

Proposed REPORT LUNS command X3T10/95-253R3

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To: Membership of X3T10

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Subject: Proposed REPORT LUNS command

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This document proposes a mechanism by which an application client can determine what SCSI LUNs are supported by a device server. The proposal capability is implemented as a new SCSI command. This proposal is based on a discussion at the May 1995 SCSI Working Group meeting. As suggested at that time, this proposal attempts (as nearly as possible) to follow various reporting examples in the MAINTENANCE (IN) command, as defined in the SCSI-3 Controller Commands (SCC) document.

During the development of this proposal, it was noted that many of the SCC commands deal with 16 bit LUNs. To be as general as the SCSI-3 models, this proposal must deal with 64 bit LUNs.

This revision of the proposal is based on input received at the September 1995 General Working Group meeting.

Changes from revision 2 are marked by change bars.

The following text is proposed for inclusion in the SPC as a new command definition clause. Revision of the SPC shall mark the new command as optional in Table 5.

#### 7.x REPORT LUNS command

The REPORT LUNS command (see table n1) requests that the logical unit numbers of known peripheral logical units at the target be sent to the application client. The REPORT LUNS command shall return information about only those logical units to which commands can be sent.

Table n1 - REPORT LUNS command

6	4	4	4	4	L	4	4	4	4	4	4	L	4	4	4	4	4	4	L	4	4	4	4	4	4	4	7
5	Bit*	7	*	6	*	5	*	4	*	3	*	2	*	1	*	0	5										
5	Byte	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5										
:	4	4	4	4	P	4	4	4	4	4	N	4	4	4	4	4	N	4	4	4	4	4	N	4	4	4	
5	0	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	1	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	2	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	3	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	4	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	5	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	6	*	(MSB)																							5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	7	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	8	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	9	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	10	*																								5	
K)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	
5	11	*																								5	
9	4	4	4	4	N	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

The Allocation length shall be at least 16 bytes. If the Allocation length is less than 16 bytes, the device server shall return CHECK CONDITION status. The sense

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key shall be set to ILLEGAL REQUEST and the additional sense data shall be set to INVALID FIELD IN CDB.

The Allocation length may not be sufficient to contain the logical unit number values for all configured logical units. This shall not be considered an error. The device server shall report as many logical unit number values as will fit in the specified Allocation length.

The device server shall report the logical unit numbers of configured logical units using the format shown in table n2.

Table n2 - LUN reporting parameter list format

The LUN list length shall contain the length in bytes of the LUN list that is available to be transferred. The LUN list length is the number of logical unit numbers reported multiplied by eight. If the allocation length in the command descriptor block is too small to transfer information about all configured logical units, the LUN list length value shall not be adjusted to reflect the truncation.