

X379.2/90-47

From: GSTEPHEN--TUCVM2
To: GOP --RCHVMP3

Date and time 03/05/90 10:32:51

Subject: Modifying Actual Retry Count

George,

The provision for returning the number of blocks in the buffer is currently provided in the command READ POSITION.

The authors idea indicates a very limited view of the buffer sizes on tape devices. Buffer sizes are approaching 1 MB per drive, even in small devices to hide the reposition time associated with streaming devices.

A 1 MB buffer filled with 80 byte records may have up top 12500 blocks in the buffer. Therefore a one byte field is insufficient to handle the response needed in this situation.

I suggest that the READ POSITION command which was designed for this purpose in sequential might also be extended to other device classes where buffering and write errors might be a problem.

As for a retry count field of one byte, that too has been considered. A device in Tucson, although not released and never will be, provided for up to 320 retries for a single block. Thus, we supported, in times past a larger retry field. Setting an arbitrarily low limit on retries is not good architecture since it limits the devices ability to apply all of its potential power to recover by stopping when the field width of the command set becomes too small.

I will not be at the Work meeting, but this shall suffice for my response.

Why has not the READ POSITION command been considered before making such a proposal?

Gary Stephens 3/5/90 1035