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Solution Brief



Maximize Power Visibility and Control for Poweredge Servers

Optimize your IT power infrastructure

Every day we are constantly pushing the limits of data center infrastructure. We continue to innovate and meet market demands but inevitably after effects occur. High expectations for high performance ultimately produce high power consumption. It is critical now more than ever to have reliable uninterrupted power to prevent downtime. Dell OpenManage Enterprise Power Manager was designed with uptime in mind and provides visibility to your power consumption. Power Manager lets you view, measure and control server power consumption and increase your infrastructure's performance. With Power Manager enabled, you can expand your decision-making intelligence and identify areas to gain efficiencies and reduce costs.

Monitored Devices and Preferences

OpenManage Enterprise Power Manager offers a comprehensive list of preference settings to meet your personalized monitoring needs. Once your preferences have been set, you can collect data from various devices that have been added to Power Manager. You can easily monitor power, temperature, CPU, and thermal health of both individual and groups of servers. By utilizing the full monitoring capabilities within Power Manager, you will have control of power levels and capacity to confidently make power saving decisions.

Grouping and Control

Being in control of power consumption across groups of devices is critical to having a healthy IT infrastructure. Power Manager in conjunction with OpenManage Enterprise streamlines the grouping process and simplifies data collection. The grouping feature is perfect for managing both simple and complex infrastructures. Whether you have 10 servers or 8,000, grouping lets you personalize and prioritize the viewing and power control experience. You can easily create, customize, edit and delete device groups within the OpenManage Enterprise interface and access them with the Power Manager.

Policy and Alerts

Sometimes having access to critical data and information is simply not enough. Power Manager delivers personalization by letting you set, create, edit and delete power and thermal alert thresholds for individual or groups of devices. This notification feature brings peace of mind when visibility and uptime are critical. You can also create, enable and disable policies to ensure that the power consumption on a device or a group does not exceed a certain value. By setting certain policies, you can throttle power during low load hours and maximize power during peak hours. This flexibility is a significant factor for optimized power consumption.

Metrics and Reporting

It can often be difficult to sift through large amounts of data to uncover what you are looking for. When Power Manager is enabled, you can set the metrics that are important to you and generate reports containing the results. These metrics and reports can easily be created, edited and emailed to those who need it. The metrics and reporting features are great for device history and record keeping.

Map and Reduce Carbon Emissions

OME Power Manager gives you the insight you need to reduce your carbon footprint by monitoring and reporting carbon emissions as it relates to PE usage. New reports map the carbon emissions, PUE, and idle/underutilized servers. Capping power and re-purposing/ removing idle servers can reduce the emissions related to usage.

Power Manager Features and Benefits

Features	Technical Specifications
Power Monitoring, Alerts, Management, Reporting – groups (rack, row, room, custom) or individual server	 Know the power health of the servers - group and/or individual server. Prevent outages, reduce carbon footprint, decrease power and cooling costs. Move servers into production faster by knowing where there is power headroom Know your CO₂ Emissions as it relates to PowerEdge usage Identify the idle servers for repurposing or removal
Thermal Alerts, Monitoring, Reporting	 Know the thermal health of the servers - group and/or individual server. Prevent outages. Move servers into production faster – know the thermal headroom of the racks/rows.
Power Capping	Policy base power capping at rack, row, and custom group level
Power reporting at the group level or individual sever	Accurately reflect the power charges for entitiesView and report the subcomponent power usage
CUPs information (CPU Usage, I/O usage, memory usage)	 Identify zombies/ghosts/underutilized servers to be removed or repurposed. You can also review information for workload balancing and customer chargeback. Compare the metrics over timeframes or compare one server to another.
Reduce the need for Smart PDUs	By creating Power capping policies, you can reduce/remove the need for expensive smart PDUs.
Dashboard	Visualize historical trend of metrics data in form of various charts and graphs.
Emergency Power Reduction (EPR)	Immediately reduce power with a single button to the minimum required power for server racks, rows, room when an unexpected event such as power switches to UPS or temperature climbing.
Integrated console for OME and Power Manager and intuitive UI	OpenManage Enterprise offers an intuitive UI that Power Manager integrates for power and thermal specific management.
VM Power Mapping	Display power consumption of virtual machines on a PowerEdge server

OpenManage Enterprise Integration

Dell OpenManage Enterprise Power Manager is an extension to Dell OpenManage Enterprise console. This plugin is a vital piece of the OpenManage portfolio and provides seamless integration. You can access power information with the Power Manager plugin interface or through a widget on the OpenManage Enterprise dashboard. By integrating with one unified tool, you can manage your power consumption effortlessly while maximizing uptime from virtually anywhere on the globe.



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