

From: Marc Banks
Sent: Friday, July 03, 2009 10:41 AM
To: storage@energystar.gov
Subject: Deutsche Bank comments on the ENERGY STAR Enterprise Storage Specification Framework

To: Andrew Fanara, EPA.

Deutsche Bank welcomes the EPA's efforts to development industry standard ratings for eco-efficiency of IT equipment, and specifically the development of an ENERGY STAR specification for enterprise storage.

Building Block #2:

We would suggest that it may be more effective to restrict the scope of the tier 1 specification to "DAS" and "NAS" as proposed but only for "hard disk" and "solid state" technologies. We suggest that having a separate category for "blade storage" may not be useful.

Building Block #3:

We welcome the EPA's wish to develop a test procedure to measure energy consumption under load. As part of this we welcome the wish to differentiate and define different workload scenarios for storage equipment. We would encourage use of industry standards where available, but would be in favour of an own development if this proves necessary, rather than have no definition.

As per the server specification, we do not consider power at idle to be a useful benchmark of energy efficiency, unless in the case of storage it can be shown that power usage at idle is a useful predictor of power consumption under load.

We welcome the the desire to define utilisation of storage equipment. Data centre IT utilisation is a key component of overall data centre efficiency, where this could be defined as "data centre facilities efficiency X IT hardware power efficiency X IT hardware utilisation" (where X means multiplied by - all values must be in percentage form for this formula to be meaningful). Due to this multiplier effect, even small improvements in utilisation can have a large overall impact on overall data centre efficiency. We would therefore also welcome inclusion in the ENERGY STAR specification provision for consideration of any features that improve overall utilisation of storage equipment.

Mit freundlichen Grüßen / Best regards
Marc Banks

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