SCSI Stream Commands - 3: Minutes: SSC-3 Dec 2 Telecon (T10/05-006r0)
Date: 12/2/04
Time: 9:30 -11:30 am Central Time
Location: Teleconference

Agenda

1. Opening remarks and introductions [Peterson]

2. Approval of agenda () [Peterson]

3. Approval of meeting minutes [Peterson]

4. Review of old action items [Butt]

5. Old business

6. New Business
6.1 SSC-3 WORM Model

7. Unscheduled business

8. Next meeting requirements

9. Review of new action items [Butt]

10. Adjournment

Attendance

SSC-3 Working Group Attendance Report - December 022004

Name	S	Organization
Mr. David Peterson	P	CNT
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Kevin Butt	V	IBM Corp.
Mr. Paul Entzel	P	Quantum Corp.
Dr. Paul Suhler	V	Seagate Technology

5 People Present

Status Key: P - Principal
A,A# - Alternate

AV - Advisory Member
L - Liaison
V - Visitor

Results of Meeting

11. Opening remarks and introductions [Peterson]

12. Approval of agenda () [Peterson]

13. Approval of meeting minutes [Peterson]

14. Review of old action items [Butt]

15. Old business

16. New Business

16.1 SSC-3 WORM Model

Michael Banther discussed comments to spreadsheet sent by Paul Entzel.

With HP's comments.

Level of write restriction for WORM[1]	WORM?	Write at EOD?	Write at BOT on blank tape?	Write over file marks at EOD?	Write over rec-ognized meta data?	Write over any meta-data?	Write over user data?
No write restrictions	No	Yes	Yes	Yes	Yes	Yes	Yes
Can over-write any metadata but no user data	Yes	Yes	Yes	Yes	Yes	Yes	No
Can over-write some types of metadata but no user data	Yes	Yes	Yes	Yes	Yes	No	No
Can over-write last filemark(s)	Yes	Yes	Yes	Yes	No	No	No
Can over-write last filemark(s) except one	Yes	Yes	Yes	All but one	No	No	No
Can write at EOD	Yes	Yes	Yes	No	No	No	No
Can write from BOP if tape has no user data[2]	Yes	Only if tape is blank[3]	Yes	No	No	No	No
Permanent write protect	No	No	No	No	No	No	No

Definition of metadata is label, header, trailer, end of volume, and filemarks

Medium Overwrite Level
Enabled (MOLE)

[1]
Michael Banther:
WORM restrictions do not fall into a sequence from less restrictive to more restrictive. For instance whether an implementation allows over-writing of meta-data is independent of whether it allows over-writing of filemarks.

Names of WORM levels describe the restriction incompletely, e.g., 'Can over-write last filemarks(s)' includes no over-writing of meta-data but the name doesn't convey that restriction.

[2]
Michael Banther:
Does this restriction apply to any partition or to partition 0 only?

[3]
Michael Banther:

I don't understand this entry.

Question on row 8 - is WORM by tape or by partition? There is a case of can only write from BOP(0) and possibly an additional row of can write from BOP(x).

Michael: Concerned that the chart is not and cannot be from less restrictive to most restrictive but should be capablilities only.

Paul Entzel: I think we are going doewn the wrong path. Implementations have gone out of their way to hide that the medium is WORM. Do we need to worry about anything more than We support WORM or not in drive and on medium. We only need to provide way to tell the app client why we don’t allow overwrite.

Kevin Butt disclosed that IBM holds several patents related to WORM and that he is working on seeing how they relate to SSC-3. The method of being able to overwrite metadata is one of the patents.

The discussion is headed towards narrowing the list to fewer classifications.

Michael: Use a single bit for WORM and specify in model section examples of what WORM could be.

Dave Peterson: We need to standardize the model and not rely on vendor specs. Which way are we leaning? Are we going in the directon of some kind of query or just check conditions.

Paul Entzel: Maybe it’s OK to only define Check Conditions that allow app to do a brute force discovery.

Michael: I think we need the following.

2 parameters

Label (does not include only a series of FMKs):

1. overwrite any label but no user;
2. Can over-write some types of labels but no user data;
3. cannot overwrite any label or user data

FM/EOD:

1. can overwrite last series of FM's at EOD;
2. can overwrite last series of FM's at EOD except FM that is furthest from EOD;
3. cannot overwrite an FM's but can append at EOD;
4. cannot append.

Can we define a term "Label" in a generic manner that says they are application labels, constructs, etc. and say the specific contents are Vendor-Specific. Some suggestions include "User Data Format Label"

This should be put into a Mode Page.

Kevin Butt: I think this should be a new mode page. We currently need 9 bits. 4 for the above 2 parms. Plus we need a single overall bit.

The drive config is in Inq VPD page.

Media configuration is the new mode page.

Paul: rev his proposal based off todays discussion.

16.2 05-002

Took comments from Paul Entzels email.

After looking at the proposal a little more, I think you are already partly there. The descriptions in the table already use the terms BOP, EOP, and current partition. My confusion came from the stuff on the first page. I think a few minor changes could alleviate this problem.

1.Remove the phrase "of the medium" from the definition of native logical capacity.

2.Reword the clause added in 8.2.2 to "..., list parameters describing native logical capacities, ..."

3.Remove the addition to note 37 as it adds no value but does confuse partition with medium.

4.In the example on page 2, replace "loaded medium" with "current partition".

As an unrelated comment, I don't see any value from the word "logical" in the phrase "native logical capacity". The term capacity is used throughout SSC, and as far as I can tell it always refers

to the logical capacity. I would recommend instead the term "native capacity" be defined and used.

I do like adding this definition of native capacity to SSC. Once it has been added I believe we could go through the document and clean it up several of the other places the term "capacity" has been used to use this new definition, see REPORT SUPPORTED DENSITY and SET CAPACITY commands.

16.3 05-002

IEEE standards project E1619 - Standard Architecture for Encripted shared storage media (www.siswg.org). Are we aware of this.

17. Unscheduled business

18. Next meeting requirements

19. Review of new action items [Butt]

Carry Over

1. Dave Peterson: Bring in a White Paper on the value added with Explicit Command Set.
2. Roger Cummings: Bring in document to support differentiation of media supported and drive supported density code.
3. Kevin Butt: Rev and post 03-010r1 Sequential-Access Device log page.
4. Dave Peterson: Review initiator vs I_T nexus throughout document.
5. Michael Banther: Bring in proposal to improve handling of cleaning and firmware upgrade cartridges.
6. Dave Peterson: Remove references to interblock gaps and erase gaps.
7. Michael Banther: Bring in proposal for State-based TapeAlert.
8. Michael Banther: Bring in proposal for Requested Recovery log page from ADC.
9. Michael Banther: Bring in proposal for Device Statistics log page from ADC
10. Paul Suhler: Lead a discussion of the concept discussed in ADI WG for Introduction of a physical device into the model section of SSC-3.

New

11. Dave Peterson: Send message on reflector to obsolete RSMK and setmarks.
12. Dave Peterson: Definition for Erase short.
13. Michael Banther: rev and post 04-335r1
14. Paul will revise his proposal with a table made from the spreadsheet and then Kevin Butt will pick it up and go forward.

15. Paul: Rev his proposal 04-373 based off telecon discussion and post.
16. Kevin: Rev 05-002 and post.

Adjournment

Dave Peterson made a motion to adjourn the meeting. Kevin Butt seconded the motion. The meeting was adjourned at 10:15 MST.