According to a recent study by The Green Grid, data center operators are often unsure of how to assess the full business value of using power management features. This may include overlooked cost savings in capital, operating, and power expenditures. Additionally, the wide variety of servers and applications within a data center can make it difficult to find and implement a unified solution for monitoring and managing power utilization across the entire data center. Recent events around the world, including electrical brownouts in the US and the earthquake in Japan, combined with the sky-rocketing costs of energy in Europe, have placed the importance of obtaining, analyzing and managing power information at an all-time high.

Dell OpenManage Power Center provides the increased visibility you need to intelligently manage your power consumption, reduce risks in your data center, and apply policies customized to fit your unique business needs.

Delivering key benefits in a simplified form factor

- Detailed measurement of energy consumed by the IT equipment inside your rack(s): You can’t manage what you can’t measure, and Power Center gives you the information you need, both in graphical and report forms, to track improvement and energy savings in the short term and over time.

- Mitigate risk by reducing power consumption per your defined policy or policies: Power Center helps maximize uptime of business-critical applications by reducing non-critical consumption (and performance) first. During a critical event, such as brownout or chiller failure, your pre-defined power capping policies will be applied, ensuring server uptime.

- Increased rack density, fully utilized IT equipment and reduced stranded power: Power Center allows you to implement a rack-level power cap policy. This enables you to safely increase data center density by identifying racks where the IT equipment is not fully utilizing the power capacity available.

- Increased visibility and management for temperature or power fluctuations: Using Power Center, you can monitor and track room temperature, reduce consumption on nights and weekends, and reduce consumption to reduce heat in the room or to lengthen the up-time if running on UPS battery.

- Increased control and management through grouping and prioritization: Power Center allows you to implement a Dynamic policy that delivers power to servers—based on priority, while staying within the overall cap. If a rack is reaching the power limit, power will be diverted from low-priority servers to high-priority servers to maintain their service levels.

- Increased uptime through real-time consumption reduction: An emergency power reduction action will lower power consumption at all the servers you select to minimize power usage and reduce heat output during a cooling emergency. This power reduction can be maintained, giving you continued uptime for as long as the cooling emergency lasts. When cooling is restored, it is simple to remove the emergency status and go back to normal operations.

Dell’s power management solution, Dell™ OpenManage™ Power Center, provides increased visibility to power consumption, anomalies, and utilization through fine-grained instrumentation. This enables increased control, improved rack density, faster response times, greater accuracy, and broader decision-making intelligence.

February 2012

Dell iDRAC7 Enterprise, OpenManage Power Center and Intel® Node Manager work together to resolve the problem of delivering accurate, timely and reliable information on power use, making it easy for IT professionals to identify areas to gain efficiencies and cut wasteful costs.
Power savings with OpenManage Power Center

OpenManage Power Center delivers a new level of detail and available historical information, allowing IT managers to confidently make improvements in power-consumption efficiency while minimizing the risk of impacting service levels.

Dell iDRAC7 Enterprise leverages Intel Node Manager technology for platform-level power reporting and capping of Intel chipsets. Power Center then communicates with iDRAC7 in Dell’s latest generation of servers to provide node, rack, row or data-center-level aggregation of power-management data, as well as execution of control policy. iDRAC7 Enterprise, OpenManage Power Center and Intel Node Manager work together to resolve the problem of delivering accurate, timely and reliable information on power-use. They make it easy for IT professionals to identify the areas where they gain efficiencies and cut wasteful costs.

Requirements to host Power Center

Minimum requirements for best performance:
- One dual-core processor, 2.6GHz or higher
- 4GB RAM
- 60GB hard-drive space


Devices monitored: agent-free, any operating system

The following devices can be discovered on the network using Power Center:
- Dell PowerEdge servers through IPMI servers (both previous and current generation)
- Metered or Managed PDU and UPS through SNMP
- Dell PowerEdge M1000e chassis enclosure through WSMAN

Downloading Power Center

OpenManage Power Center can be downloaded at www.Dell.com/PowerCenter.

The following download requirements apply:
- OpenManage Power Center is a downloadable application that can be hosted anywhere you choose, as long as the location is reliable and has network access to the devices being monitored.
- OpenManage Power Center can be downloaded for a free 60-day trial. After the 60 days, there is no additional charge, but a brief registration process is required to continue to have access to Power Center.

Power Center is best utilized in collaboration with Dell iDRAC7 Enterprise.