

T10/07-093r0: Minutes of SCSI Media Changer (SMC) Conference call for February 21, 2007, 8.01 AM – 10:00 AM PST

1. Introductions

Group

Michael Banther called the meeting to order at 8:01 AM PST. Roger Cummings agreed to serve as the secretary of the conference call.

Michael asked the people on the call to identify themselves, and the following people responded:

Name	Organization
Mr. Noud Snelder	BDT
Mr. Curtis Ballard	Hewlett Packard
Mr. Michael Banther	Hewlett Packard Co.
Mr. Kevin Butt	IBM Corp.
Mr. Geoffrey Barton	Overland Storage
Mr. Paul Entzel	Quantum Corp.
Dr. Paul Suhler	Quantum Corp.
Mr. Rod Wideman	Quantum Corp.
Mr. Roger Cummings	Symantec

9 people from 6 organizations.

2. Approval of the Agenda

Michael Banther

Michael Banther presented the agenda and noted that it and the details of the conference call had been distributed as 07-061r0. Roger Cummings reported that an additional document had subsequently been uploaded, and agenda item 5.1 added as a result. Michael Banther made a motion to accept the agenda as modified. Roger Cummings seconded the motion. The group passed the motion unanimously.

3. INCITS Patent Policy

Michael Banther

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

4. Old Business

Group

4.1 Working List for ISV feedback (SMC/SSC/ADC/SPC) (05-315r3).

Kevin Butt

Kevin Butt requested that this item be deferred to the next meeting.

- 4.2 SMC-3: Element Statistics log page for SMC (06-394r1) Kevin Marks
This item was deferred to the next meeting.
- 4.3 SMC-3: Diagnostics Data log page (06-395r2) Kevin Marks
This item was deferred to the next meeting.
- 4.4 SMC-3 Error codes overview (06-397r1) Noud Snelder
Noud Snelder requested that this item be deferred to the next meeting.
- 4.5 SMC-3, Report Element Information (06-272r1) Curtis Ballard
Curtis Ballard requested that this item be deferred to the next meeting.

- 4.6 SMC-3 TapeAlert Enhancements (06-420r0) Michael Banther
Michael Banther presented this proposal, which is designed to correspond to changes already made to SSC-3. Noud Snelder questioned why these features were called Tape Alert, and Kevin Butt particularly asked why the features should be labeled “tape” in a medium changer document. After some discussion, however, it was decided that current usage was too strong to make a change at this time. Paul Entzel asked if Tape Alert was an HP trademark, and Michael Banther was assigned an action item to check on this and respond.

There was a considerable discussion on the best approach to keeping the SSC-3 and SMC-3 Table in sync, and Michael raised several issues about referencing a subset of a table and solicited better ideas.

Michael noted that he had copied the severity definitions in Table x+1 from SSC-3, and he was concerned that they didn’t make much sense in the context of SMC-3. This led to a long discussion about severity terminology & usage. Curtis Ballard suggested replacing “is likely to” with “will”, and Noud suggested that any reference to data loss should be deleted. Geoff Barton suggested that the definition for critical should be “prevents system operation” and for warning” prevents optimum system operation”, and Michael modified the latter to read “If this is not corrected the system may not operate optimally.” Rod thought that there needed to be a sense that an uncorrected condition may cause a transition to “critical” severity. There was also a suggestion to use the phrase “or a failure is imminent”.

Michael also asked if it was acceptable to delete the Severity column in Table x+2, given Kevin Butt’s proposal for a Service Information Log page. Kevin agreed that the goal of that proposal was self-description, but the consensus was to retain the column for the moment. Paul Suhler asked if activation conditions also needed to be defined, and Michael responded that possible activation conditions were defined in an informative annex. Geoff felt that it would be difficult to agree on a deactivation condition before defining the activation condition, but several people disagreed with this on the basis of experience. Paul Entzel asked if the setting of any flag survived a power cycle, and was unconvinced by the response of “No”.

Individual flags were then discussed in order. The deactivation condition for flag 05h was proposed as diagnostics completed, but Kevin felt that the flag should be deactivated once diagnostics had started to run, and might be activated once more as a result. Michael proposed

the definition “Library diagnostics run or the condition causing the diagnostics request resolved”, and this was agreed along with a suggestion by Rod to make the flag Informative.

Michael proposed delaying the definition of the deactivation condition for flag 06h pending proposals to change the current definition in SSC-3, and Paul Entzel commented that the person making that proposal should also address the dual-port interface error flag.

The deactivation condition for flag 07h was agreed as “Predicted failure condition no longer met, or failure occurs”, for flag 08h as “Preventive Maintenance performed”, and it was agreed to use the SSC-3 definitions for flags 09h thru 0Bh.

For flag 0Ch it was quickly agreed to change “tape” to “volume”, but otherwise there was a considerable discussion on where this flag might be used. Curtis defined stray as “outside of inventory”, and described a function in which a volume was popped out into a slot, and only later was an operator asked to remove it. Rod also knew of conditions where volumes were moved without necessarily having a defined place to land, but still left inside the library. Curtis asked if the name of the flag could be changed. Michael was not sure if there was consensus on the second part of the proposed definition and suggested “volume has been placed in a storage element or media transfer element”, but Kevin argued against mention of a storage element. Michael also mentioned that he was considering the case of a magazine being removed and an empty magazine added, but Kevin expected that case to be covered by the Library Inventory flag. A question was asked if a magazine was treated as an i/o element, but there was no consensus on that point.

Michael accepted an Action Item to revise his proposal and post 06-420r1 as a result of the above discussion.

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| 4.7 | SMC-3 Discussion: Visibility of Volumes in Elements (06-421r1) | Curtis Ballard |
| | Curtis Ballard requested that this item be withdrawn. | |
| 4.8 | SMC-3 New Additional Sense Codes for Media Changers (06-110r0) | Rod Wideman |
| | This item was deferred to the next meeting. | |
| 4.9 | SMC-3 Add PREVENT ALLOW MEDIA REMOVAL command (06-442r1) | Noud Snelder |
| | This item was not addressed because of a lack of time. | |
| 4.10 | SMC-3 Support column in mode page codes and subpage codes table (06-456r2) | Noud Snelder |
| | This item was not addressed because of a lack of time. | |
| 4.11 | SMC-3 Command table and INQUIRY clean-up (06-477r0) | Michael Banther |
| | This item was not addressed because of a lack of time. | |
| 4.12 | SMC-3 Clarification of reporting drive prevented media removal (07-015r0) | Curtis Ballard |
| | This item was not addressed because of a lack of time. | |

4.13 SMC-3 New Additional Sense Codes Usage (07-018r0) Rod Wideman

This item was deferred to the next meeting.

4.14 SMC-3 Medium transport element subclause correction (07-024r0) Rod Wideman

This item was deferred to the next meeting.

4.15 SMC-3: RES – Incomplete Descriptors (07-035r0) Kevin Butt

Kevin Butt requested that this item be deferred to the next meeting.

5. New Business **Group**

5.1 SMC-3 Processed commands during not ready state (07-060) Noud Snelder

This item was not addressed because of a lack of time.

6. Review New Action Items **Roger Cummings**

Roger Cummings reviewed the following new Action Items with the meeting:

07-011 [Michael Banther] Check if “Tape Alert” is an HP trademark.

07-012 [Michael Banther] Create and post 06-420r1 (r0 revised as per discussion at the February 21, 2007 conference call).

7. Adjournment **Group**

Michel Banter made a motion for adjournment. Kevin Butt seconded the motion. The group passed the motion unanimously. Michael Banther adjourned the group at 10:00 AM PST.