

Accredited Standards Committee  
X3, Information Processing Systems

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Project: 1047D

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Reply to: G. Penokie

To: Membership of X3T10

From: George Penokie

Subject: Minutes of X3T10 SCC Working Group Meeting -May 07, 1996

## AGENDA

1. Opening Remarks
2. Attendance and Membership
3. Approval of Agenda
4. Report on status of the SCC-2 project proposal
5. Indication that a redundancy group is overlaid
6. Making it illegal to modify an object without specifying the object
7. Allow a spare to be configured to cover all like objects within a target in one service action
8. Add disable, enable, and report disabled volume set service actions
9. Add a report device identification service action
10. What to return in Report LUN command?
11. The difference between p\_extent and ps\_extent
12. Add in a new redundancy group identifier of P+S redundancy
13. Configure Storage Array Command and Report Storage Array Configuration Command
14. Annex of configuration examples
15. Action Items
16. Meeting Schedule
17. Adjournment

## Results of Meeting

1. Opening Remarks

George Penokie convened the meeting at 9:00 am, Tuesday, May 07, 1996. He thanked Norm Harris of Adaptec for hosting the meeting.

This is a joint meeting of the X3T10 SCSI Controller Commands working group and the RAB Host Interface working group. The purpose of the group is to deal with interface issues related to using RAID's. The study group will assess the issues and then formulate a strategy for dealing with them.

As is customary, the people attending introduced themselves. A copy of the attendance list was circulated for attendance and corrections.

It was stated that the meeting had been authorized by X3T10 and would be

conducted under the X3 rules. Working group meetings take no final actions, but prepare recommendations for approval by the X3T10 task group. The voting rules for the meeting are those of the parent committee, X3T10. These rules are: one vote per company; and any participating company member may vote.

The minutes of this meeting will be posted to the SCSI BBS and the SCSI Reflector and will be included in the next committee mailing.

## 2. Attendance and Membership

Attendance at working group meetings does not count toward minimum attendance requirements for X3T10 membership. Working group meetings are open to any person or company to attend and to express their opinion on the subjects being discussed.

### RAID Study Group Meeting Attendees

Attendee	Company	Email Address
A. Taylor	Adaptec	ataylor@corp.adaptec.com
Edward Fong	Amdahl	esfi0@spg.amdahl.com
Chris Nieves	Auspex	cnieves@auspex.com
Doug Hagerman	DEC	hagerman@starch.enet.com
Paul Massiglia	DEC	massiglia@genral.enet.dec.com
Brett Quinn	EMC	quinn_brett@isus.emc.com
John Hartjen	EMC	hartjen_john@isus.emc.com
Dal Allan	ENDL	dal_allen@micmail.com
George Penokie	IBM	gop@rchvmp3.vnet.ibm.com
Dan Strevey	Intellistor/Fujitsu	dstrevey@intellistor.com
Corky Ball	JMR Electronics	corky@jmr.com
Bob Snively	Sun Microsystems	bob.snively@sun.com
Rick Wagner	Stream Logic	richard_wagner@streamlogic.com
Rod DeKoning	Symbios Logic	rod.dekoning@symbios.com
M.W. Jibbe	Symbios Logic	mahmoud.jibbe@symbios.com
Joe Molina	Technology Forums	tforums@ic.manicato.mn.us
Dave Wehrman	Unisys	75122,177@compuserve.com
Paul Scammell	Veritas	ps@veritas.com
Rager Klorese	Veritas	rogerk@veritas.com
Ed Barnes	Xyratex/Peer	edbarnes@primenet.com

## 3. Approval of Agenda

The agenda presented at the meeting was approved.

## 4. Report on status of the SCC-2 standard

The SCC-2 project proposal(96-152r0) will be presented to X3T10 for vote.

## 5. Indication that a redundancy group is overlaid

This proposal was accepted without comment.

6. Making it illegal to modify an object without specifying the object

This proposal was accepted without comment.

7. Allow a spare to be configured to cover all like objects within a target in one service action

It was requested that the term 'like objects' be clearly defined in SCC. This definition should also discuss if like objects may or may not have a capacity less than the spare (eg can a 2GB drive cover a 1GB drive).

During the discussion it was requested that the cover all be split into to two functions. One function would be to cover all like devices regardless of any other currently defined spares (note: this is the way things work in SCC and that behavior should be make clear in SCC-2). The other would be to only cover those like objects that are not already covered by a spare. (note: if there are no objects free to spare then an error should occur.)

8. Add disable, enable, and report disabled volume set service actions

The group requested the disable and enable volume set service actions be renamed to deassign and assign volume set. No other requests for changes was made.

9. Add a report device identification service action

This proposal was accepted without comment.

10. What to return in Report LUN command?

This was not discussed.

11. The difference between p\_extent and ps\_extent

George pointed out the model is not clear and the differences between a p\_extent and a ps\_extent. Information will be added to the model in SCC-2 to make it cleared on the differences.

12. Add in a new redundancy group identifier of P+S redundancy

This was proposal was accepted with requests that more information be added to the model to give examples of what things the spare would cover.

13. Configure Storage Array Command and Report Storage Array Configuration Command

A long discussion occurred on weather a one command configuration is desired or possible. The group agreed such a command would be a good idea. The problem is getting more than two groups to agree on what the parameters should be specified and the meaning of those parameters. Rod agreed to put a list of proposed parameters on the SCSI reflector within two weeks.

14. Annex of configuration examples

George expressed the opinion that an annex containing examples of how a host would use the SCC commands to configure various RAIDs would be useful. All agreed this is a good idea but is a big job and it is uncertain it actually be completed.

15. Action Items

- Develop a list of actions that could be used to create a one step configuration command - Rod DeKoning
- Add into the SCC-2 the proposals agreed to by the working group - George Penokie

16. Meeting Schedule

The next meeting will be hosted by Symbios Logic in Colorado Springs at the Red Lion Hotel July 16 9:00AM to Noon.

17. Adjournment

The meeting was adjourned at 12 noon.