

To: T10 Technical Committee
From: Rob Elliott, HP (elliott@hp.com)
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Subject: 04-192r0 SBC-2 Commands during format operation

Revision history

Revision 0 (21 June 2004) First revision

Related documents

sbc2r14 - SCSI Block Commands - 2 revision 14

Overview

During a format operation, what should happen to commands already in the task set? Do they continue to run, get delayed during the format, or get aborted?

Proposal: vendor-specific.

During a format operation, REPORT LUNS should be added to the list of allowed commands (either newly received or previously in the task set) alongside INQUIRY and REQUEST SENSE. In comparison, SEND DIAGNOSTIC allows all three during foreground tests. REPORT LUNS is one of the "implicit head of queue" commands so seems like it deserves to be included in the list.

The sense key and additional sense code returned for commands terminated during a format operation need to be specified - sense key of NOT READY, additional sense code of LOGICAL UNIT NOT READY, FORMAT IN PROGRESS.

Proposed wording is taken from SPC-3's SEND DIAGNOSTIC command foreground test mode.

Suggested changes

5.3 FORMAT UNIT command

5.3.1 FORMAT UNIT command overview

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~~During the format operation, the device server shall respond to commands as follows:~~

- ~~a) In response to all commands except REQUEST SENSE and INQUIRY, the device server shall return CHECK CONDITION status unless a reservation conflict exists, in which case RESERVATION CONFLICT status shall be returned;~~
- ~~b) In response to the INQUIRY command, the device server shall respond as commanded; and~~
- ~~c) In response to the REQUEST SENSE command, unless an error has occurred, the device server shall return a sense key of NOT READY with the additional sense code set to LOGICAL UNIT NOT READY FORMAT IN PROGRESS, with the sense key specific bytes set for progress indication (see SPC-3). See SPC-3 for a description of deferred error handling that may occur during the format operation.~~

While performing a format operation, the device server shall respond to all *new* commands except INQUIRY, REPORT LUNS, and REQUEST SENSE with a CHECK CONDITION status, a sense key of NOT READY and an additional sense code of LOGICAL UNIT NOT READY, FORMAT IN PROGRESS. *Handling of commands already in the task set is vendor-specific.*

The PROGRESS INDICATION field returned in response to a REQUEST SENSE command (see SPC-3) may be used by the application client at any time during a format operation to poll the logical unit's progress. While a format operation is in progress unless an error has occurred, a device server shall respond to a REQUEST SENSE command by returning a sense key of NOT READY and an additional sense code of LOGICAL UNIT NOT READY, FORMAT IN PROGRESS with the sense key specific bytes set for progress indication (see SPC-3).