

ENDL TEXAS

Date: 10 July 2003
 To: T10 Technical Committee
 From: Ralph O. Weber
 Subject: PERSISTENT RESERVE OUT SPEC_I_PT additional parameter data

Revision History

- r0 Initial proposal
- r1 Eliminate the proposed change option that produces redundant length fields in the access controls data format (see r0) and describe only the change that produces a backwards incompatibility in the PERSISTENT RESERVE OUT parameter data format.

Discussion

Warning: the changes contained in this proposal are not backwards compatible.

The definition of the PERSISTENT RESERVE OUT additional parameter data when the SPEC_I_PT bit is set to one incorporates the use of TransportID values based on definitions established by the Access Controls proposal.

Owing to incomplete the SPC-3 revisions available at the time 02-065r2 (the proposal containing the SPEC_I_PT bit definition) was prepared, the required usage of TransportIDs was not followed. The following table shows usage of TransportIDs envisioned by the Access Controls proposal.

Table x — Grant/Revoke ACE page format

Bit Byte	7	6	5	4	3	2	1	0
0	PAGE CODE (00h)							
1	Reserved							
2	(MSB)		PAGE LENGTH (n-3)				(LSB)	
3								
4	NOCNCL	Reserved						
5	ACCESS IDENTIFIER TYPE							
6	(MSB)		ACCESS IDENTIFIER LENGTH (m-7)				(LSB)	
7								
8	ACCESS IDENTIFIER							
m								
	⋮							

The ACCESS IDENTIFIER TYPE field specifies the type of access identifier present in the ACCESS IDENTIFIER field, one option of which is TransportID. This construct need not be replicated in the PERSISTENT RESERVE OUT additional parameter data used when the SPEC_I_PT bit is set to one because only TransportIDs are allowed.

The ACCESS IDENTIFIER LENGTH field specifies the number of bytes in the ACCESS IDENTIFIER field. The construct should have been replicated in the PERSISTENT RESERVE OUT additional parameter data used when the SPEC_I_PT bit is set to one but was not. Inclusion of a length field is necessary to maintain the practice of having SCSI parameter data be self describing, a practice that dates back to at least SCSI-2 (almost twenty years).

Proposed Changes

Change 1 [PERSISTENT RESERVE OUT additional parameter data]: The following changes are proposed for 6.12.3 (PERSISTENT RESERVE OUT parameter list). **Warning: these changes are not backwards compatible.**

Table 107 — PERSISTENT RESERVE OUT ~~specify initiator ports~~ SPEC_I_PT additional parameter data

Bit Byte	7	6	5	4	3	2	1	0
24	TRANSPORTID PARAMETER DATA LENGTH (n - 27)							
27								
	TransportIDs list							
28	First TRANSPORTID LENGTH **backward incompatible field**							
31								
2832	First TransportID							
	⋮							
i	Last TRANSPORTID LENGTH **backward incompatible field**							
i+3								
i+4	Last TransportID							
n								

The TRANSPORTID PARAMETER DATA LENGTH field specifies the number of bytes of ~~TransportIDs~~ TransportID information that follows.

The command shall be terminated with a CHECK CONDITION status and the sense key set to ILLEGAL REQUEST:

- a) If the value in the parameter list length field in the CDB does not include all of the additional parameter list bytes specified by the TRANSPORTID PARAMETER DATA LENGTH field; or
- b) If the value in the TRANSPORTID PARAMETER DATA LENGTH field results in the truncation of a TransportID.

Each TRANSPORTID LENGTH field specifies the number of bytes in the TransportID immediately following it in the parameter data. Each TransportID length shall be at least 24 and shall be a multiple of four.

The format of a TransportID is specified in 7.5.4.