

T10/07-222r1 SMC-3 Additional sense code for incompatible destination element

To: T10 Technical Committee

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Subject: T10/07-222r1 Additional sense code for incompatible destination element

### Revision History

Revision 0 (4 May 2007): initial revision

Revision 1 (10 July 2007): incorporated comments from July SMC-3 WG meeting

### Related Documents

SMC3r06 - SCSI Media Changer Commands - 3 revision 6

### Overview

Some elements do not support media with specific volume type or volume qualifiers. If the media changer is aware that a specific volume is not compatible with a specific data transfer element, then it is desired that the media changer prevents such move medium operation. This proposal creates two different error codes, one for a move to a destination that does not support the media's volume type, and one for a move to a data transfer element that is not compatible with the media's volume qualifier.

The proposed new ASC/ASCQs for use within SMC-3 are:

ASC	ASCQ	Description
30h	11h	INCOMPATIBLE VOLUME TYPE <del>S</del>
30h	12h	INCOMPATIBLE VOLUME QUALIFIER <del>S</del>

### Suggested Changes to SMC-3

#### Add to chapter 5.4 Volume types overview

If an application client requests to move a volume to an element that is incompatible ~~for~~ with this volume type, then the device server shall ~~return~~ terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME TYPE~~S~~.

If an application client requests to move a volume to a data transfer element ~~that has a compatible volume type and an incompatible~~ that is incompatible for this volume qualifier, then the device server shall ~~return~~ terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME QUALIFIER~~S~~.

#### Add to chapter 6.6 MOVE MEDIUM command

If a volume specified by the SOURCE ADDRESS field is incompatible with the volume type of the element specified by the DESTINATION ADDRESS field, then the device server shall terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME TYPE.

If the DESTINATION ADDRESS field represents a data transfer element with compatible volume and incompatible volume qualifier than the volume specified by the SOURCE ADDRESS field, then the device server shall terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME QUALIFIER.

#### Add to chapter 6.3 EXCHANGE MEDIUM command

If a volume specified by the SOURCE ADDRESS field is incompatible with the volume type of the element specified by the FIRST DESTINATION ADDRESS field or SECOND DESTINATION ADDRESS, then the device

server shall terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME TYPE.

If the FIRST DESTINATION ADDRESS field or SECOND DESTINATION ADDRESS field represents a data transfer element with compatible volume and incompatible volume qualifier than the volume specified by the SOURCE ADDRESS field, then the device server shall terminate the command with CHECK CONDITION status, the sense key shall be set to ILLEGAL REQUEST and the sense data shall be set to INCOMPATIBLE VOLUME QUALIFIER.