

Accredited Standards Committee*
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Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber and John Lohmeyer
Subject: SCSI Commands, Architecture, & Protocol Working Group Meeting -- September 18-20, 2007
Vancouver, BC Canada

Agenda

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10. Review of Working Drafts
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12. Meeting Schedule

13. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer called the meeting to order at 9:00 a.m. Tuesday, September 18, 2007. He thanked Tim Symons of PMC-Sierra 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 membership. 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:

Name	S	Organization
Mr. David Peterson	P	Brocade
Mr. Kevin Marks	P	Dell, Inc.
Mr. David Black	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. Mike Fitzpatrick	P	Fujitsu
Mr. Nathan Hastad	P	General Dynamics
Mr. Michael Banther	A	Hewlett Packard Co.
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. Steven Fairchild	V	Hewlett Packard Co.
Mr. Christopher Williams	V	Hewlett Packard Co.
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.
Mr. Glen Jaquette	V	IBM
Mr. Kevin Butt	A	IBM Corp.
Mr. George O. Penokie	P	IBM Corp.
Dr. Mark Seidel	P	Intel Corp.
Mr. Robert Payne	P	Iomega Corp.
Mr. Joel Silverman	P	Kawasaki Microelectronics Am
Mr. Dennis Moore	P	KnowledgeTek, Inc.
Mr. John Geldman	P	Lexar Media, Inc.
Mr. Brad Besmer	V	LSI Corp.
Mr. Walt Hubis	V	LSI Corp.
Mr. John Lohmeyer	P	LSI Corp.
Mr. Landon Noll	A	NeoScale Systems Inc.
Mr. Frederick Knight	P	Network Appliance

Mr. Subhash Sankuratripati	A# Network Appliance
Mr. Geoffrey Barton	V Overland Storage
Mr. Tim Symons	P PMC-Sierra
Mr. Matthew Ball	V Quantum Corp.
Dr. Paul Suhler	A Quantum Corp.
Mr. Joseph Chen	P Samsung
Mr. Gerald Houlder	P Seagate Technology
Mr. Gary D. Moorhead	V Seagate Technology
Mr. Stephen Finch	P STMicroelectronics, Inc.
Mr. Erich Oetting	P Sun Microsystems, Inc.
Mr. Roger Cummings	P Symantec
Mr. Georg Boasson	V Tandberg Storage
Mr. Mark Evans	P Western Digital
Mr. Curtis Stevens	A Western Digital
Mr. Rich Ramos	AV Xyratex

42 People Present

Status Key: P - Principal
 A,A# - Alternate
 AV - Advisory Member
 E - Emeritus
 L - Liaison
 V - Visitor

4. SCSI Architecture Model Topics

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

Rob Elliott requested that discussion of the proposal to reflect transport layer ordering of commands and task management functions in SAM-4 (06-341r1) be deferred to the next meeting.

4.2 SAM-4: Task Tag Length and FCP (07-139) [Peterson]

Dave Peterson asked that discussion of the proposal to remove the task tag size statements in SAM-4 (07-139) be deferred to the next meeting.

4.3 SAM-4: Changes requested from 03/2007 editing session (07-157) [Penokie]

George Penokie presented a collection of UML changes that arose from discussions during the March SAM editing session (07-157r3). The group requested several changes and George agreed to prepare a new revision.

Rob Elliott asked for a straw poll to sense the support for changing task tag to task identifier.

There were 5 votes for task tag and 6 votes for task identifier.

George Penokie moved that 07-157r4 (r3 as modified) be recommended for inclusion in SAM-4. Mark Evans seconded the motion. The motion passed 13:1:3.

4.4 SAM-4: No UA on NOTIFY DATA TRANSFER DEVICE command (07-266) [Entzel]

George Penokie noted that this proposal was approved at the July meeting. John Lohmeyer agreed to remove this item from future agendas.

4.5 SAM-4 SCSI Initiator and Target Port capability attributes (07-263) [Elliott]

Rob Elliott presented a proposal to define port attributes that indicate port capabilities (e.g., which task attributes are supported) in a new SAM-4 annex (07-263r0). The goal was to facilitate the tracking of what features are supported, both manually and eventually via UML-based means.

Rob agreed to revise the proposal to remove everything except the informative annex and attributes that are not yet defined. Rob reviewed the other planned changes that were based on comments he had received offline.

Rob Elliott moved that 07-263r1 (r0 as modified) be recommended for inclusion in SAM-4. Mark Evans seconded the motion. In the absence of any objections, the motion passed unanimously.

5. Command Set Topics

5.1 SCSI Primary Commands Proposals

5.1.1 SPC-4: ASC/ASCQ Reservations for ATA REQUEST SENSE (07-081) [Overby]

In the absence of Mark Overby, discussion of the proposal to define a range of additional sense codes for use by T13 (07-081) was deferred to the next meeting.

5.1.2 SPC-4: Extended SCSI Commands (07-029) [Weber]

Ralph Weber reviewed the proposal to define a mechanism for adding extensions to SCSI CDBs (07-029r3). Ralph Weber moved that 07-029r3 be recommended for inclusion in SPC-4. Bob Nixon seconded the motion. The motion passed 15:0:4.

5.1.3 SPC-4 Persistent Reservation Clarification (07-389) [Knight]

Fred Knight presented a proposal to clarify the non-use of the reservation key by the REGISTER AND IGNORE THE EXISTING KEY persistent reservations function (07-389r0). The group concluded that the desired effect could be accomplished by removing extraneous text from the existing wording instead of adding more wording. Fred agreed to modify his proposal to effect this.

Fred Knight moved that 07-389r1 (r0 as modified) be recommended for inclusion in SPC-4. Bill Martin seconded the motion. In the absence of any objections, the motion passed unanimously.

5.1.4 SPC-4 Target Port Groups & Logical Unit Groups (07-390) [Knight]

Fred Knight presented a proposal to clarify the relationship between logical unit groups and target port groups (07-390r0). The group requested minor wording changes to clarify the requirements and options being proposed. Fred agreed to prepare a new revision.

Fred Knight moved that 07-390r1 (r0 as modified) be recommended for inclusion in SPC-4. Roger Cummings seconded the motion. The motion passed 11:0:6.

5.1.5 ASC/ASCQ Request for TCG constructs (07-381) [Marks]

Kevin Marks requested that this topic be removed from future agendas.

5.2 SCSI Block Commands Proposals

No block commands proposals were presented to the group.

5.3 SCSI Enclosure Services Proposals

No enclosure services proposals were presented to the group.

5.4 Other Proposals

5.4.1 OSD-2 Security Enhancements (07-301) [Weber]

Ralph Weber briefly reviewed the proposal to add range-based object security and attribute number security capability formats (07-301r2). The group requested editorial corrections and Ralph agreed to prepare a new revision.

5.4.2 Correct an OSD-2 defined attributes bug (07-357) [Weber]

Ralph Weber presented a proposal to correct a bug in OSD-2 r01 (07-357r0). Ralph Weber moved that 07-357r0 be recommended for inclusion in OSD-2. Kevin Marks seconded the motion. The motion passed 13:0:7.

5.4.3 OSD-2 Exceptions Management enhancements (07-378) [Weber]

Ralph Weber briefly reviewed the proposal enhance OSD-2 error detection and recovery (07-378r0). The group requested editorial corrections and Ralph agreed to prepare a new revision.

6. SCSI Protocol Topics

No SCSI Protocol topics were presented to the group.

7. Security

7.1 SPC-4: Command Security Model (07-262) [Weber/Penokie]

George Penokie and Ralph Weber discussed the relationship between 07-262r5 and 07-069r8.

The group reviewed 07-262r5 with an eye toward incorporating its general model into the next SPC-4 revision. Several minor changes were requested and George agreed to prepare a new revision of the proposal.

Ralph Weber moved that 07-262r6 (r5 as modified) be recommended for inclusion in SPC-4. George Penokie seconded the motion. In the absence of objections, the motion passed unanimously.

7.2 Capability based Command Security (07-069) [Penokie]

In the absence of Sivan Tal, George Penokie reviewed the latest revision of the proposal to define capability-based command security (07-069r8). The group provided a definition for 'security token'. The group suggested that 'security method' be changed to 'CbCS method' to eliminate any hint that the BASIC security method provides security, and George agreed to consider the suggestion.

Concerns were raised over the management device server being required to control secure CDB originator behaviors when it had no way to exercise such control and the fact that the management device server should always respond to requests using the same modus operandi regardless of the security method. The problematic text was completely rewritten and George agreed to discuss the changes with his co-authors.

The yes/no sense of the capability validation rules were found to be a knotted nest of overlapping then statements and double-negatives. George agreed to rewrite the text offline.

Several other issues were noted and George agreed to prepare a new revision for consideration at the next meeting.

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

David Black reviewed the history of the 128 vs 256 bit strength debate. David Black moved that 06-449r9 as modified be revised to include one suite of mandatory of cryptographic algorithms. Matt Ball seconded the motion.

Fred Knight moved to amend the motion to state that no mandatory cryptographic algorithms will be specified. Landon Noll seconded the motion to amend. The motion to amend passed 10:4:4.

By the agreement of David Black, Matt Ball, Fred Knight, and Landon Noll the amended motion was withdrawn.

Fred Knight moved that the 06-449 authors be instructed to propose text that all of the algorithms in at least one of the columns of the 256 vs 128 bit strength table shall be implemented. Eric Hibbard seconded the motion. The group discussed how best to implement the motion. The motion passed 12:3:6.

The group reviewed several dozen issues raised by reviews of 06-449r9 and agreed to modifications to resolve all but two of them. David agreed to review the requirements on application clients vis a vis the Use and Accept bits so that appropriate changes can be made in the next revision.

Ralph Weber agreed to prepare a new revision of the proposal for consideration at the next meeting. He noted that the document number will change since the current revision is r9.

7.4 ESP-SCSI for Parameter Data (07-169r1) [Weber]

Due to the late hour, Ralph Weber asked that discussion of this proposal to define a ESP-based parameter data feature for SPC-4 (07-069r1) be deferred to the next meeting.

7.5 Request for Security Protocol Code for TCG OSSC for use in MMC-6 (07-346) [McFerrin]

In the absence of Bill McFerrin, John Geldman moved that 07-346r0 be recommended for inclusion in SPC-4. Bill Martin seconded the motion. The motion passed 3:1:7.

Later in the meeting, Bill McFerrin announced that he had been instructed to withdraw the proposal.

George Penokie moved to reconsider the motion approving 07-346r0. Erich Oetting seconded the motion. In the absence of objections, the motion to reconsider passed unanimously. Based on Bill's earlier comments no further action was taken to recommend 07-346r0.

7.6 Update to SECURITY PROTOCOL IN (07-368) [Hatfield]

On behalf of Jim Hatfield, Gerry Houlder presented a proposal to add the reporting of security protocol properties to the SECURITY PROTOCOL IN command (07-368r1). The group requested that the proposal be modified to clarify those cases where no security protocol properties are defined and Gerry agreed to prepare a new revision.

Gerry Houlder moved that 07-368r2 (r1 as modified) be recommended for inclusion in SPC-4. Dan Colegrove seconded the motion. During the discussion further revisions were requested and Gerry felt the changes could not be made without benefit of offline discussions between himself and other proposal authors. Gerry and Dan agreed to withdraw the motion.

8. Old Business

There was no old business.

9. New Business

There was no new business.

10. Review of Working Drafts

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

11. Review of Recommendations to the Plenary

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

For inclusion in SAM-4:

07-157r4 (Changes requested from 03/2007 editing session) [Penokie]

07-263r1 (SCSI Initiator and Target Port capability attributes) [Elliott]

For inclusion in SPC-4:

07-262r6 (Command Security Model) [Weber/Penokie]

07-029r3 (Extended SCSI Commands) [Weber]

07-389r1 (Persistent Reservation Clarification) [Knight]

07-390r1 (Target Port Groups & Logical Unit Groups) [Knight]

For inclusion in OSD-2:

07-357r0 (Correct an OSD-2 defined attributes bug) [Weber]

12. Meeting Schedule

The next meeting of the SCSI Commands, Architecture, and Protocols Working Group will be Wednesday, November 7, 2007 from 9 a.m. until 7 p.m. and resuming Thursday, November 8, 2007 from 9 a.m. until noon. The meeting will be in Las Vegas, NV at the Atrium Suites Hotel (Reservations: 866-404-5286) hosted by Hitachi Global Storage Technology.

13. Adjournment

The meeting was adjourned at 12:05 p.m. on Thursday September 20, 2007.