

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

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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 13, 2006
Nashua, NH

Agenda

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 - 5.3 SCSI Enclosure Services Proposals
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 - 5.4.1 Remove PREVENT ALLOW MEDIUM REMOVAL from OSD-2 (06-257) [Weber]
 - 5.4.2 OSD-2 REMOVE PARTITION Security Controlled by Root Attributes (05-311) [Weber]
 - 5.4.3 OSD-2 No Capability can have a Vendor Specific integrity check value algorithm (05-314) [Weber]
 - 5.4.4 OSD-2 Multi-Object LIST and LIST COLLECTION command enhancements (05-316) [Weber]
 - 5.4.5 OSD-2 Four New Multi-Object Commands (05-328) [Weber]
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 - 8.1 SCSI Communications Security (06-431) [Black]
9. Review of Working Drafts
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12. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer called the meeting to order at 9:00 a.m. Wednesday, September 13, 2006. He thanked Zane Daggett of Hitachi Cable Manchester 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. Chris Fore	P	Adaptec, Inc.
Mr. Noud Snelder	V	BDT
Mr. Gideon Avida	P	Decru
Mr. Kevin Marks	P	Dell, Inc.
Mr. David Black	A	EMC Corp.
Mr. Mickey Felton	A#	EMC Corp.
Mr. Robert H. Nixon	P	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	V	Hewlett Packard Co.
Mr. Wayne Bellamy	V	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. Zane Daggett	P	Hitachi Cable Manchester
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. Joel Silverman	AV	Kawasaki Microelectronics Am
Mr. Mark Adams	V	LeCroy Corporation
Mr. John Geldman	P	Lexar Media, Inc.
Mr. John Lohmeyer	P	LSI Logic Corp.
Mr. Donald Rich	A#	m-systems Flash Disk Pioneers
Mr. David Peterson	P	McDATA
Mr. Larry Hofer	V	McDATA Corp
Mr. Mark Benedikt	P	Microsoft Corporation
Mr. Frederick Knight	A	Network Appliance
Mr. Mark Overby	P	Nvidia Corp.
Mr. James Williams	P	Oracle
Mr. Paul Entzel	P	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Gerald Houlder	P	Seagate Technology
Mr. William Martin	P	Sierra Logic, Inc.
Mr. Stephen Finch	P	STMicroelectronics, Inc.
Mr. Roger Cummings	P	Symantec
Mr. Curtis Stevens	P	Western Digital

40 People Present

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

4. SCSI Architecture Model Topics

4.1 SAM-4 Response Fence for protocol services (06-341r0) [Elliott]

Rob Elliott asked that discussion of this topic be deferred to the next meeting.

4.2 SAM-4 QUERY TASK TMF Extended Response (06-368) [Tuikov]

Luben Tuikov requested by email that this item be deferred until the November meeting.

4.3 SAM-4 SPC-4 Clear REPORTED LUNS DATA HAS CHANGED on any command (06-411) [Elliott]

Rob Elliott presented a proposal to clear the REPORTED LUNS DATA HAS CHANGED Unit Attention condition upon the processing of any command (06-411r0). The group requested several changes and 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: Log Command Corrections (05-232) [Penokie]

George Penokie asked that discussion of this topic be deferred to the next meeting.

5.1.2 SPC-4: Self Describing Command Timeouts (05-284) [Butt]

Kevin Butt presented a proposal for adding a method to recommend initiator command timeout values for each command (05-284r2). The group requested major changes in the proposal, including redefining the purpose of one of the two proposed time intervals being reported. Kevin agreed to prepare a new revision of the proposal for consideration at the next meeting.

5.1.3 SPC-4 Peripheral device informational identifier (06-221) [Elliott]

Rob Elliott presented a proposal to add administrative identification information to the SET/REPORT DEVICE IDENTIFIER commands (06-221r2). The group requested several changes and Rob agreed to prepare a new revision.

Rob Elliott moved that 06-221r3 (r2 as modified) be recommended for inclusion in SPC-4. Bob Nixon seconded the motion. In the absence of any objections, the motion passed unanimously.

5.1.4 SPC-4 WRITE BUFFER clarifications (06-282) [Elliott]

Rob Elliott presented a proposal to clarify when downloaded microcode takes effect (06-282r1). The group requested several changes and Rob agreed to prepare a new revision for consideration at the next meeting.

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

Gerry Houlder presented a proposal to define a method for retrieving debug log information (06-362r0). The group requested substantial changes and Gerry agreed to prepare a new revision for consideration at the next meeting.

5.1.6 SPC-4/SBC-3: Power conditions state machine clarification (06-350) [Marks]

Kevin Marks presented a proposal to make several minor wording corrections (e.g., changing 'receives' to 'processes') in the SPC-4 and SBC-3 Power Conditions state machines (06-350r0). Kevin Marks moved that 06-350r0 be recommended for inclusion in SPC-4 and SBC-3. Chris Fore seconded the motion. In the absence of any objections, the motion passed unanimously.

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

Ralph Weber presented a proposal to define security associations in SPC-4 (06-369r3). The group requested several changes and Ralph agreed to prepare a new revision for consideration at the next meeting.

5.1.8 SPC-4: Security Goals and Threat Model (06-388) [Black]

Due to the expiration of the time allowed for security topics, David Black agreed to defer discussion of this topic to the next meeting.

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

Fred Knight presented a proposal to define a Disconnected State for asymmetric logical unit access reporting purposes (06-390r0). The proposed mechanism for representing Disconnect State troubled several members of the group. The group agreed upon defining a new target port group to contain all ports in the Disconnected State and to require all such ports to stay listed in their normal target port group whenever they are listed in the new group.

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

5.1.10 Make Certificate Data Optional for SECURITY PROTOCOL IN Command (06-372) [Suhler]

Paul Suhler presented a proposal make returning certificates optional (06-372r0). Gerry Holder contested the plan based on concerns about returning Check Condition status in such cases.

Paul asked that discussion of this topic be removed from future agendas.

5.1.11 Request for Additional Security Protocol Value Allocation (06-392) [Cummings]

Due to the expiration of the time allowed for security topics, Roger Cummings agreed to defer discussion of this topic to the next meeting.

5.2 SCSI Block Commands Proposals

5.2.1 SBC-3 Physical blocks sans FORMAT UNIT LBA TO ALIGN field (06-034) [Elliott]

Rob Elliott presented a proposal to add reporting actual sector size using READ CAPACITY command SBC-3 (06-034r5). Rob Elliott moved that 06-034r5 be recommended for inclusion in SBC-3. Curtis Stevens seconded the motion. The motion passed 6:3:10.

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

Roger Cummings presented a proposal to add an ORWRITE command to SBC-3 (06-393r0) the purpose of which was setting bits in a block. The group considered adding an ANDWRITE command to clear bits and concluded it was inappropriate at this time.

Concerns were raised regarding the interactions of the proposal with end-to-end data protection and Roger agreed to consider the XDPWRITE command usage as a model for how to correctly handle the situation.

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

5.3 SCSI Enclosure Services Proposals

No SES-2 proposals were presented to the group.

5.4 Other Proposals

5.4.1 Remove PREVENT ALLOW MEDIUM REMOVAL from OSD-2 (06-257) [Weber]

Due to the late hour, Ralph Weber agreed to defer consideration of this proposal to the next meeting.

5.4.2 OSD-2 REMOVE PARTITION Security Controlled by Root Attributes (05-311) [Weber]

Due to the late hour, Ralph Weber agreed to defer consideration of this proposal to the next meeting.

5.4.3 OSD-2 No Capability can have a Vendor Specific integrity check value algorithm (05-314) [Weber]

Due to the late hour, Ralph Weber agreed to defer consideration of this proposal to the next meeting.

5.4.4 OSD-2 Multi-Object LIST and LIST COLLECTION command enhancements (05-316) [Weber]

Due to the late hour, Ralph Weber agreed to defer consideration of this proposal to the next meeting.

5.4.5 OSD-2 Four New Multi-Object Commands (05-328) [Weber]

Due to the late hour, Ralph Weber agreed to defer consideration of this proposal to the next meeting.

6. SCSI Protocol Topics

No SCSI Protocol topics were presented to the group.

7. Old Business

There was no old business.

8. New Business

8.1 SCSI Communications Security (06-431) [Black]

David Black presented an overview of security issues that are developing in SCSI command sets, especially SSC-3 (06-431r0). Several issues were debated and the effort produced valuable input to the various security-related proposals on the agenda (see agenda item 5.1.7).

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:

06-221r3 (Peripheral device informational identifier) [Elliott]

For inclusion in SBC-3:

06-034r5 (Physical blocks sans FORMAT UNIT LBA TO ALIGN field) [Elliott]

For inclusion in SPC-4 and SBC-3:

06-350r0 (Power conditions state machine clarification) [Marks]

11. Meeting Schedule

The next meeting of the SCSI Commands, Architecture, and Protocols Working Group will be Wednesday, November 8, 2006 from 9 a.m. to 8 p.m. (or until all agenda items are completed). The meeting will be in Las Vegas, NV at the Atrium Suites Las Vegas Hotel (1-866-404-5286) hosted by Hitachi GST.

12. Adjournment

The meeting was adjourned at 7:25 p.m. on Wednesday September 13, 2006.