

Nominee: DCPM by Racktivity

Nomination title: Reduce opex and maximize uptime thanks to DCPM the data centre power

One of the major data centre challenges today is the increasing cost of electricity. Over the past decade the cost of electricity has increased significantly and this trend is not expected to fade away soon. Industry data and studies mention power costs can account for over 50% of the total data centre operational cost. In addition to controlling operational expenses the need to achieve close to 100% uptime is shifting from a service to a pure necessity, one may even say a commodity. For companies, data centre downtime can translate in a hit on credibility, lost revenues, lowered stock value and/or lost customers. So data centres are faced with the challenge to ensure a maximum of uptime and service whilst keeping energy cost under control. To overcome these challenges, data centres have in general three choices:

- expand power and cooling capacity
- build new data centres
- deploy a power management solution that analyses, maximizes and improves the usage of existing capacity

As the first two options require major investments and other resources, data centres should invest in the third. According to the Uptime Institute's survey results regarding data centre business priorities for 2013 (see

http://uptimeinstitute.com/images/stories/NA_Network/Top_10_DC_Business_Mgt._Priorities/UIN_Top_10_Mgmt_Priorities_for_2013.pdf), 52% of the data centre owners cite the need to improve metrics for power-usage effectiveness and uninterruptible power supply, as well as those related to network and rack operations. 32% of all participants said capacity planning for critical resources such as power, cooling and rack space are increasingly of strategic important. In order to truly drive data centre performance with maximized availability and energy efficiency, the management team requires detailed insights and control of the various electrical power and environmental metrics, both on IT level and on facility level.

Racktivity's DCPM (Data Centre Power Management System) software is a mission-critical data centre management software designed to address the specific power (both on IT and facility level) and environmental aspects of the data centre infrastructure. By providing the data centre with the most accurate and detailed metrics they are able to maximize productivity, availability and efficiency, all through the DCPM software suite.

*** REDUCE OPEX**

Knowing what devices are consuming most of the energy, detecting idle, underutilized or power ineffective servers and finding out where they can save on energy has a direct impact on the bottom line and carbon footprint of any data centre. With the IT equipment, the most significant savings are normally found in what is the biggest source of waste in most data centres: poor server utilization. DCPM provides data centres with the right information to correlate between the power usage for a specific server and the CPU & memory usage of that same server, helping data centres identify the

worst performing servers and appliances. It delivers the tools to re-distribute the applications over fewer servers with as a consequence better utilization of resources. Successful consolidation initiatives can reclaim a considerable amount of rack space and stranded power. Depending on the specific needs of the data centre, DCPM can provide detailed analyses such as carbon footprint, power capacity management, PUE, power consumption of each individual server, aggregated data across multiple servers/appliances, complete data centres or even multiple data centres. For the data centre facility itself, the most significant savings are normally to be found in the cooling system. Much of the cooling power can be reclaimed by eliminating cooling inefficiencies. Thanks to DCPM and its predictive character, the data centre can simulate power usage forecasting and the impact of temperature changes in efficiency, allowing them to set up an automated cooling control system.

* INCREASE THE SERVICE LEVEL AND CUSTOMER LOYALTY OF THE DATA CENTRE

The numbers tell the tale. The better you measure, the better you are informed and consequently take the most appropriate decisions. Having the capability to measure power usage and power quality in the most accurate way, from source (enter the data centre) down to the mouth: individual power outlet or sensor and everything in between, giving the data centre the right tools at hand to provide correct billing information to their customers.

* PLAN CAPACITY

Enterprises rely on data centres to meet their continuous growth objectives, therefore rigorous and well-thought capacity planning and management is critical to each data centre allowing them to accommodate both the expected and unexpected needs of their customers business. Thanks to the right and accurate metrics, provided by DCPM, data centres can manage capacity planning for both contingencies and planned growth, bringing significant cost and space saving.

* SCALABLE

The DCPM platform offers data centres a user-friendly interface where they can integrate virtually any single power consumer, whether it is a Ractivity power measuring device, or a third party device. DCPM offers data centres a holistic, full end-to-end solution: from the entering power supply down to the single power outlet. The power in DCPM lays in its flexibility. The user itself defines how detailed he approaches the power & environmental metrics offered to him via DCPM. DCPM provides data centres the required and most accurate data to:

- Pro-actively prevent downtime by creating customized warnings & alarms
- Predict power usage trends to avoid downtime
- Reduce OPEX
- Plan capacity Because fore-warned is fore-armed.

Why nominee should win

- FOCUS ON POWER & ENVIRONMENTAL: Addresses power & environmental aspects of the DC infrastructure: reducing opex & maximizing uptime
- BOTH IT & FACILITY: Covers IT level and facility level, allowing DC to save in both areas
- ACCURACY: Access remotely, at any time, the most detailed & accurate metrics enabling DC to correctly manage energy consumption

- SCALABLE: Offers a global view allowing you to drill down to the individual power outlet or sensor and everything in between
- PREDICTABLE: A predictable and prescriptive capacity, allowing DC to simulate and automate events in order to save on energy and improve uptime