To: X3T10 Committee (SCSI)

From: George Penokie (IBM)

Subject: More Simplification of SACL Configuration

1 SCSI Implementation

This implementation of the simplified configuration of a storage subsystem will use the simple create/ modify volume set SCSI command to deliver the configuration parameters to the storage subsystem. The two parameters of interest are located in the SIMPLE CREATE/MODIFY VOLUME SET parameter list (table 4) and are titled normal user data transfer size and percentage of sequential transfers.

1.1 Simple create/modify volume set command

The SIMPLE CREATE/MODIFY VOLUME SET command (see table 1) requests the creation of a new volume set or the modification of an existing volume set. If the create operation fails to complete successfully the command shall be terminated with a CHECK CONDITION status. The sense key shall be set to HARDWARE ERROR, and the additional sense code set to CREATION OF LOGICAL UNIT FAILED. If the modification operation fails to complete successfully the command shall be terminated with a CHECK CONDITION status. The sense key shall be set to HARDWARE ERROR, and the additional sense code set to MODIFICATION OF LOGICAL UNIT FAILED.

Table 1 - SIMPLE CREATE/MODIFY VOLUME SET command

Bit Byte	7	6	5	4	3	2	1	0
0	Operation code (BFh)							
1	Reserved			Command (08h)				
2	Reserved							
3	Reserved							
4	(MSB)			lun_v				
5								(LSB)
6	(MSB)							
7				List length				
8								
9								(LSB)
10	create/modify		configure					Immed
11	Control							

The lun_v field specifies the address of the volume set that shall be created or modified.

An immediate (immed) bit of zero indicates that status shall be returned after the create/modify volume set operation has completed. An immed bit value of one indicates that the storage subsystem shall return status as soon as the command descriptor block has been validated, and the entire SIMPLE CREATE/ MODIFIY VOLUME SET parameters list has been transferred.