Minutes
SCSI Media Changer (SMC) Working Group
T10/06-062r0
9 January 2006
1:00 PM – 7:00 PM MST

1. Introductions   Group

Michael Banther called the meeting to order at 2:40 PM MST. He thanked Intel for hosting the meeting. Roger Cummings agreed to serve as the secretary of the meeting.

2. Approval of the Agenda   Michael Banther

Michael Banther discussed the agenda displayed on the Meetings page at ww.t10.org. Items addressing the SMC-3 Read Element Media Descriptor Proposal (05-259r1), SMC ISO/IEC 14776-351 comments (05-293r0), and the visibility of media types in storage element, were deleted. The resulting modified agenda is reflected in these minutes.

Kevin Butt made a motion to accept the agenda. Paul Suhler seconded the motion. The group passed the motion unanimously.

3. Attendance and Membership   Michael Banther

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:

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            Name                     S         Organization
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Mr. Rod Wideman                     V  ADIC
Mr. Noud Snelder                    V  BDT
Mr. Curtis Ballard                  V  Hewlett Packard
Mr. Michael Banther                 V  Hewlett Packard Co.
Mr. Kevin Butt                      A  IBM Corp.
Mr. Robert Payne                    P  Iomega Corp.
Mr. Paul Entzel                     P  Quantum Corp.
Dr. Paul Suhler                     A  Quantum Corp.
Mr. Roger Cummings                  P  Symantec
Mr. Halvard Eriksen                 AV Tandberg Data ASA
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4. INCITS Patent Policy   Michael Banther

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

Michael Banther requested corrections for the minutes of the November 7 2005 meeting (05-431r1). Corrections to the Title, the page header, and the time zone of the adjournment were requested.

Kevin Butt made a motion to accept the meeting minutes as modified at this meeting. Michael Banther seconded the motion. The group passed the motion unanimously.

6. Review of Action Items   Roger Cummings

Roger Cummings reviewed the outstanding agenda items, and the status of each item was reported as listed below:

06-001   [Michael Banther] Enhanced TapeAlert capability – synchronization with SSC-3.

Carry-Over

06-002   [Michael Banther] Reporting of virtual libraries / partitioning to host.

Carry-Over

06-003   [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.

06-004   [Greg Wheeless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes.

Carry-over

06-005   [Greg Wheeless] Revise 05-271r2 and post as 05-271r3.

Carry over

06-006   [Rod Wideman] Write a proposal for items 3.2.6 and 3.2.7 in 05-315r0.

Carry over

06-007   [Curtis Ballard] Revise 05-259r0 per discussion.

Done

06-008   [Greg Wheeless] Revise and post the minutes from the 12 September 2005 meeting.

Done

06-009   [Rod Wideman] Collect Sense codes from all Library vendors to assist in standardizing these sense codes.

Carry Over

06-010   [Kevin Butt] Post 05-315r1 (results of Sept 1 teleconference), and then merge the comments from the September working group into that document and post as r2.

Done

06-011   [Curtis Ballard] Revise 05-153r1 per November discussion item 7.2 and post.

Done

06-012 [Rod Wideman] Bring a proposal for a new command/framework per November discussion item 7.4.

Carry over

06-013 [Rob Elliott] Revise 05-074r1 per November discussion item 7.5 and post.

Carry over

06-014 [Paul Entzel] Revise 05-317r2 per November discussion item 7.6 and post.

Done

06-015 [Rod Wideman] Revise 05-243r1 per November discussion item 8.1 and post.

Carry over

7. Discussion Items   Group

7.1 Working List for ISV feedback (SMC/SSC/ADC/SPC) (05-315r2).   Kevin Butt

Kevin Butt reviewed section 3.2 of the latest version of the ISV feedback document. Kevin noted that an owner is still needed for item 3.2.1, and the group consensus was that we do not have sufficient detail in SMC-3 at the moment. Regarding 3.2.2, Kevin reported that Kevin Marks had agreed to extend his current SSC-3 proposal to cover SMC-3. Kevin noted that the responses to CA identified in section 3.2.3 & 3.2.4 had not yet been transmitted to CA, and he accepted an Action Item to forward each response. Kevin noted that Rod Wideman had outstanding Action Items to address items 3.2.6 & 3.2.7.

7.2 SMC-3 Read Element Multi-identifiers (05-153r1).   Curtis Ballard

This item was deferred to the next meeting.

7.3 SPC-3 SPC-4 SES-2 SMC-3 Command requirements (05-074r1).   Michael Banther

This item was deferred to the next meeting.

7.4 SMC-3 REQUEST DATA TRANSFER ELEMENT INQUIRY (05-243r1) command.
                                                                         Rod Wideman

This item was deferred to the next meeting.

7.5 SPC-4 SBC-3 SMC-3 Allow more commands through Write Exclusive reservations (05-368r1).   Rob Elliott

There was a long discussion regarding the usefulness of Write Exclusive Persistent Reservations to SMC devices. It was noted that SSC-3 permits Initiators other than the Reservation Holder to perform all commands other than those that change bits on the media. Suggestions to allow inventory applications to operate in the presence of persistent reservations were discussed. Robert Payne accepted an Action Item to define a philosophy to be used for Write Exclusive Persistent Reservations in SMC-3. Michael Banther accepted an Action Item to inform Rob Elliot of the discussion in this meeting.

7.6   SMC-3 Undocumented Element Type Code field in READ ATTRIBUTE command (05-413r0).   Noud Snelder

A detailed search of SMC history to identify where the description of the Element Status field had been deleted was performed. Curtis Ballard reported that the field had been included in response to proposal 99-148r2 to allow differentiation between MAM chips in different elements, and he believed that this was related to an HP plan to place a MAM chip in a picker which had never been shipped in a product. Document 03-052r5, the SMC-2 Letter Ballot comment resolution, was reported as accepting a comment to delete the field, and there was speculation that at this time the description was deleted put the field retained in the Figure in error. Rod Wideman accepted an Action Item to contact Erich Oetting (the SMC-2 editor) to see if he could provide any further information on this subject. A modification to 05-413r0 was proposed to replace "This proposal recommends removing this field from the READ ATTRIBUTE command" with "This proposal recommends changing this field in the READ ATTRIBUTE command to obsolete". Noud Snelder moved, and Kevin Butt seconded that, 05-413r0 as modified above be accepted for inclusion in SMC-3, and the motion was approved by a vote of 7 for, 0 opposed and 1 abstention. Noud accepted an action item to produce a revision of the proposal, and to incorporate it into SMC-3.

Michael Banther noted that problem with the Element Type field identified in 05-413 also existed in the published SMC-2 document. He undertook to discuss with John Lohmeyer if any action should be taken with respect to SMC-2, and accepted an Action Item in that respect.

7.7   SMC-3 Clarification SEND VOLUME TAG command (05-414r0).   Noud Snelder

This proposal was discussed in detail, and Noud accepted an Action Item to create a new revision based on the discussion.

8. Unscheduled Business   Group

8.1   SMC-3 Editorial changes (06-023r0)   Noud Snelder

This proposal was reviewed in detail, and additional changes needed by the deletion of attached medium changers were discovered. Noud accepted an Action Item to produce a revised proposal that incorporates the additional changes. During the discussion it was discovered that the terms "medium changer" and "media changer" are both found in the latest SPC-4 draft, and Paul Entzel accepted an Action Item to create a proposal for SPC-4 to make this consistent.

8.2   SMC-3 Report Supported Medium Types (06-046)   Curtis Ballard

Curtis described the usage of the Single bit in detail, and understood that text for the definition as set to zero was missing from the description. Curtis also commented that he had not differentiated between cases where the library was being upgraded by adding drives with new technologies versus upgrading the slots and the picker etc. Curtis agreed to post a new revision of the proposal for the next meeting.

9. Next Meeting Requirements Michael Banther

Subject to approval by the T10 Plenary, the group will hold a meeting on March 6, 2006 during the T10 plenary week in Hilton Head Island, SC, beginning immediately after ADI completes, and concluding at 7:00 PM.

10. Review New & Outstanding Action Items Roger Cummings

Roger Cummings reviewed the following items with the meeting:

06-001 [Michael Banther] Enhanced TapeAlert capability – synchronization with SSC-3.

06-002 [Michael Banther] Reporting of virtual libraries / partitioning to host.

06-003 [Rod Wideman] Visibility of media type in storage element. Medium Domain (e.g. technology) & Medium type (e.g. WORM, Clean, Data, F/W Upgrade).

06-004 [Greg Wheeless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes.

06-005 [Greg Wheeless] Revise 05-271r2 and post as 05-271r3.

06-006 [Rod Wideman] Write a proposal for items 3.2.6 and 3.2.7 in 05-315r0.

06-009 [Rod Wideman] Collect Sense codes from all Library vendors to assist in standardizing these sense codes.

06-012 [Rod Wideman] Bring a proposal for a new command/framework per November discussion item 7.4.

06-013 [Rob Elliott] Revise 05-074r1 per November discussion item 7.5 and post.

06-014 [Paul Entzel] Revise 05-317r2 per November discussion item 7.6 and post as 05-317r3.

06-015 [Rod Wideman] Revise 05-243r1 per November discussion item 8.1 and post.

06-016 [Noud Snelder] Incorporate 05-317r3 into SMC-3.

06-017 [Roger Cummings] Post revised November minutes as 05-431r2.

06-018 [Kevin Butt] Respond to CA re 3.2.3. of 05-315r1.

06-019 [Kevin Butt] Respond to CA re 3.2.4. of 05-315r1.

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

06-021 [Michael Banther] Forward comments from the discussion on 05-368r1 to Rob Elliott.

06-022 [Rod Wideman] Contact Erich Oetting re knowledge of SMC-2 Letter Ballot comments re the Element Type Code field in the Read Attribute command.

06-023 [Michael Banther] Contact john Lohmeyer regarding impact (if any) of approval of 05-413r0 on processed SMC-2 documents.

06-024   [Noud Snelder] Revise 05-413r0 per January agenda item 7.6, post as 05-413r1, and incorporate in SMC-3.

06-025   [Noud Snelder] Revise 05-414r1 per January agenda item 7.7 and post.

06-026   [Noud Snelder] Revise 06-023r0 per January agenda item 8.1, and post.

06-027   [Paul Entzel] Write proposal for SPC-4 to make usage of "medium changer" and "media changer" consistent.

06-028   [Curtis Ballard] Revised 06-046r0 per January agenda item 8.2, and post.

11. Adjournment   Group

Paul Suhler made a motion for adjournment. Kevin Butt seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 7:34 PM MST.