Accredited Standards Committee*
InterNational Committee for Information Technology Standards (INCITS)

Doc. No.:	T10/07-033r0
Date:	January 30, 2007
Reply to:	John Lohmeyer

To: T10 Membership

From: Ralph Weber and John Lohmeyer

Subject: SCSI Commands, Architecture, & Protocol Working Group Meeting -- January 16-17, 2007
Lake Mary, FL

Agenda

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. SCSI Architecture Model Topics
   4.1   SAM-4 Response Fence for protocol services (06-341) [Elliott]
5. Command Set Topics
   5.1   SCSI Primary Commands Proposals
       5.1.1 SPC-4 Read debug data proposal (06-362) [Houlder]
       5.1.2 Security Association Model for SPC-4 (06-369) [Weber]
       5.1.3 SPC-4: Establishing a Security Association using IKEv2 (06-449) [Ball & Black]
       5.1.4 Secure LU Access (07-023) [Penokie]
       5.1.5 SPC-4 Target Port Group disconnected state proposal (06-390) [Knight]
       5.1.6 SPC-4: Encapsulated SCSI Commands (07-029) [Weber]
       5.1.7 MANAGEMENT PROTOCOL IN command field name fixup (07-022) [Weber]
   5.2   SCSI Block Commands Proposals
       5.2.1 On-disk bitmap support (06-393) [Cummings]
   5.3   SCSI Enclosure Services Proposals
   5.4   Other Proposals
       5.4.1 SNIA requested OSD changes (07-014) [Weber]
6. SCSI Protocol Topics
7. Old Business
8. New Business
9. Review of Working Drafts
10. Review of Recommendations to the Plenary
11. Meeting Schedule
12. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer called the meeting to order at 4:00 p.m. Tuesday, January 16, 2007. He thanked Roger Cummings of Symantec for hosting the meeting. As usual, the people present introduced themselves.

2. Approval of Agenda

The draft agenda was approved with no additions or changes.

No items were added/revised during the course of the meeting.

3. Attendance and Membership

Attendance at working group meetings does not count toward minimum attendance requirements for T10 member-ship. Working group meetings are open to any person or organization directly and materially affected by T10's scope of work. The following people attended the meeting:

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CAP Working Group Attendance Report - January 2007


            Name                   S         Organization
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Mr. Chris Fore                      P  Adaptec, Inc.
Mr. Noud Snelder                    V  BDT
Mr. Robert Snively                  P  Brocade Comm. Systems, Inc.
Mr. Gideon Avida                    P  Decru
Mr. Kevin Marks                     P  Dell, Inc.
Mr. David Black                     A  EMC Corp.
Mr. Mickey Felton                   A# EMC Corp.
Mr. Gary S. Robinson                P  EMC Corp.
Mr. William Martin                  P  Emulex
Mr. Robert H. Nixon                 A  Emulex
Mr. Ralph O. Weber                  P  ENDL Texas
Mr. Walt Hubis                      V  Engenio Information Tech.
Mr. Mike Fitzpatrick                P  Fujitsu
Mr. Nathan Hastad                   P  General Dynamics
Mr. Michael Banther                 A  Hewlett Packard Co.
Mr. Steven Fairchild                V  Hewlett Packard Co.
Mr. Dan Colegrove                   P  Hitachi Global Storage Tech.
Mr. Kevin Butt                      A  IBM Corp.
Mr. George O. Penokie               P  IBM Corp.
Mr. Robert Sheffield                P  Intel Corp.
Mr. Robert Payne                    P  Iomega Corp.
Mr. Eddy Quicksall                  V  iVivity
Mr. Joel Silverman                  P  Kawasaki Microelectronics Am
Mr. Dennis Moore                    P  KnowledgeTek, Inc.
Mr. John Geldman                    P  Lexar Media, Inc.
Mr. John Lohmeyer                   P  LSI Logic Corp.
Mr. Graeme Weston-Lewis             V  LSI Logic Corp.
Mr. David Geddes                    P  Marvell Semiconductor, Inc.
Mr. Landon Noll                     AV NeoScale Systems Inc.
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Mr. Frederick Knight              A  Network Appliance
Mr. Mark Overby                   P  Nvidia Corp.
Mr. Geoffrey Barton               V  Overland Storage
Mr. Tim Symons                    P  PMC-Sierra
Mr. Craig W. Carlson              AV QLogic Corp.
Mr. Matthew Ball                  V  Quantum Corp.
Mr. Paul Entzel                   P  Quantum Corp.
Dr. Paul Suhler                   A  Quantum Corp.
Mr. Michael Rogers                AV Samsung
Mr. Avraham Shimor                P  SanDisk Corporation
Mr. Stephen Finch                 P  STMicroelectronics, Inc.
Mr. Erich Oetting                 A# Sun Microsystems, Inc.
Mr. Roger Cummings                P  Symantec
Mr. Anders Liverud                AV Tandberg Storage
Mr. Jim Scott                     P  Vitesse Semiconductor
Mr. Mark Evans                    A  Western Digital
Mr. Curtis Stevens                P  Western Digital
Mr. Jeff Williams                 P  Xiotech Corp.
Mr. Rich Ramos                    P  Xyratex

48 People Present

Status Key:  P    -  Principal
             A,A# -  Alternate
             AV   -  Advisory Member
             L    -  Liaison
             V    -  Visitor
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4.   SCSI Architecture Model Topics

4.1 SAM-4 Response Fence for protocol services (06-341) [Elliott]

Rob Elliott presented a proposal to reflect transport layer ordering of commands and task management functions in SAM-4 (06-341r1). The group discussed numerous SCSI ordering issues, possible changes in the proposal, several other issues. A request was made for the addition of a model clause to describe the available ordering features, how they relate to each other, and how they should be used.

Rob agreed to prepare a new revision for consideration at the next meeting.

5.   Command Set Topics

5.1 SCSI Primary Commands Proposals

5.1.1   SPC-4 Read debug data proposal (06-362) [Houlder]

Gerry Houlder presented a proposal to define a method for retrieving debug log information (06-362r2). The group requested several changes, including changing 'debug log' to 'error history' globally. Gerry agreed to prepare a new revision.

Gerry Houlder moved that 06-362r3 (r2 as revised) be recommended for inclusion in SPC-4. Kevin Marks seconded the motion. In the absence of any objections, the motion passed unanimously.

5.1.2   Security Association Model for SPC-4 (06-369) [Weber]

Ralph Weber presented a proposal to add a Security Association model to SPC-4 (06-369r6). The group identified several errors in the proposal and Ralph agreed to prepare a new revision for consideration at the next meeting.

5.1.3   SPC-4: Establishing a Security Association using IKEv2 (06-449) [Ball & Black]

Matt Ball and David Black presented a proposal to define an IKEv2-based method for establishing a Security Association (06-449r1). The group discussed passing URLs instead of certificates as part of the authentication mechanism. It was agreed that URLs should be disallowed unless Kevin Butt reported otherwise to David Black.

The group provided significant editing guidance. Matt Ball and David Black agreed to prepare a new revision for consideration at the next meeting.

5.1.4   Secure LU Access (07-023) [Penokie]

George Penokie presented an overview of a new mechanism for securing command access to logical units using the concept of a cryptographically protected capability first developed for OSD (07-023r0). Several concerns were raised and George agreed to report them to the people writing the detailed proposal.

George noted that future discussion of this topic will involve a different document number and asked that this item be removed from future agendas.

5.1.5   SPC-4 Target Port Group disconnected state proposal (06-390) [Knight]

Fred Knight presented a proposal to define secondary target port group state information that would allow the identification of situations where the target port is offline (06-390r1). The group requested several editorial changes and Fred agreed to prepare a new revision.

Fred Knight moved that 06-390r2 (r1 as revised) be recommended for inclusion in SPC-4. Chris Fore seconded the motion. In the absence of any objections, the motion passed unanimously.

5.1.6   SPC-4: Encapsulated SCSI Commands (07-029) [Weber]

Ralph Weber presented a proposal to define a mechanism for encapsulating one SCSI CDB in another (07-029r0). Concerns were raised regarding the recursive use of the encapsulation mechanism, the need for placing some encapsulation parameters at the end of the encapsulation CDB, and several other problems. Ralph agreed to prepare a new revision of the proposal for consideration at the next meeting.

5.1.7   MANAGEMENT PROTOCOL IN command field name fixup (07-022) [Weber]

Ralph Weber presented a proposal to correct substantive errors discovered during the incorporation of the MANAGEMENT PROTOCOL IN command definition (07-022r0). The group requested several editorial changes and Ralph agreed to prepare a new revision.

Ralph Weber moved that 07-022r1 (r0 as revised) be recommended for inclusion in SPC-4. Mark Evans seconded the motion. In the absence of any objections, the motion passed unanimously.

5.2   SCSI Block Commands Proposals

5.2.1   On-disk bitmap support (06-393) [Cummings]

Roger Cummings presented a proposal to add an ORWRITE command to SBC-3 (06-393r2) the purpose of which was setting bits in a block. The group requested several editorial changes and Roger agreed to prepare a new revision.

Roger Cummings moved that 06-393r3 (r2 as revised) be recommended for inclusion in SBC-3. Kevin Marks seconded the motion. In the absence of any objections, the motion passed unanimously.

5.3 SCSI Enclosure Services Proposals

No SES-2 proposals were presented to the group.

5.4 Other Proposals

5.4.1   SNIA requested OSD changes (07-014) [Weber]

Ralph Weber presented a proposal to address several issues with OSD-2 that were discovered by the SNIA OSD TWG (07-014r0). The primary issue was the inability of SAS and FCP to transport OSD-2 data-in buffers. Secondary issues concerned byte alignment of CDB and parameter data fields. Because commonly used CDB and parameter data fields were relocated to achieve the SNIA-requested alignment, the proposal also made all OSD service action codes obsolete and replaced them with new service action codes for the same commands for OSD-2.

The group requested editorial changes and Ralph agreed to prepare a new revision.

Ralph Weber moved that 07-014r1 (r0 as revised) be recommended for inclusion in OSD-2. Mark Evans seconded the motion. In the absence of any objections, the motion passed unanimously.

6. SCSI Protocol Topics

No SCSI Protocol topics were presented to the group.

7. Old Business

There was no old business.

8. New Business

There was no old business.

9. Review of Working Drafts

No requests were made to review working drafts at this meeting.

10. Review of Recommendations to the Plenary

Ralph Weber noted that the following recommendations have been made to the T10 plenary:

    For inclusion in SPC-4:
    06-362r3 (Read debug data proposal) [Houlder]
    07-022r1 (MANAGEMENT PROTOCOL IN command field name fixup) [Weber]
    06-390r2 (Target Port Group disconnected state proposal) [Knight]

    For inclusion in SBC-3:
    06-393r3 (On-disk bitmap support) [Cummings]

    For inclusion in OSD-2:
    07-014r1 (SNIA requested OSD changes) [Weber]

11. Meeting Schedule

The next meeting of the SCSI Commands, Architecture, and Protocols Working Group will be Wednesday, March 14, 2007 from 9 a.m. until 7 p.m. and resuming Thursday, March 15, 2007 from 9 a.m. until noon. The meeting will be in Memphis, TN at the Marriott Memphis Downtown Hotel (http://marriott.com/property/proper-typage/memdt?groupCode=scsscsa&app=resvlink) hosted by the SCSI Trade Association.

12. Adjournment

The meeting was adjourned at 6:55 p.m. on Wednesday January 17, 2007.