

To: T10 Technical Committee
 From: Thin Nguyen (thin_nguyen@hp.com) and Rob Elliott (elliott@hp.com), HP
 Date: 28 June 2002
 Subject: T10/02-249r0 SES-2 Nonvolatile Cache Element cache size

Revision History

Revision 0 (28 June 2002) first revision

Related Documents

ses2r00 - SCSI Enclosure Services - 2 revision 00

Overview

Currently there is no way to determine the size of the Nonvolatile Cache element. Users and management applications would be better informed and be able to better manage the various related components if the size of the cache element in the enclosure was available.

Suggested Changes

This proposal provides for a mechanism to report the size of the NV cache available in the enclosure.

7.3.11 Nonvolatile Cache element

...

The format of the STATUS INFORMATION field for a Nonvolatile Cache element is defined in table 50.

Table 50 — Nonvolatile Cache element for Enclosure Status diagnostic pages

	7	6	5	4	3	2	1	0
0	COMMON STATUS							
1	Reserved						<u>SIZE MULTIPLIER</u>	
2	<u>(MSB)</u>		<u>NONVOLATILE CACHE SIZE</u>					
3							<u>(LSB)</u>	

The NONVOLATILE CACHE SIZE field and the SIZE MULTIPLIER indicate the approximate size of the nonvolatile cache. The SIZE MULTIPLIER field defines the units of the NONVOLATILE CACHE SIZE field.

Table x. SIZE MULTIPLIER field

<u>SIZE MULTIPLIER value</u>	<u>Units of NONVOLATILE CACHE SIZE field</u>
<u>00b</u>	<u>Bytes</u>
<u>01b</u>	<u>Kilobytes (2¹⁰ bytes)</u>
<u>10b</u>	<u>Megabytes (2²⁰ bytes)</u>
<u>11b</u>	<u>Gigabytes (2³⁰ bytes)</u>

Failures of the Nonvolatile Cache may require immediate changes in the operating mode of elements in the enclosure. Information in the cache may be corrupted after such a failure.