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To: T10 Committee (SCSI)

From: George Penokie (Tivoli)

Subject: Report Supported Operation Codes Command

1 Overview

There currently is no easy way in SCSI for determining what commands a logical unit supports. The only way is to try the command to see if it fails. This is not an acceptable method when there are large numbers of logical units that need to be managed in a network. The, just try method, would waist bandwidth and time, and would cause errors when unsupported commands are discovered.

2 REPORT SUPPORTED OPERATION CODES command

The REPORT SUPPORTED OPERATION CODES command (see table 1) requests that a list of operation codes the addressed logical unit supports be reported.

Table 1 - REPORT SUPPORTED OPERATION CODES command

Bit Byte	7	6	5	4	3	2	1	0
0	OPERATION CODE (A3h)							
1	RESERVED				SERVICE ACTION (xxh)			
2	RESERVED							
3	RESERVED							
4	RESERVED							
5	RESERVED							
6	(MSB)							
7	ALLOCATION LENGTH							
8									
9	(LSB)							
10	RESERVED							
11	CONTROL							

The REPORT SUPPORTED OPERATION CODES parameter list (see table 2) contains a four-byte header that contains the length in bytes of the parameter list and a list of supported commands. Each OPERATION CODE DESCRIPTOR contains information on a single supported command. The list of OPERATION CODE DESCRIPTORS shall contain all commands supported by the addressed logical unit.

Table 2 - REPORT OPERATIONS CODE parameter list

Bit Byte	7	6	5	4	3	2	1	0
0	(MSB)							
1								
2			OPERATION CODES LIST LENGTH (n-3)					
3								(LSB)
	OPERATION CODE(s) (if any)							
4								
7			OPERATION CODE DESCRIPTOR 0					
	. . .							
n-3								
n			OPERATION CODE DESCRIPTOR x					

The OPERATION CODE(S) LIST LENGTH field specifies the length in bytes of the following OPERATION CODE DESCRIPTOR(s).

The OPERATION CODE DESCRIPTOR is defined in Table 3.

Table 3 - Data format of OPERATION CODE DESCRIPTOR

Bit Byte	7	6	5	4	3	2	1	0
0	OPERATION CODE							
1	SERVICE ACTION							
2	(MSB)							
3			COMMAND DATA BLOCK LENGTH					(LSB)

The OPERATION CODE field contains the operation code of a command supported by the addressed logical unit.

The SERVICE ACTION field contains the service action of the command indicated by the OPERATION CODE field. If the command indicated in the OPERATION CODE field does not contain a service action then the SERVICE ACTION field shall be set to 00h.

The COMMAND DATA BLOCK LENGTH field contains the length of the CDB in bytes.