

## SNIA Comments on ENERGY STAR® Data Center Storage V2.0 Draft 2

This document presents the comments of the SNIA Green Storage Technical Working Group and SNIA Green Storage Initiative on the ENERGY STAR Data Center Storage V2.0 Draft 2.

*Response dated 03/20/2020*

### About SNIA

The Storage Networking Industry Association is a not-for-profit global organization, made up of member companies spanning the global storage market. SNIA's mission is to lead the storage industry worldwide in developing and promoting standards, technologies, and educational services to empower organizations in the management of information. To this end, the SNIA is uniquely committed to delivering standards, education, and services that will propel open storage networking solutions into the broader market. For additional information, visit the SNIA web site at [www.snia.org](http://www.snia.org).

The SNIA comments represent the technical work and viewpoints of the Green Storage Initiative (GSI) <http://www.snia.org/forums/green> and the Green Storage Technical Working Group (TWG) [http://www.snia.org/tech\\_activities/work/twgs/](http://www.snia.org/tech_activities/work/twgs/). Collectively, the TWG and GSI represent over 19 companies and several individual subject matter experts. Collectively, the SNIA is a well-established subject matter voice for the multi-billion dollar a year global storage and information management industry. SNIA is also the developer of the SNIA Emerald™ Specification and the SNIA Emerald™ Program, which are test and measurement method underpinnings for the EPA Energy Star Data Center Storage Specification.

Contacting SNIA for further discussion about this response can be arranged through SNIA Green Storage TWG and GSI leaders Herb Tanzer, Don Goddard, and/or Wayne Adams, with contact information on file with the ENERGY STAR Program Management Team. Alternatively, email can be sent to [emerald@snia.org](mailto:emerald@snia.org).

### Comments

The SNIA Green Storage Initiative and SNIA Green Storage Technical Working Group have reviewed and discussed ENERGY STAR Data Center Storage V2.0 Draft 2 and offer the following comments, organized by document section.

### Section 2.1 Included Products, subsection iii:

SNIA recommends changing the text from:

are characterized within the Disk Set Online categories 2, 3, or 4 and NVSS Set Disk Access categories 2, 4, and 4 with the following additional criteria;

to:

are characterized within the Disk Set Online categories 2, 3, or 4 and NVSS Set Disk Access categories 2, 3, and 4 with the following additional criteria;

### Section 3.2 Power Supply Requirements, subsection 3.2.2 ii Power Factor:

SNIA recommends changing the text under PSU Type from:

Redundant and Non-Redundant Capable PSU

to:

Single Output and Multiple Output PSU

### Section 3.6 Information Reporting Requirements, subsection 3.6.2 Workload Weighting Requirements, line 406:

SNIA recommends changing (per Table 7) to (per Table 8).

### Section 3.6 Information Reporting Requirements, subsection 3.6.2 Workload Weighting Requirements, lines 408 – 410:

SNIA recommends deleting:

The same weighting of the sums should also be used for subsequent certification measurements (e.g. determining optional flexible or mixed certification ranges).

as mixed certification ranges are no longer used.

### From the Webinar March 4, 2020 questions

- Is there a need to set a minimum ratio of SSD to HDD for hybrid systems?

SNIA recommends that no minimum is required as the requirement in subsection 4.2.1, ii will serve to keep low SSD counts in hybrid systems from qualifying if they do not meet the requirements.

- Status of Emerald 4.0?

SNIA anticipates publishing another working draft by the end of March. The Final draft (minor edits, no changes to section numbering) is expected to be published by the End of April. That begins the 3-month SNIA approval process which is expected to result in the Emerald V4.0 being published in the July 2020 time frame.

As there are no limits for File systems, it is assumed that it is only required to report data for File Systems.