

To: T10 Technical Committee
 From: Rob Elliott, HP (elliott@hp.com)
 Date: 3 March 2007
 Subject: 07-104r0 SES-2 Remove IDENT bit from nonsensical elements

Revision history

Revision 0 (3 March 2007) First revision

Related documents

ses2r15 - SCSI Enclosure Services - 2 (SES-2) revision 15
 02-192 SES-2 IDENT bit for each element (Dennis Spicher and Rob Elliott, HP) - incorporated into SES-2 revision 1

Overview

02-192 added RQST IDENT and IDENT bits to most of the SES-2 elements to control a visual identification indicator.

However, this functionality does not make sense for two elements:

- a) the Language element does not represent a physical entity
- b) the Simple Subenclosure element manages a subenclosure other than the primary subenclosure that does not support anything but the Short Enclosure Status diagnostic page. If used as a primary subenclosure, it would not provide any mechanism for identification control, so it is unlikely to offer that when not primary.

The RQST IDENT and IDENT bits should be reverted to Reserved (or perhaps Restricted) for those elements. Obsolete is not appropriate since the bits were not defined in SES-1.

Suggested changes to SES-2

7.3.18 Language element

The Language element manages the language used for visual displays.

The format of the control field for a Language element is defined in table 104.

Table 104 — Language element for control-type diagnostic pages

Byte\Bit	7	6	5	4	3	2	1	0
0	COMMON CONTROL							
1	RQST IDENT Reserved	Reserved						
2	(MSB)							
3	LANGUAGE CODE							(LSB)

The COMMON CONTROL field is specified in 7.2.2.

~~A RQST IDENT (request identify) bit set to one specifies that the enclosure services process identify the element by a visual indication. A RQST IDENT bit set to zero specifies that the enclosure services process not identify the element by a visual indication.~~

The LANGUAGE CODE field specifies the language and character encoding to be used in all fields that are defined as being modified by the Language element. The enclosure should provide external indications in the requested language.

If the LANGUAGE CODE field contains:

- a) 0000h: the enclosure services process shall use the default language of English with the US-ASCII character set encoding as defined by ISO/IEC 8859-1 (i.e., encoded as 8-bit characters with each MSB set to zero);
- b) two characters containing the ISO 639-1 two-letter code for a language that is supported by the enclosure services process (e.g., “en” for English, “fr” for French, “de” for German, or “jp” for Japanese) expressed as US-ASCII characters as defined by ISO/IEC 8859-1 (i.e., encoded as 8-bit characters each with its MSB set to zero): the enclosure services process shall use UCS-2 as defined by ISO 10646-1 (i.e., encode using 16-bit characters); or
- c) a value other than 0000h or the two-letter code of a language that is supported by the enclosure services process: the enclosure services process shall use the default language of English with the US-ASCII character set encoded as defined by ISO/IEC 8859-1 (i.e., encoded as 8-bit characters with each MSB set to zero) and shall report an invalid field error (see 4.5).

The format of the status field for a Language element is defined in table 105.

Table 105 — Language element for status-type diagnostic pages

Byte\Bit	7	6	5	4	3	2	1	0
0	COMMON STATUS							
1	IDENT Reserved	Reserved						
2	(MSB)							
3	LANGUAGE CODE							(LSB)

The COMMON STATUS field is specified in 7.2.3.

~~An IDENT (identify) bit set to one indicates that the enclosure services process is currently identifying the element by a visual indication because the RQST IDENT bit was set to one in the control type diagnostic page. An IDENT bit set to zero indicates that the enclosure services process is not currently identifying the element by a visual indication based on the RQST IDENT bit in the control type diagnostic page, or a visual indication is not implemented.~~

The LANGUAGE CODE field indicates the language and character encoding that the enclosure services process uses for those fields that have the capability of being modified by the Language element. A LANGUAGE CODE field set to 0000h indicates the enclosure services process is using the default language of English and the US-ASCII character set encoded as defined by ISO/IEC 8859-1 (i.e., encoded as 8-bit characters with each MSB set to zero). A LANGUAGE CODE field set to an ISO 639-1 two-letter code (e.g., “en” for English, “fr” for French, “de” for German, or “jp” for Japanese) expressed as US-ASCII characters as defined by ISO/IEC 8859-1 (i.e., encoded as 8-bit characters each with its MSB set to zero) indicates the enclosure services process is using the indicated language and is using UCS-2 as defined by ISO/IEC 10646-1 (i.e., encoding using 16-bit characters).

7.3.19 Simple Subenclosure element

The Simple Subenclosure element manages a subenclosure that only provides the Short Enclosure Status diagnostic page (see 6.1.11).

The format of the control field for a Simple Subenclosure element is defined in table 106.

Table 106 — Simple Subenclosure element for control-type diagnostic pages

Byte\Bit	7	6	5	4	3	2	1	0
0	COMMON CONTROL							
1	RQST IDENT Reserved	Reserved						
2	Reserved							
3	Reserved							

The COMMON CONTROL field is specified in 7.2.2.

~~A RQST IDENT (request identify) bit set to one specifies that the enclosure services process identify the element by a visual indication. A RQST IDENT bit set to zero specifies that the enclosure services process not identify the element by a visual indication.~~

The format of the status field for a Simple Subenclosure element is defined in table 107.

Table 107 — Simple Subenclosure element for status-type diagnostic pages

Byte\Bit	7	6	5	4	3	2	1	0
0	COMMON STATUS							
1	IDENT Reserved	Reserved						
2	Reserved							
3	SHORT ENCLOSURE STATUS							

The COMMON STATUS field is specified in 7.2.3.

~~An IDENT (identify) bit set to one indicates that the enclosure services process is currently identifying the element by a visual indication because the RQST IDENT bit was set to one in the control-type diagnostic page. An IDENT bit set to zero indicates that the enclosure services process is not currently identifying the element by a visual indication based on the RQST IDENT bit in the control-type diagnostic page, or a visual indication is not implemented.~~

The SHORT ENCLOSURE STATUS field contains the contents of the SHORT ENCLOSURE STATUS field of the Short Enclosure Status diagnostic page (see 6.1.11) from the specified subenclosure.