

Minutes
SCSI Media Changer (SMC) Working Group
Ad Hoc Meeting
T10/05-353r0
12 September 2005
2:30 PM – 7:00 PM PDT

1. Introductions

Group

Michael Banther called the meeting to order at 2:30 PM PDT. He thanked PMC-Sierra for hosting the meeting.

2. Approval of the agenda

Michael Banther

Michael Banther discussed the order of the discussion items. It was noted that the agenda item numbering is incorrect. A call for secretary was added to the agenda.

Paul Suhler made a motion to accept the agenda. Susan Gray 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. Noud Snelder	V	BDT
Mr. Curtis Ballard	V	Hewlett Packard
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Paul Entzel	P	Quantum Corp.
Mrs. Susan Gray	V	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Erich Oetting	A#	Sun Microsystems, Inc.
Mr. Roger Cummings	P	Symantec
Mr. Halvard Eriksen	AV	Tandberg Data ASA

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 11 July 2005 (05-254r0) meeting and the 18 August 2005 (05-318r0) and 1 September 2005 (05-327r0) teleconferences. No comments were made.

Michael Banther made a motion to accept the meeting minutes. Paul Entzel seconded the motion. The group passed the motion unanimously

6. Call for Secretary

It is likely that a new secretary will be needed as of the November meeting. Anyone who is interested should contact Michael Banther.

7. Review of action items:

Susan Gray

- a. [Greg Wheelless] Model information on how PAMR interaction with I/E elements. Carry-Over
- b. [Michael Banther] Enhanced TapeAlert capability – synchronization with SSC-3. Carry-Over
- c. [Michael Banther] Reporting of virtual libraries / partitioning to host. Carry-Over
- d. [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.
- e. [Greg Wheelless] Change the 3rd paragraph of 5.3.1 to clarify addresses and volumes. Carry-over
- f. [Rod Wideman] Revise and post 05-243r0 as 05-243r1. Carry-over
- g. [Greg Wheelless] Revise and post 05-271r2 as 05-271r3. Carry over
- h. [All library vendors] Produce a list of vendor unique SCSI sense values used by their products. Carry-over
- i. [Rod Wideman] Write a proposal for “inventory changed” after I/E door accessed. Items 3.2.6 and 3.2.7 in 05-315r0. Carry over
- j. [Michael Banther] Present 05-315r0 at SMC-3 working group meeting in order to identify difficulty, priority and owner. Agenda item
- k. [Noud Snelder] Revise 05-078r3 based on discussion. Closed
- l. [Noud Snelder] Revise 05-070r3 based on discussion. Carry over

8. Discussion items:

8.1. SMC-3 Extended device capabilities proposal (05-078r4) [Snelder]

The changes made since revision 3 were reviewed.

The description of the MVCL bit when it is not set is not exactly the opposite of when it is set.

Noud Snelder made a motion to incorporate 05-078r4 as revised. Paul Suhler seconded the motion. The group passed the motion unanimously.

8.2. SMC-3 OPEN/CLOSE IMPORT/EXPORT ELEMENT command (05-070r3) [Snelder]

The group discussed how this could be expanded to component management in the future. Decided to leave the name alone for now and it can be changed in the future when the functionality is expanded.

Noud Snelder made a motion to incorporate 05-070r3 as revised. Susan Gray seconded the motion. The group passed the motion unanimously.

8.3. SMC-3 Read Element Multi-identifiers (05-153r1) [Banther]

There was much discussion about overloading the Read Element Status command. It would be nice if we could break it up into static and dynamic data so the host only has to ask for the static part.

The group discussed the association field and what the values mean for I/E, MTE and storage elements. It was suggested 00b be changed to be associated with the element to make it backwards compatible. It was suggested 01b and 10b be changed to be reserved since the SPC definition doesn't make apply.

What media type is reported if the element is empty vs. full? When empty, only the Primary code is reported (the secondary is reserved) and when full both the primary and secondary codes are reported.

Paul Entzel questioned whether MD5 is what is really wanted since not all drives report it. Should it be the T10 Vendor Identification format?

Provide guidance on the media type identifier for non DTE elements. When an element is full the media type descriptor for the media in the element should be reported. Should/can multiple media type identifiers be reported? If multiple media type identifiers are reported for an element, then other ones may need to be padded in order to maintain a consistent length for all element descriptors.

It was suggested that the Report Media Types Supported command must be supported if the MID bit is supported.

The group discussed expanding MID to multiple bits so that the various command set specific identifiers could be reported independently. This would allow only dynamic information to be reported all the time (i.e media type) and not the static stuff (i.e. location).

8.4. SMC-3 Read Element Media Descriptor Proposal (05-259) [Ballard]

This is very similar to the previous proposal. It does not address multiple device identifiers and simply adds a media descriptor.

The group is leaning more towards the first proposal because it solves more problems but is concerned about the complexity.

8.5. SMC ISO/IEC 14776-351 comments (05-293) [Banther]

ISO has responded with comments on SMC. Erich noted that he received comments for SMC-2. Can we drop SMC and just go with SMC-2? Need to make sure we address the issues in SMC-3.

8.6. Working List for ISV feedback (SMC/SSC/ADC/SPC) (05-315) [Butt]

Attempted to set priority, difficulty and owner for each item.

8.7. SPC-3 SPC-4 SES-2 SMC-3 Command requirements (05-074r1) [Banther]

Not discussed due to lack of time.

8.8. Visibility of media type in storage element [Rod Wideman]

Not discussed due to lack of time.

8.9. SMC-3 & SPC-4: Remove Attached Media Changer model (05-317) [Entzel]

Not discussed due to lack of time.

9. Unscheduled business:

10. Next meeting requirements:

Michael Banther

Subject to approval by the T10 Plenary, the group will hold a meeting 7 November 2005 during T10 plenary week in Austin, TX beginning at 1:30 PM and concluding at 7:00 PM.

11. Review new action items:

Michael Banther

11.1. Noud Snelder will revise 05-078r4 per discussion item 7.1.

11.2. Noud Snelder will incorporate 05-078r4 as revised into SMC-3.

11.3. Noud Snelder will revise 05-070r2.

11.4. Noud Snelder will incorporate 05-070r2 as revised into SMC-3.

11.5. Michael Banther will revise 05-153r1 per discussion item 7.3.

11.6. Curtis Ballard will revise 05-259r0 per discussion.

11.7. Michael Banther will create a proposal for SMC-3 that addresses the ISO comments against SMC and SMC-2.

12. Adjournment:

Group

Roger Cummings made a motion for adjournment. Noud Snelder seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 7:00 PM PDT.