

To: T10 Technical Committee
 From: Kevin Marks and Steven Chin - Dell, Inc.
 Date: July 8, 2005
 Subject: T10/05-262r0 - SPC-4: ASC/ASCQ for Media Thread Failures

Revision History

Revision 0 (07/08/05) – Initial proposal

Related Documents

SCSI Primary Commands - 4 (T10/1729-D - SPC-4r00)

Overview

Dell sees a need to define an ASC/ASCQ to standardize the tape drives response when a media thread failure occurs. A media thread failure is defined as a failure to thread the media during a load/mount operation, generally referred to as a drop leader, miss pick, buckle failure, etc depending on tape technology and vendor. This allows diagnostic software and in the future, tape software to quickly identify what the specific failure is instead of the commonly used HARDWARE ERROR/ INTERNAL TARGET FAILURE.

Suggested Changes:

Add new row to the Additional Sense Code table in the current ANNEX D.2, Table D.1 of SPC-4.

Table D.1 — ASC and ASCQ assignments

		D - DIRECT ACCESS BLOCK DEVICE (SBC-2)										Description				
		. T - SEQUENTIAL ACCESS DEVICE (SSC-2)														
		. L - PRINTER DEVICE (SSC)														
		. P - PROCESSOR DEVICE (SPC-2)														
		. W - WRITE ONCE BLOCK DEVICE (SBC)														
		. R - CD/DVD DEVICE (MMC-4)														
		. O - OPTICAL MEMORY BLOCK DEVICE (SBC)														
		. M - MEDIA CHANGER DEVICE (SMC-2)														
		. A - STORAGE ARRAY DEVICE (SCC-2)														
		. E - ENCLOSURE SERVICES DEVICE (SES)														
		. B - SIMPLIFIED DIRECT-ACCESS DEVICE (RBC)														
		. K - OPTICAL CARD READER/WRIER DEVICE (OCRW)														
		. V - AUTOMATION/DRIVE INTERFACE (ADC)														
		. F - OBJECT-BASED STORAGE (OSD)														
ASC	ASCQ	D	T	L	P	W	R	O	M	A	E	B	K	V	F	Description
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53h	00h	D	T	L		W	R	O	M			B	K			MEDIA LOAD OR EJECT FAILED
53h	01h		T													UNLOAD TAPE FAILURE
53h	02h	D	T			W	R	O	M			B	K			MEDIUM REMOVAL PREVENTED
53h*	03h*		T													MEDIA TREAD FAILURE
54h	00h				P											SCSI TO HOST SYSTEM INTERFACE FAILURE
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*Editor's Note: The ASC/ASCQ of 53h/03h has not been assigned and may change to another value.