

TO: T10 Membership, SMC-3 Working Group
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SUBJECT: SMC-3 Use of INCOMPATIBLE MEDIUM INSTALLED (document T10/08-270r0)

Rev0 – Initial draft.

Related Documents

SMC-3r11

Introduction

This document proposes a meaning and use of sense code INCOMPATIBLE MEDIUM INSTALLED per action item 14Jan08-10.

Discussion

In practice, some legacy usage of this sense code included terminating MOVE MEDIUM commands with a sense key of ILLEGAL REQUEST when attempts were made to move volumes to incompatible destinations (e.g., moving a volume to a data transfer device that didn't support the volume type). SMC-3 now specifies use of sense codes INCOMPATIBLE VOLUME TYPE or INCOMPATIBLE VOLUME QUALIFIER to accommodate these scenarios, so use of INCOMPATIBLE MEDIUM INSTALLED should be deprecated in those cases, and the new sense codes used instead.

However, one possible usage scenario may remain when volumes are discovered residing in elements with which they are incompatible (e.g., while initializing element status). In this case, the sense code INCOMPATIBLE MEDIUM INSTALLED would only be used within element status data (e.g., in response to READ ELEMENT STATUS, REPORT ELEMENT INFORMATION) instead of in response to a command.

Proposed Changes to SMC-3

Proposed new text is shown in **blue**. Proposed deletions are shown in ~~red-strikeout~~.

Changes to 6.11.4 Medium transport element descriptor

(Excerpts included only to show placement, which is a few paragraphs above Table 26)

The ADDITIONAL SENSE CODE field may provide specific information on an abnormal element state. The values in this field are as defined for the ADDITIONAL SENSE CODE field of REQUEST SENSE command response data (see SPC-3). This field is valid only if the EXCEPT bit is set to one.

The ADDITIONAL SENSE CODE QUALIFIER field may provide more detailed information on an abnormal element state. The values in this field are as defined for the ADDITIONAL SENSE CODE QUALIFIER field of REQUEST SENSE command response data (see SPC-3). This field is valid only if the EXCEPT bit is set to one.

If the type of medium currently present in an element is incompatible with the element as determined by the media changer, then the combination of the ADDITIONAL SENSE CODE field and the ADDITIONAL SENSE CODE QUALIFIER field should be set to INCOMPATIBLE MEDIUM INSTALLED.

A source valid (SVALID) bit set to one indicates that the SOURCE STORAGE ELEMENT ADDRESS field and the INVERT bit information are valid. A SVALID set to zero indicates that the values in these fields are not valid.