

X3T9.2/87-101

NCR CORPORATION

Intracorporation



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To: ANSI X3T9.2 Working Group
Location:

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Subject: Buffer Sizing for Tapes with No Early Warning--Document 101.

A unique end of tape situation has recently surfaced, which I feel requires consideration by the Working Group. As buffers get larger, there is increased probability of receiving a hardware error while attempting to empty the buffer after end of tape status. To reduce this probability, a mode select/mode sense parameter should be added to the Device Configuration page for tapes. The new data is:

FLUSH bit -- When this bit is zero, the target shall flush the buffer to the device upon reaching EOT. If the bit is one, the target shall retain data in the buffer upon reaching EOT and report a residue to the initiator. A WRITE FILE MARK shall be used to flush the buffer, a RECOVER BUFFER DATA shall be used to move the data back to the initiator, or a REWIND shall be used to discard the buffered data. Note that using the FLUSH bit allows the user to exercise control over the algorithm implemented by the target for EOT processing.

This feature allows the user to protect himself by stopping the flush operation at EOT.

DS/lr