

T10/08-045r1: Minutes  
SCSI Media Changer (SMC) Working Group  
for 14 January 2008, 2:52 PM - 6:30 PM PDT

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

Curtis Ballard called the meeting to order at 2:52 PM PST. He thanked Western Digital for hosting the meeting. Kevin Butt is serving as the secretary of this meeting.

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

Curtis Ballard presented the agenda. Kevin Butt made a motion to accept the agenda. Rod Wideman seconded the motion. The group passed the motion unanimously.

**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 - January 2008

Name	S	Organization
Mr. Noud Snelder	V	BDT
Mr. Mike Fitzpatrick	P	Fujitsu
Mr. Curtis Ballard	A	Hewlett Packard Co.
Mr. Michael Banther	A	Hewlett Packard Co.
Mr. Kevin Butt	P	IBM Corp.
Mr. Robert Payne	P	Iomega Corp.
Mr. Geoffrey Barton	V	Overland Storage
Mr. Paul Stone	A	Quantum Corp.
Dr. Paul Suhler	P	Quantum Corp.
Mr. Erich Oetting	P	Sun Microsystems, Inc.
Mr. Roger Cummings	P	Symantec
Mr. Georg Boasson	V	Tandberg Storage

12 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>).

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

Curtis Ballard asked for any problems with the minutes of the Nov meeting (07-489r1). Kevin Butt

made a motion to approve the minutes. Roger Cummings seconded. Voting was unanimous.

## 6. Review of Action Items

**Kevin Butt**

Kevin Butt reviewed the outstanding action items, and the status of each item was reported as listed below:

06-020 [Robert Payne] Define a philosophy for Write Exclusive Persistent Reservations in SMC.

Carry Over

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

Carry Over

06-063 [Noud Snelder] Investigate use of LOGICAL UNIT NOT READY, INITIALIZING COMMAND REQUIRED error code.

08-038 - Closed

07-003 [Curtis Ballard] Create a proposal to define the usage of the “Cleaning Requested” and “Cleaning Failure” error codes.

Carry Over

07-006 [Rod Wideman] Define a new ASC/ASCQ for “Logical Unit Not Ready – Robotics Disabled”.

Closed - 08-039.

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]

07-027 [Rod Wideman] Revise and post SMC-3 New Additional Sense Codes Usage (07-018r0) as 07-018r1.

Closed.

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

Carry-Over

07-058 [Kevin Butt] Revise SMC-3: Medium Magazine Error Codes (07-372r0) and post.

Carry Over

07-059 [Noud Snelder] Noud Snelder Revise SMC-3 Additional sense code for incompatible destination element (07-222r1) and post.

Closed

05Nov07-01 Kevin Butt: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?

Closed. IBM has it defined for an illegal condition where expansion frames are present and

the capacity expansion feature has not been installed. But the tape alert is never set.

05Nov07-02 Curtis Ballard: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?

Carry-Over.

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?

Carry-Over

05Nov07-04 Rod Wideman: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?

Closed. Quantum does not use.

05Nov07-05 Halvard Eriksen: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?

Carry Over

05Nov07-06 Noud Snelder: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?

Closed. SCSI commands not supported. Write Buffer commands that attempt to update firmware but fails because of invalid image.

05Nov07-07 Nould Snelder to incorporate SMC-3 Additional sense code for incompatible destination element (07-222r1) as revised.

Complete.

05Nov07-08 Group review SMC-3 for changing SPC-3 references to SPC-4.

Closed. Curtis will turn this into an agenda item.

05Nov07-09 Noud Snelder to revise and post SMC-3, READ ATTRIBUTE and WRITE ATTRIBUTE command clarification (07-244r2).

Complete

05Nov07-10 Noud Snelder to incorporate SMC-3, READ ATTRIBUTE and WRITE ATTRIBUTE command clarification (07-244r2) as revised into SMC-3.

Closed - SMC-3r10

- | <b>7. Old Business</b>   | <b>Group</b> |
|--|--------------|
| 7.1 Working List for ISV feedback (SMC/SSC/ADC/SPC) (07-131r0)<br>Deferred   | [Butt]       |
| 7.2 SMC-3 Error codes overview (06-397r2)<br>Noud mentioned that there is a need to defined:<br>Several action Items were assigned. WARNING - ENCLOSURE DEGRADED was | [Snelder]    |

removed and SMC-3 will be silent on it.

CLEANING REQUEST REJECTED to be moved to table specifying “m” removed from SPC-4 table.

- 7.3 SMC-3, Report Element Information (08-066r0) [Ballard]

Curtis discussed this proposal and some changes were made.

- 7.4 SMC-3 TapeAlert Enhancements (06-420r2) [Banther]

- 7.5 SMC-3 New Additional Sense Codes Usage (07-018r1) [Wideman]

Discussion around 6.3 of the proposal highlighted confusion over why the order of the first ordered list was reordered. There were conflicting thoughts on why this order had been reversed. We decided to have INSERTED UA returned before the ENABLED UA because this makes logical sense.

Several edits were made. Rod Wideman moved that SMC-3 New Additional Sense Codes Usage (07-018r1) as revised by included in SMC-3. Noud Snelder seconded the motion. The motion passed unanimously.

Rod Widemand to revise SMC-3 New Additional Sense Codes Usage (07-018r1) and post.

Noud Snelder to incorporate SMC-3 New Additional Sense Codes Usage (07-018r2) into SMC-3.

- 7.6 SMC-3: Medium Magazine Error Codes (07-372r0) [Butt]

## 8. New Business

- 8.1 SMC-3 Use of LOGICAL UNIT NOT READY, INITIALIZING COMMAND REQUIRED error code (08-038r0) [Snelder]

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

- 8.3 SMC-3 New Tape Alert flags (08-047r0) [Snelder]

## 9. Next Meeting Requirements Curtis Ballard

Request same meeting time for March meeting Cycle.

Phone Conference Feb 6, 8:00 AM PST - 10:00 AM PST.

## 10. Review New and Outstanding Action Items Kevin Butt

Kevin Butt reviewed the following new action items with the meeting:

- 06-020 [Robert Payne] Define a philosophy for Write Exclusive Persistent Reservations in SMC.
- 06-044 [Roger Cummings] Solicit additional vendor-specific sense codes from library vendors per June discussion item 4.4.
- 07-003 [Curtis Ballard] Create a proposal to define the usage of the “Cleaning Requested” and “Cleaning Failure” error codes.

- 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.
- 07-058 [Kevin Butt] Revise SMC-3: Medium Magazine Error Codes (07-372r0) and post.
- 05Nov07-02 Curtis Ballard: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?
- 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?
- 05Nov07-05 Halvard Eriksen: Determine what actions set TapeAlert flag 19h (illegal operation) and when the flag is cleared. Also what actions does it generate?
- 14Jan08-01 Kevin Butt report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-02 Curtis Ballard report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-03 Noud snelder report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-04 Rod Wideman report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-05 Erich Oetting report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-06 Georg Boasson report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-07 Robert Payne report to Geoff when their library sets NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED sense code
- 14Jan08-08 Noud Snelder to propose meaning of LOGICAL UNIT NOT READY, OFFLINE
- 14Jan08-09 Curtis Ballard to propose meaning of RANDOM POSITIONING ERROR
- 14Jan08-10 Rod Wideman to propose meaning of INCOMPATIBLE MEDIUM INSTALLED
- 14Jan08-11 Kevin Butt to propose meaning of OPERATOR MEDIUM REMOVAL REQUEST
- 14Jan08-12 Rod Wideman to propose meaning of LOGICAL UNIT COMMUNICATION FAILURE

- 14Jan08-13 Noud Snelder to send email to SPC-4 editor to remove 'M' from sense code table as specified in 06-397r2.
- 14Jan08-14 Rod Widemand to revise SMC-3 New Additional Sense Codes Usage (07-018r1) and post.
- 14Jan08-15 Noud Snelder to incorporate SMC-3 New Additional Sense Codes Usage (07-018r2) into SMC-3.
- 14Jan08-16 Noud Snelder to revise SMC-3 Error codes overview (06-397r2) and post.

## **11. Adjournment**

## **Group**

Kevin Butt made a motion for adjournment. Paul Suhler seconded the motion. The group passed the motion unanimously. Curtis Ballard adjourned the group at 6:30 PM PST.