

T10/08-334r0: Minutes  
SCSI Media Changer (SMC) Working Group  
for 06 Aug 2008, 8:00 AM - 10:00 AM PDT

**1. Introductions** **Group**

Curtis Ballard called the meeting to order at 8:08 AM PDT. He thanked HP for hosting the phone conference. Rod Wideman served as secretary.

**2. Approval of the Agenda** **Curtis Ballard**

Curtis Ballard presented the agenda. He pointed out the desire to move some smaller items to the beginning to facilitate progress. Several items were identified for deferral. Rod Wideman moved to accept agenda as modified; Noud Snelder seconded

**3. Attendance and Membership** **Curtis Ballard**

Curtis Ballard reviewed the T10 attendance rules with the group and directed prospective new members to John Lohmeyer. The attendance report appears below.

SMC-3 Working Group Attendance Report - July 2008

Name	S	Organization
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Mr. Noud Snelder	V	BDT
Mr. Curtis Ballard	A	Hewlett Packard Co.
Mr. Geoffrey Barton	V	Overland Storage
Mr. Rod Wideman	P	Quantum Corp.

4 People Present

Status Key: P - Principal  
A - Alternate  
AV - Advisory Member  
E - Emeritus  
L - Liaison  
V - Visitor

**4. INCITS Patent Policy** **Curtis Ballard**

Curtis Ballard pointed to the T10 website (<http://www.t10.org/patpol.htm>).

Curtis Ballard discussed that T10 needs to avoid discussions that might raise anti-trust issues and that we are all required to make sure they don't happen.

**5. Approval of Previous Minutes** **Group**

Not done due to this being a phone call

**6. Review of Action Items** **Rod Wideman**

Old Action Items:

06-044 [Roger Cummings] Solicit additional vendor-specific sense codes from library vendors per June discussion item 4.4.

carryover

07-017 [Group] Make sure the all the functionality of Read Element Status is covered by the Report Element Information command (06-272) and the Report Volume Information command and examine if an informative annex to map the RES command onto these is appropriate. [Reminder to do as final step]

carryover

07-042 [Paul Suhler] Write a proposal for the commands which the cached ready state in ADC may be used.

Carryover

05Nov07-03 Erich Oetting: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate? - Report to Curtis Ballard.

Closed.

14Jan08-03 Noud snelder report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code

closed by e-mail from Snelder to Barton

14Jan08-05 Erich Oetting report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code.

Closed.

14Jan08-08 Noud Snelder to propose meaning of LOGICAL UNIT NOT READY, OFFLINE

closed by 08-260r0

14Jan08-09 Curtis Ballard to propose meaning of RANDOM POSITIONING ERROR.

Carryover.

14Jan08-10 Rod Wideman to propose meaning of INCOMPATIBLE MEDIUM IN-STALLLED

Closed by 08-270r0

14Jan08-11 Kevin Butt to propose meaning of OPERATOR MEDIUM REMOVAL REQUEST.

Carryover.

14Jan08-12 Rod Wideman to propose meaning of LOGICAL UNIT COMMUNICATION FAILURE

Closed by 08-271r0

10Mar08-03 Noud Snelder to review use of the medium magazine error codes listed in 07-372 in their libraries and report to Kevin Butt.

closed by e-mail from Snelder to Butt

05May08-01 Curtis Ballard to discuss with John Lohmeyer the issue of the SMC-3 editor not belonging to a member company.

should have been closed earlier

28May08-01 Rod to create a tracking document for proposals coming out of 08-039r0 and post.

Closed by 08-272r0

28May08-02 Noud will revise SMC-3 Use of LOGICAL UNIT NOT READY, INITIALIZING COMMAND REQUIRED error code (08-038r1) and post

closed by 08-038r2

**7. Old Business Group**

7.1 Working List for ISV feedback (SMC/SSC/ADC/SPC) (07-131r0) [Butt]  
Defer

7.2 SMC-3 Use of LOGICAL UNIT NOT READY, INITIALIZING COMMAND REQUIRED error code (08-038r3) (was agenda item 7.2 today) [Snelder]

Noud reviewed the changes in this revision. The group discussed the definition of 'inventory scan' and recommended shortening it.

The group recommended that the list of SCSI commands affecting inventory be made an example rather than a lettered list.

The introduction of SCSI commands causing inventory scans was updated to align with the definition.

Dropped the last part of the clause that contained the 'until' portion, and changed to a 'should' from 'may'. The 'unable to process' portion of the clause allows vendor specific determination of capability.

Curtis recommended changing the text in the command clauses to better allow that inventory scans may not be performed. Rod recommended moving the curdata requirement for READ ELEMENT STATUS from 5.2.6 down into 6.11.1.

Curtis moved to incorporate as modified. Geoffrey seconded. Passed unanimously.

AI: Noud to revise and post 08-038r3 as 08-038

AI: Noud to incorporate.

7.3 SMC-3 Cleaning error codes (08-201r1) [Ballard]

Curtis indicated he did not intend to move on this today, but wanted to review for any potential controversial items.

Curtis pointed out a concern of using the except bit in this fashion, in that it may cause an issue for legacy applications that interpret this bit as a more significant error. Rod suggested moving this concept into the new REPORT ELEMENT INFORMATION commands. Much discussion ensued, but the consensus was that preserving legacy behavior was paramount. Curtis will hold off on this proposal until the newer command foundation is present in SMC-

3.

Discussed 5.6.3, and the concept of a load in the first paragraph. Rod pointed out that completion of a move command may vary among products, and include just the move, or the move and monitoring of the load process. Also discussed whether while cleaning is working, whether other commands are rejected. Concluded a may was sufficient. Then discussed means to report progress or status of clean, including use of a true progress indicator.

Discussed the paragraph that specifies the medium changer preparing the drive for cleaning medium unload, and that it needs to be worded in terms of the device server and/or application client.

Discussed how cleaning volume expired or failed is reported. Noted a change to make it more clear that it is for application-controlled cleaning only; discussed separation of reporting expired (e.g., possibly use Noud's proposed TapeAlert, etc).

Curtis will make revisions per the discussion, and reconcile with the newer commands.

AI: Curtis to revise and post 08-201r1 per discussion.

7.4 SMC-3 New Tape Alert flags (08-047r2) [Snelder]  
Noud presented this proposal and took a few edits.

7.5 SMC-3 TapeAlert Enhancements (06-420r2) [Ballard]  
Defer

7.6 SMC-3 Medium Magazine Error Codes (07-372r1) [Butt]  
Defer

7.7 SMC-3 Report Volume Information (08-215r1) [Ballard]  
Defer

7.8 SMC-3 Report Element Information (08-066r4) [Ballard]  
Defer

7.9 SMC-3 New ASC/ASCQs List (08-039r0) [Wideman]

7.10 SMC-3 Updated SPC-3 references to SPC-4 Curtis Ballard  
The discussion resolved that we see no reason to move to SPC-4 at this time.

**8. New Business** **Curtis Ballard**

8.1 SMC-3 Use of LOGICAL UNIT NOT READY, OFFLINE (08-260r0) [Snelder]

8.2 SMC-3 Use of INCOMPATIBLE MEDIUM INSTALLED (08-270r0) [Wideman]

8.3 SMC-3 New additional sense codes tracking document (08-272r1) [Wideman]

8.4 SMC-3 Use of LOGICAL UNIT COMMUNICATION FAILURE (08-271r0) [Wideman]

**9. Plans for SMC-3 call for final technical input** **Curtis Ballard**

Tentatively looking at January 2009 call for final content. We will review each meeting cycle the

appropriateness of the date.

**10. Next Meeting Requirements**

**Curtis Ballard**

Curtis suggested we hold a conference call. Aug 20 at 08:00 - 10:00 PDT.

**11. Review New and Outstanding Action Items**

**Rod Wideman**

**Old Action Items:**

- 06-044 [Roger Cummings] Solicit additional vendor-specific sense codes from library vendors per June discussion item 4.4.
- 07-017 [Group] Make sure the all the functionality of Read Element Status is covered by the Report Element Information command (06-272) and the Report Volume Information command and examine if an informative annex to map the RES command onto these is appropriate. [Reminder to do as final step]
- 07-042 [Paul Suhler] Write a proposal for the commands which the cached ready state in ADC may be used.
- 14Jan08-09 Curtis Ballard to propose meaning of RANDOM POSITIONING ERROR
- 14Jan08-11 Kevin Butt to propose meaning of OPERATOR MEDIUM REMOVAL REQUEST
- 14July08-01 Geoff Barton to create a proposal for the use of the NOT READY TO READY TRANSITION sense code.
- 14July08-03 Curtis Ballard will revise and post 08-215r1.

**New Action Items from this meeting**

- 06Aug08-01 Curtis to revise and post 08-201r1 per discussion
- 06Aug08-02 Noud to incorporate 08-038r4 into SMC-3

**12. Adjournment**

**Group**

Rod moved we adjourn; Noud seconded. Adjourned at 10:01am PDT.