

T10/08-320r2 SMC-3 Use of NOT READY error codes

To: T10 Technical Committee

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Subject: T10/08-320r1 SMC-3 Use of NOT READY error codes

Revision History

Revision 0 (30 July 2008): initial revision

Revision 1 (29 April 2009): added comments from March SMC-3 working group meeting

Revision 2 (5 May 2009): added comments from May SMC-3 working group meeting

Related Documents

SMC3r11 - SCSI Media Changer Commands - 3

08-272r1 – SMC-3 New additional sense codes tracking document

Overview

The SMC3 working group is attempting to define commonly used error codes in the standard to increase level of standardization. The document 08-272 lists all new SMC-3 error codes. This document describes some of these new error codes.

Suggested Changes to SMC-3

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

[Add definition:]

3.1.x ready state: A state where a logical unit is able to process a medium-access command without returning CHECK CONDITION status with the sense key set to NOT READY.

3.1.y sequential mode: A mode of media changer operation that performs self-directed media movement without processing robotic motion SCSI commands.

3.1.z robotic motion *SCSI* commands: Commands that may require robotic movement (e.g, EXCHANGE MEDIUM, ~~INITIALIZE ELEMENT STATUS, INITIALIZE ELEMENT STATUS WITH RANGE,~~ MOVE MEDIUM, ~~OPEN CLOSE IMPORT EXPORT ELEMENT,~~ and READ ELEMENT STATUS).

[Add paragraphs:]

5.6 Error ~~conditions~~*reporting*

5.6.1 Overview

This sub clause describes media changer states that prevent normal operation.

5.6.2 Error conditions that report NOT READY

5.6.2.1 Sequential mode

If the ~~logical unit~~*media changer* is configured in sequential mode (see 3.1.y), then the device server shall terminate robotic motion *SCSI* commands (see 3.1.z) ~~and may terminate other commands~~ with CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, OPERATING IN SEQUENTIAL MODE.

5.6.2.2 Door open

If the ~~logical-unit~~media changer has an access door in a state that does not allow the device server to ~~process-return~~ GOOD status for robotic motion SCSI commands, then the device server may terminate the command with CHECK CONDITION status, with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, A DOOR IS OPEN.

5.6.2.3 Calibration required

If the ~~logical-unit~~device server is unable to ~~process-return~~ GOOD status for robotic motion SCSI commands ~~successfully~~ due to a missing calibration, then the device server may terminate the command with CHECK CONDITION status, with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, SYSTEM CALIBRATION REQUIRED. ~~The calibration may be performed by:~~

- ~~a) an INITIALIZE ELEMENT STATUS command;~~
- ~~b) a Power cycle;~~
- ~~c) a Service intervention; or~~
- ~~d) a Vendor specific command.~~

5.6.2.4 Media changer configuration required

If the ~~logical-unit~~device server is unable to ~~process-return~~ GOOD status for commands ~~successfully~~ due to ~~missing configuration settings~~the media changer requiring configuration, then the device server may terminate the command with CHECK CONDITION status, with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, ~~MEDIA CHANGER~~SYSTEM CONFIGURATION REQUIRED.

5.6.2.5 Robotics disabled

If the ~~logical-unit~~device server is unable to ~~process-return~~ GOOD status for commands due to ~~disabled~~robotics ~~being disabled~~mechanism, then the device server may terminate the command with CHECK CONDITION status, with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, ROBOTICS DISABLED.

5.6.3 Error conditions that report ILLEGAL REQUEST

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