Eaton Intelligent Power Manager™ (IPM) software extends network runtime, protects critical equipment, and allows you to view and manage your entire power infrastructure from your existing virtualization dash-board, making it the perfect power solution for FlexPod.

IPM works with the NetApp® Data ONTAP® operating system to allow you to monitor and manage FAS systems and facilitate a smooth shutdown to protect data integrity in the event of an extended power outage. By building on IPM's plug-in for VMware® vCenter Server™, which simplifies data center management by providing the ability to monitor and protect your entire power infrastructure directly from the vCenter dashboard, you can use IPM to manage power settings for FAS systems within the same pane of glass to get a streamlined view of IT assets.

IPM also works with Cisco UCS® server management, so you can prioritize and predetermine a power consumption limit on each server to extend battery runtime during an event.

The Challenge

Virtualization empowers businesses to lower hardware spending, simplify administration, and boost availability. For IT and facilities managers, however, virtualization introduces new challenges and opportunities. In particular, virtual-ization makes preventing downtime during utility failures dramatically easier—provided your data center is equipped with proper power manage-ment software—but it also adds new complexities to the demands

of avoiding data loss during electrical outages when shutting down servers is unavoidable. Downtime is enormously expensive, so a truly comprehensive power protection environment must be designed so that essential applications remain continuously available.
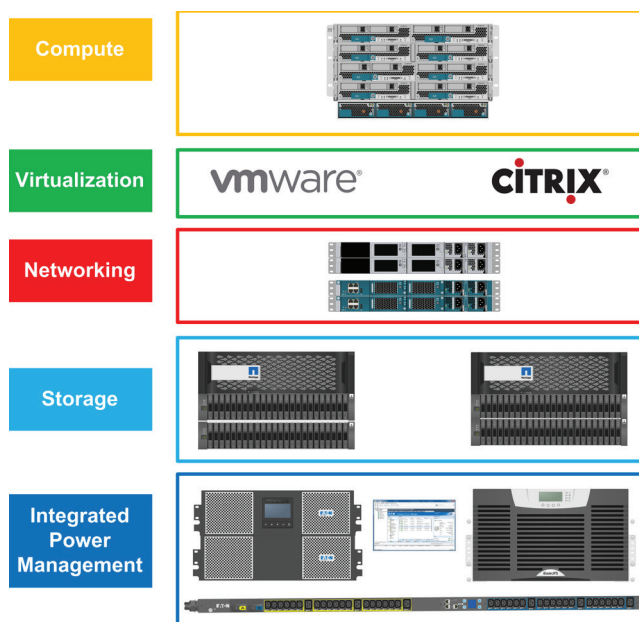
The Solution

Eaton's award-winning IPM software, along with our power protection and distribution solutions, integrates into FlexPod to monitor and manage power in the data center, measures power consumption to help calculate power usage effectiveness, and triggers live migration of virtual machines and smooth shutdown initiation during extended power outages.

IPM's integration with VMware and Microsoft® hypervisors in a FlexPod environment allows you to:

- Manage your power infrastructure through virtualization tools in use today.
- Maintain business continuity through disaster recovery initiation and load-shedding capabilities.
- Protect your IT investment from power anomalies and environmental threats.

Eaton: the 5th element of FlexPod

NetApp, Cisco and Eaton provide you the ultimate validated infrastructure solution. NetApp's performance-driven storage offering, in combination

Compute	
Virtualization	vmware® CITRIX®
Networking	
Storage	
Integrated Power Management	

POWER MANAGEMENT IS SO ESSENTIAL TO THE SAFE OPERATION OF CONVERGED INFRASTRUCTURE THAT IT SHOULD BE REGARDED AS THE FIFTH ELEMENT OF FLEXPOD SOLUTIONS.

with Cisco's advanced compute and networking and Eaton's class-leading power management solutions, provide the premier integrated solution you need to reduce deployment time, project risk, and the cost of IT.

Eaton's IPM software, combined with NetApp ONTAP operating system and Cisco UCS server management, provides supervision, extends runtime during extended outages and provides shutdown capability when required. Seamlessly integrating into leading hypervisors, such as VMware vCenter,

to initiate virtual machine migration and disaster recovery site failover in the event of an extended power outage to ensure the data integrity of the FlexPod data center platform.

For more information on Eaton power management solution for FlexPod, visit *www.eaton.com/flexpod*.

ABOUT EATON

Eaton is a power management company with 2013 sales of $22.0 billion. Eaton provides energy-efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. For more information, visit www.eaton.com.

ABOUT NETAPP

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future. www.netapp.com.