

To: T10 Technical Committee
 From: Rob Elliott, HP (elliott@hp.com)
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 Subject: 07-092r0 SES-2 Additional Element Status Bay Number for Fibre Channel

Revision history

Revision 0 (28 February 2007) First revision

Related documents

ses2r15 - SCSI Enclosure Services - 2 (SES-2) revision 15

Overview

The Additional Element Status descriptor for SAS Array Device and Device elements includes a BAY NUMBER field, to indicate the bay number that the user uses to identify the bay. This is helpful in differentiating between enclosures that number their drive bays starting with 0 vs. those starting with 1.

The BAY NUMBER field should be included in the Array Element Status descriptor for Fibre Channel as well.

Suggested changes to SES-2

6.1.13.2 Additional Element Status descriptor protocol-specific information for Fibre Channel

The Additional Element Status descriptor is used to describe a Device element or an Array Device element that may contain a Fibre Channel device.

Table 27 defines the Additional Element Status descriptor protocol-specific information for Fibre Channel devices (see FCP-3) with the EIP bit set to one.

Table 27 — Additional Element Status descriptor protocol-specific information for [Device and Array Device elements for Fibre Channel](#) with the EIP bit set to one

Byte\Bit	7	6	5	4	3	2	1	0	
0	NUMBER OF PORTS								
1	Reserved								
2	Reserved								
3	Reserved BAY NUMBER								
4	(MSB)	NODE NAME							
11								(LSB)	
Port descriptor list									
12	Port descriptor (first)(see table 29)								
27	...								
y - 15	Port descriptor (last)(see table 29)								
y									

Table 28 defines the Additional Element Status descriptor protocol-specific information for Fibre Channel devices (see FCP-3) with the EIP bit set to zero.

Fibre Channel device. This format does not include the two extra bytes that are in table 27

Table 28 — Additional Element Status descriptor protocol-specific information for [Device and Array Device elements for Fibre Channel with the EIP bit set to zero](#)

Byte\Bit	7	6	5	4	3	2	1	0
0	NUMBER OF PORTS							
1	Reserved							
2	(MSB)	NODE NAME						(LSB)
9								
Port descriptor list								
10	Port descriptor (first)(see table 29)							
25	...							
y - 15	Port descriptor (last)(see table 29)							
y								

The NUMBER OF PORTS field indicates how many Fibre Channel ports are in the port descriptor list. There is one port descriptor for each port.

[The BAY NUMBER field, if any, indicates the number of the bay represented by the Device element or Array Device element.](#)

The NODE NAME field contains the node Name_Identifier of the corresponding Fibre Channel node.

Table 29 defines the port descriptor.

Table 29 — Port descriptor

Byte\Bit	7	6	5	4	3	2	1	0
0	PORT LOOP POSITION							
1	Reserved							
3								
4	PORT REQUESTED HARD ADDRESS							
5	(MSB)	N_PORT IDENTIFIER						(LSB)
7								
8	(MSB)	N_PORT_NAME						(LSB)
15								

The PORT LOOP POSITION field indicates the position of the corresponding Fibre Channel port on a Fibre Channel Arbitrated Loop.

The PORT REQUESTED HARD ADDRESS field contains the Fibre Channel Arbitrated Loop requested hard address of the corresponding Fibre Channel port.

The N_PORT IDENTIFIER field contains the address identifier of the corresponding Fibre Channel port. Applications may compare the lower 8 bits of this field with the PORT REQUESTED HARD ADDRESS field to determine whether the port was assigned its requested address.

The N_PORT_NAME field contains the Name_Identifier of the corresponding Fibre Channel port.