

To: John Lohmeyer  
Chairman, X3T9.2

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Subject: Potential Flaw Management Problem

Problem Difficulties

In early implementations of flaw management many disk drives responded to reassign block by simply moving the sectors associated with the identified LBA to an alternative area.

As performance became more of an issue many drives began to rearrange blocks to maintain sequential LBA's.

This presents a problem for systems that maintain a log of soft errors. This log loses its value whenever a single reassign block is executed.

Possible Solution(s)

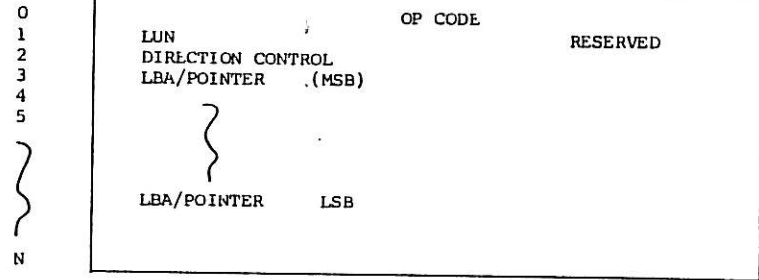
This problem seems best approached by allowing the host to have a physical constant for his log.

This suggests some sort of translate function.

One possible solution is a translate command which could:

- receive an LBA and return a "constant physical pointer"
- receive a "constant physical pointer" and return an LBA
- for simplicity be limited to one block per command

COMMAND DESCRIPTION

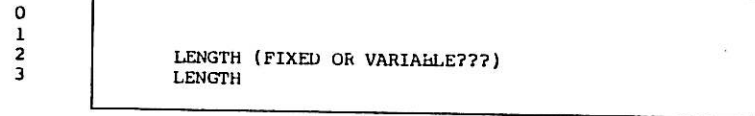


Direction control includes a bit that identifies the command as:

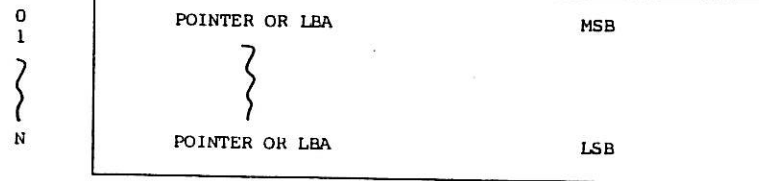
- LBA to pointer or
- pointer to LBA

DATA IN

Header



Data



It is our suggestion that this problem be assigned to the July working group to define a mandatory protocol for dealing with this and similar situations.

Regards,

*J. Patton*   *R. Hodgson*

James Patton and Richard Hodgson

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