

T10/06-327r0: Minutes of SCSI Media Changer (SMC) Working Group for July 10, 2006, 2:30 PM - 7:00 PM MDT

1. Introductions

Group

Michael Banther called the meeting to order at 2:30 MDT. He thanked LSI Logic for hosting the meeting. Greg Wheelless agreed to serve as the secretary of the meeting.

2. Approval of the Agenda

Michael Banther

Michael Banther presented the agenda. Kevin Butt made a motion to accept the agenda as modified. Rod Wideman 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:

Name	S	Organization
Mr. Rod Wideman	V	ADIC
Mr. Noud Snelder	V	BDT
Mr. Kevin Marks	P	Dell, Inc.
Mr. Curtis Ballard	V	Hewlett Packard
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Kevin Butt	A	IBM Corp.
Mr. Paul Entzel	P	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Greg Wheelless	A	Symantec

8 People Present

Status Key: P - Principal
A,A# - Alternate
AV - Advisory Member
L - Liaison
V - Visitor

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 Minutes

Michael Banther

Rod Wideman made a motion to accept the previous meeting and teleconference minutes (06-269r0 and 06-239r0). Noud Snelder seconded the motion. The group passed the motion unanimously.

6. Review of Action Items

Greg Wheelless

Greg Wheelless reviewed the outstanding action 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 Wheelless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes. Carry-over.
- 06-005 [Greg Wheelless] 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.
- 06-012 [Rod Wideman] Bring a proposal for a new command/framework per November discussion item 7.4. Carry-over.
- 06-013 [Michael Banther] Revise 05-074r1 per November discussion item 7.5 and post. Duplicate.
- 06-018 [Kevin Butt] Respond to CA re 3.2.3. of 05-315r1. Carry-over.
- 06-019 [Kevin Butt] Respond to CA re 3.2.4. of 05-315r1. Carry-over.
- 06-020 [Robert Payne] Define a philosophy for Write Exclusive Persistent Reservations in SMC. Carry-over.
- 06-030 [Kevin Butt] Revise and post 05-315r2 per March discussion item 7.1. Carry-over.
- 06-031 [Noud Snelder] Standardize existing conditions and events where ASC/Qs are listed with an “M” (those that apply to medium changers), per March discussion item 7.1. Carry-over.
- 06-038 [Roger Cummings] Post a new revision of the 3-27 Conference Call minutes (06-174r0) as modified per May agenda item 5. Complete.
- 06-039 [Rod Wideman] Revise 05-243r3 per discussion during May agenda item 7.4 and post. Complete.
- 06-040 [Noud Snelder] Incorporate 05-243r4 into the next revision of SMC-3. Carry-over.
- 06-041 [Noud Snelder] Revise 05-414r2 per discussion during May agenda item 7.5 and post new revision. Carry-over.
- 06-042 [Curtis Ballard] Revise 06-046r3 per discussion during May agenda item 7.6 and post new revision. Complete
- 06-043 [Michael Banther] Revise and post 05-074r1 per June discussion item 4.3. Carry-over.
- 06-044 [Greg Wheelless] Solicit additional vendor-specific sense codes from library vendors per June discussion item 4.4. Carry-over.
- 06-045 [Rod Wideman] Bring a proposal for new sense codes for SMC (06-110r0) per June discussion item 4.4. Carry-over.
- 06-046 [Kevin Marks] Revise and post 06-182r0 per June discussion item 4.5. Complete.
- 06-047 [Curtis Ballard] bring a proposal for a specific type of Report Element Information per June discussion item 4.6. Carry-over.

7. Old Business

Group

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

Kevin Butt

This item was deferred to the next meeting.

- 7.2 SPC-3 SPC-4 SES-2 SMC-3 Command requirements (05-074r1).

Michael Banther

This item was deferred to the next meeting.

- 7.3 SMC-3 Clarification SEND VOLUME TAG command (05-414r1)

Noud Snelder

This item was deferred to the next meeting.

- 7.4 SMC-3 Report Supported Medium Types (06-046r5)

Curtis Ballard

Curtis Ballard presented the changes to his proposal from the previous revision. The group discussed whether limiting the number of volume type and qualifier combinations to 255 was too limiting, and agreed that Table y+3 should be changed to allow for a 2-byte descriptor count field.

Paul Entzel noted that the new editorial standard is to avoid “header” tables and instead use “parameter data” tables which show the header and the space for descriptors. Editorial changes were suggested for table y+5.

The group discussed the term “universal” in table y+1, and concluded that the term “All Qualifiers” was more self-descriptive. The group had further spirited discussion of “form factor”.

Curtis Ballard will revise and post 06-046r5.

- 7.5 SMC-3: Diagnostic and statistics log pages for SMC (06-182r1)

Kevin Marks

Kevin Marks presented the changes to his proposal from the previous revision. The group suggested replacing the terms “hard” and “soft” error with “unrecovered” and “recovered”. The group discussed the practicality of counting barcode errors, and concluded that the level of detail desired is not practical for many commercial readers.

Rod Wideman emphasized the importance of being able to reset the counters in this proposal. It was noted that deferred errors don't occur for SMC commands, as they don't use the immediate bit.

Kevin Marks will split 06-182r1 into two documents for separate consideration.

The group discussed the practicality of this proposal, as it seemed quite complex for low-end devices. Rod Wideman noted that he “loved tape alert”. Participants representing automation groups will inquire about the difficulty of this proposal with their automation group.

8. New Business

Group

- 8.1 Discuss volumes and addresses in SMC Model clause (5.2.1)

Greg Wheelless

Greg Wheelless asked the group's opinion about the clarity of this model clause. The group consensus was that there was not a large problem, merely small issues with wording: the word

“storage” is problematic, an element “may contain” a volume, a volume should be “in” an element, “at” an element address.

9. Next Meeting Requirements

Michael Banther

Subject to approval by the T10 Plenary, the group will hold a meeting on September 11, 2006 during the T10 plenary week in Nashua, NH beginning at 9:00 AM and completing at an undetermined time.

10. Review New and Outstanding Action Items

Greg Wheelless

Greg Wheelless 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 Wheelless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes.
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- 06-040 [Noud Snelder] Incorporate 05-243r4 into the next revision of SMC-3.
- 06-041 [Noud Snelder] Revise 05-414r2 per discussion during May agenda item 7.5 and post new revision.
- 06-043 [Michael Banther] Revise and post 05-074r1 per June discussion item 4.3.
- 06-044 [Greg Wheelless] Solicit additional vendor-specific sense codes from library vendors per June discussion item 4.4.
- 06-045 [Rod Wideman] Bring a proposal for new sense codes for SMC (06-110r0) per June discussion item 4.4.
- 06-047 [Curtis Ballard] bring a proposal (06-272) for a specific type of Report Element Information per June discussion item 4.6.
- 06-048 [Curtis Ballard] Revise and post 06-046r5 per July discussion item 7.4.
- 06-049 [Kevin Marks] Split 06-182r1 into two documents per July discussion item 7.5.
- 06-050 [Group] Participants representing automation groups will inquire about the difficulty of proposal 06-182r1 with their automation group per July discussion item 7.6.

11. Adjournment

Group

Greg Wheelless made a motion for adjournment. Paul Suhler seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 7:01 PM MDT.