To: Membership of X3T10

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Subject: Changes for the SPACE command in the Sequential Device command set.

I am requesting the following changes to the SPACE command in SSC for SCSI-3 as recommended at the SSC/SMC Working group held in November, 1994.

1. That a new space mode, SPACE PAST EOD be added to the space command.

According to the model for sequential devices, once data is written to a partition, the remainder of the partition is inaccessible. If this write was accidental, all remaining data in the partition is lost. This can be particularly bad if the write occurred at the beginning of a large partition.

This proposal standardizes a mechanism already available on some tape drives as a vendor-unique feature. This space mode is not intended to guarantee recovery of data. This space mode is optional.

The following text will be added to the SPACE COMMAND in SSC. Change bars indicate changes in currently existing text.

Code	Description	Support
000b	Blocks	Mandatory
001b	Filemarks	Mandatory
010b	Sequential filemarks	Optional
011b	End-of-data	Optional
100b	Setmarks	Optional
101b	Sequential setmarks	Optional
110b	Past EOD	Optional
111b	Reserved	

Table 0 - Code field definition

When spacing Past EOD, the count field is ignored. Upon successful completion, the medium shall be positioned at the beginning of the first readable logical block between the current position and the physical end of the current partition. If the logical unit is not positioned at end-of-data, a CHECK CONDITION status shall be returned, the sense key shall be set to ILLEGAL REQUEST and the additional sense code shall be set to COMMAND SEQUENCE ERROR.

If end-of-partition is encountered while spacing Past EOD, CHECK CONDITION status shall be returned, the sense key shall be set to MEDIUM ERROR, the EOM bit shall be set to one, and the valid bit shall be set to zero.

Data past end-of-data is outside the model for a sequential device and may be subject to limitations. Once past EOD, the logical unit may return CHECK CONDITION to COPY, COPY and VERIFY, ERASE,

READ REVERSE, SPACE, VERIFY, WRITE, and WRITE FILEMARKS commands while past the valid data in the partition. The LOCATE command may return CHECK CONDITION for any position past the end-of-data for the current partition.

NOTE The device is free to choose the method for determining the next readable block and whether such a block exists.