To:	T10 Membership
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Date:	29 February 2000
Subject:	Analysis of SSC Public Review Comment (SET CAPACITY)
Document:	T10/00-159r0

1 Background

At the February meeting of the T10/T11.3 Working Group, I was tasked with determining whether the existing protocol can provide the functionality of the proposed-and-then-discarded SET CAPACITY command. This memo summarizes my findings.

The SET CAPACITY command "...sets the available medium for a volume to a proportion of the total capacity of that volume..." without reference to partition number.

If the comment were accepted, the document would be returned to the working group and another public review period (at least) would ensue. Having a documented proposal (that has been discussed by the working group) to put SET CAPACITY in SSC-2 would be a step toward ensuring that the command does not change in the future, thus helping to protect any implementations.

2 Implementations

At least two implementations are known, one in an unreleased drive and one in a tool for generating SCSI commands.

3 Alternatives

There are two alternatives which could be made to serve the desired purpose. However, neither is adequate.

3.1 MODE SELECT Command on Medium Partition Page (1)

The semantics of this page could probably be modified to serve the desired purpose. However, at least one medium type (LTO Ultrium) does not support partitions, so this would require new implementations for those drives. Worse, the SSC standard would not document this behavior correctly without a change.

3.2 FORMAT MEDIUM Command

The FORMAT MEDIUM command can transfer vendor-specific format information to the device server. However, this also begs the question of standardizing the operation.

4 Recommendation

Given the need to release SSC and the ability to publicly document the command, I recommend that the public review comment be rejected and that the SET CAPACITY command be considered for SSC-2.