Draft Minutes  
SCSI Media Changer (SMC) Working Group  
Ad Hoc Meeting  
T10/05-254r0  
11 July 2005  
2:30 PM – 7:00 PM MDT

1. **Introductions**  

Michael Banther called the meeting to order at 2:45 PM MDT. He thanked LSI for hosting the meeting.

2. **Approval of the agenda**  

Michael Banther discussed the order of the discussion items. Noud suggested we add 05-074r1 authored by Rob Elliott to agenda. 05-271r0 by Greg Wheeless desired to be discussed before Read Element Status changes. Will put in as 8.2.

Greg Wheeless made a motion to accept the agenda. Paul Suhler seconded the motion. The group passed the motion unanimously.

3. **Attendance and Membership**  

Michael Banther 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 2005**

<table>
<thead>
<tr>
<th>Name</th>
<th>S</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Mr. Rod Wideman</td>
<td>V</td>
<td>ADIC</td>
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<tr>
<td>Mr. Noud Snelder</td>
<td>V</td>
<td>BDT</td>
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<tr>
<td>Mr. Michael Banther</td>
<td>V</td>
<td>Hewlett Packard Co.</td>
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<tr>
<td>Mr. Kevin Butt</td>
<td>A</td>
<td>IBM Corp.</td>
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<td>Mr. Paul Entzel</td>
<td>P</td>
<td>Quantum Corp.</td>
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<td>Ms. Deborah Laurion</td>
<td>V</td>
<td>Quantum Corp.</td>
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<tr>
<td>Mr. Greg Wheeless</td>
<td>A</td>
<td>Symantec</td>
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4. **INCITS Patent Policy**  

Michael Banther directed the group to a reading of the [T10 Short Summary](#) of the INCITS Patent Policy.

5. **Approval of previous meeting minutes**  

Michael Banther requested corrections for the minutes of the 2 May 2005 meeting, 05-182r0. Modifications were made to 7.1 where reference to 05-070r0 as revised was changed to 05-070r1 as revised.

Noud Snedler made a motion for acceptance of the minutes as modified. Greg Wheeless seconded the motion. The group passed the motion unanimously.
6. **Review of action items:**

   a. Kevin Butt will make a request to CAP to include Media Changer devices for the Logical Unit Not Ready, Offline additional sense key. Closed

   b. Greg Wheeless: Investigate PAMR command and all it does. How can we make it simpler. Also, how lock and unlock solenoid should fit in. Interactions should be with Move Medium command. Carry-Over


   d. Susan Gray: Update per today's discussions 05-063r0. Closed

   e. Kevin Butt: Send today's discussion to Susan. Closed

   f. Rod Wideman: Bring in ADIC's vendor-specific mode page that controls cleaning for discussion. Closed – 05-237r0

   g. Noud Snelder: Revise and post 05-078r0. Closed

   h. Michael Banther: Revise 05-175r0 and take to Lohmeyer for review. After approval by Lohmeyer and Dave Peterson it will be posted. Closed

   i. Kevin Butt: Write proposal for Self describe SCSI command timeouts. Carry-Over

   j. Rod Wideman: Reporting serial number of drive. 05-243

   k. Greg Wheeless: Method to describe accessibility of I/E elements. Closed 05-271r0

   l. Greg Wheeless: Method to group elements such as a removable magazine. Closed 05-271r0

   m. Greg Wheeless: Model information on how PAMR interaction with I/E elements. Carry-Over


   o. Michael Banther: Reporting of virtual libraries / partitioning to host. Carry-Over
p. Paul Entzel: Remove attached media changer model
   Carry-Over

q. Rod Wideman: Method for library to disable a drive so ISV knows not to use it.
   Closed. The ED bit of RES does this from a changer point of view.

r. Rod Wideman: Visibility of media type in storage element. Medium Domain (e.g.
   technology) & Medium type (e.g. WORM, Clean, Data, F/W Upgrade)
   Carry-Over. Add discussion to unscheduled business.

7. Discussion items:

7.1 SMC-3 Extended device capabilities proposal (05-078r1) [Snelder]
   Internally this document is called 05-078r2. r1 was never posted to the site. A discussion
   with John Lohmeyer to correct this will be discussed later.
   This discussion took most of the time with lots of changes.
   Should autoclean enable bit include mutual exclusive between the automation and the
   application client from cleaning? Suggested to add “exclusive” to device capabilities
   page.
   [Michael Banther] Add to 05-063r1 “Review of Clean”. This should include a model
   section of all ways the media changer is affected by cleaning.
   Delay CL_RTN bit until the cleaning model is complete. Remove from this proposal.
   The problem that is attempting to be addressed is…?
   [Greg Wheeless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes.
   [Noud Snelder] Revise and post 05-078r1 as 05-078r3 pending next Action Item.
   [Noud Snelder; Michael Banther] Get revision number corrected with John Lohmeyer.

7.2 Development of SMC-3 Standard (05-175) [Banther]
   Shared and ready to send out to ISV’s and others
   Received notification from SSC working group that Dave Peterson’s email has changed.
   Modify and post 05-175r2 as 05-175r3

7.3 SMC-3 ADIC AutoCleaning mode page (05-237) [Wideman]
   Rod does not suggest using the time based cleaning. The only thing of interest is a bit
   that says autocleaning is enabled or not. This is already covered in device capabilities
   mode page.

7.4 SMC-3 REQUEST DATA TRANSFER ELEMENT INQUIRY command (05-243)
   [Wideman]
   Rod made notes of feedback and will revise.
   [Rod Wideman] Revise and post 05-243r0 as 05-243r1

8. Unscheduled business:
8.1 SMC-3 (05-271r0) [Greg Wheeless]
We were out of time, but since Greg will not be here next meeting cycle we gave him 10 minutes to present the concept to let him see if he is heading in an acceptable direction. There may need to be a component of robotics. There are shoulds that need addressed.

8.2 SMC-3 OPEN/CLOSE IMPORT/EXPORT ELEMENT command (05-070r2) [Snelder]
8.3 SMC-3 Read Element Multi-identifiers (05-153r1) [Banther]
8.4 SPC-3 SPC-4 SES-2 SMC-3 Command requirements (05-074r1) [Banther]
8.5 Visibility of media type in storage element [Rod Wideman]

9. Next meeting requirements: Michael Banther
Subject to approval by the T10 Plenary, the group will hold a meeting 12 September 2005 during T10 plenary week in Colorado Vancouver, BC beginning at 2:30 PM and concluding at 7:00 PM.

6 Review new action items: Michael Banther

a. [Michael Banther] Add to 05-063r1 “Review of Clean”. This should include a model section of all ways the media changer is affected by cleaning. Reference 7.1. ASC/ASCQ’s should be specified for all states.

b. [Greg Wheeless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes.

c. [Noud Snelder] Revise and post 05-078r1 as 05-078r3 pending next Action Item.

d. [Noud Snelder; Michael Banther] Get revision number corrected with John Lohmeyer.

e. [Rod Wideman] Revise and post 05-243r0 as 05-243r1


7 Adjournment: Group
Paul Suhler made a motion for adjournment. Rod Wideman seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 7:54 PM MDT.