T10/06-239r0: Minutes of
SCSI Media Changer (SMC) Working Group
for May 8, 2006, 3:33 PM - 7:11 PM PDT

1.   Introductions   Group

Michael Banther called the meeting to order at 3:33 PM PDT. He thanked NVIDIA for hosting the meeting. Roger Cummings agreed to serve as the secretary of the meeting.

2.   Approval of the Agenda   Michael Banther

Michael Banther presented the agenda. New items 8.2 and 8.3 were added to the agenda displayed at t10.org. Paul Suhler made a motion to accept the agenda as modified. Kevin Butt 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. 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. Robert Payne                    P  Iomega Corp.
Mr. Paul Entzel                     P  Quantum Corp.
Dr. Paul Suhler                     A  Quantum Corp.
Mr. Erich Oetting                   A# Sun Microsystems, Inc.
Mr. Roger Cummings                  P  Symantec

11 People Present

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

Roger Cummings noted that both the Minutes of the 3-06 meeting (06-139r1), and 3-27 Conference Call (06-174r0) needed to be approved, and asked if any changes were required. It was noted the attendance list in 06-174r0 is incorrect. Rod Wideman made a motion to accept both 06-139r1 and 06-174r1 (r0 as modified at the meeting). Paul Suhler 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.

06-012 [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.

06-018 [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.

06-027 [Paul Entzel] Write proposal for SPC-4 to make usage of "medium changer" and "media changer" consistent: closed by 06-224r0.

06-029 [Noud Snelder] Incorporate 05-368r2 (contains changes requested per January agenda item 7.5) into SMC-3: closed by SMC-3 Revision 2

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.

06-032 [Kevin Butt] Contact Kevin Marks to ask if he would be willing to extend his proposal in 05-158r2 from SSC to SMC per March discussion item 7.1: closed.

06-033 [Kevin Butt] Inquire how the VOLUME SEQUENCE NUMBER field is used by implementers at IBM, per March discussion item 7.5: closed (the field is not used).

06-034 [Paul Entzel] Inquire how the VOLUME SEQUENCE NUMBER field is used by implementers at Quantum, per March discussion item 7.5: closed (the field is not used and there will be no impact as long as zero is not defined as something other than "may be ignored".).

06-035   [Noud Snelder] Revise and post 05-414r1 per March discussion item 7.5: closed

06-036   [Rod Wideman] Revise and post 05-243r2 per March discussion item 7.4: closed

06-037   [Michael Banther] Post a meeting announcement for the March 27 conference call on the T10 reflector: closed

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   SMC-3 Read Element Multi-identifiers (05-153r2).   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 command (05-243r3).
        Rod Wideman

Rod Wideman discussed the changes made from 05-243r2, and noted that a motion to approve 05-243r2 had been tabled at the previous meeting. Curtis Ballard noted that r3 did not define page code 0 as mandatory, and said that he had requested this be added via e-mail. Rod therefore edited r3 in the meeting to define that page code 0 be mandatory where the device server supports the EVPD bit being set to one. The tabled motion was then modified to reference 05-243r4 (r3 as modified at this meeting), and the motion passed unanimously. Action items were assigned to Rod Wideman to post 05-243r4, and to Noud Snelder to incorporate 05-243r4 in the next revision of SMC.

7.5   SMC-3 Clarification SEND VOLUME TAG command (05-414r2)   Noud Snelder

Noud Snelder discussed the changes made from 05-414r1. There was a long discussion about the Volume Sequence Number field and is use to disambiguate volumes with identical barcodes or Volume Identifiers. It was noted that the use of the Volume Sequence Number field had never been clearly defined even though the field has existed since SCSI-2. Many other changes were made during the meeting, and Noud accepted an Action Item to post a new revision of 05-414r2.

7.6   SMC-3 Report Supported Medium Types (06-046r3)   Curtis Ballard

Curtis Ballard discussed the changes from 06-046r3. There was a spirited discussion about the definition of form factor, and modifications were made. The format of the Volume Type Descriptor was discussed in detail, and a decision taken to have only a single description field in each descriptor. Curtis accepted an Action Item to post a new revision of 06-046r3.

7.7   SMC-3 Vendor Specific Sense Code Survey (06-109r1)   Rod Wideman

This item was deferred to the next meeting because of a lack of time.

8.   New Business   Group

8.1   SMC-3: Diagnostic and statistics log pages for SMC (06-182r0)   Lestage and Marks

This item was deferred to the next meeting because of a lack of time.

8.2   SMC-3 Report Element Information (06-163r0)   Curtis Ballard

This item was deferred to the next meeting because of a lack of time.

8.3   SPC-4: Change 'medium changer' to 'media changer' (06-224r0)   Paul Entzel

The group briefly reviewed 06-224r0, and no issues were raised.

9.   Next Meeting Requirements   Michael Banther

There will be a conference call on at Monday, June 5 at 4pm BST (8am PDT, 11 EDT) for a duration of 2 hours.

Subject to approval by the T10 Plenary, the group will hold a meeting on July 10, 2006 during the T10 plenary week in Colorado Springs, CO beginning immediately after ADI completes, and concluding at 7:00 PM.

10.   Review New and Outstanding Action Items   Roger Cummings

R 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).

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

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

06-030 [Kevin Butt] Revise and post 05-315r2 per March discussion item 7.1.

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.

06-038   [Roger Cummings] Post a new revision of the 3-27 Conference Call minutes (06-174r0) as modified per May agenda item 5.

06-039   [Rod Wideman] Revise 05-243r3 per discussion during May agenda item 7.4 and post.

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.

06-042   [Curtis Ballard] Revise 06-046r3 per discussion during May agenda item 7.6 and post new revision.

11. Adjournment   Group

Kevin Butt made a motion for adjournment. Eric Oetting seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 7:11 PM PDT.