

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

Doc. No.: T10/02-121r0

Date: March 19, 2002

Reply to: Cris Simpson

To: T10 Membership
From: Cris Simpson
Subject: SCSI RDMA Protocol (SRP) Working Group Meeting -- March 14, 2002
Dallas, TX

1. Opening Remarks

Cris Simpson thanked TI and Paul Aliosi for hosting.

2. Approval of Agenda

3. Attendance and Membership

Attendees

Brian Forbes	Brocade
Rob Elliott	Compaq
Bob Griswold	Crossroads
Bob Nixon	Emulex
Ralph Weber	ENDL
Randy Haagens	HP
George Penokie	IBM
Cris Simpson	Intel
John Lohmeyer	LSI
Nathan Obr	Microsoft
Ed Gardner	Ophidian Designs
Roger Cummings	Veritas

4. Old Business

4.1. Letter ballot resolution status - Simpson

Near closure on technical issues

Comments Resolved: 116, In Process: 23, Open: 298

Expecting motion to forward in May.

4.2. IBM050 - Reserve/Release

CAP recommended obsoleting Reserve/Release, Plenary to consider in May.

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Will assume approval, and write accordingly.

4.3. Other clearing effects - Elliott

Discussed list submitted by Rob Elliott, based on the FCP-2 clearing effects table (FCP2r7a §4.9).

4.3.1. Events mentioned by FCP-2 clearing effects table

4.3.1.1. Classic reservations

FCP-2: released (5.5.2, 7.26.2, 7.26.3)

SRP: See 4.2 *supra*.

4.3.1.2. Shared mode pages

FCP-2: reset to default/saved values (7.9.2, 7.9.6)

GOP: Inits should save. Follow FCP.

EAG: Init can't know whether a hard reset happened.

ROW: FCP-2 may come back...(Opportunity to fix?)

GOP: FCP-2 Mode Page issues resolved, others not.

Events that cause clearing:

Failed discovery after LIP,
 ... after OLS,
 Logout
 LOGI (Port Login)

EAG: If we're silent, things should work (Unit Attentions will be generated)

RobE, ROW: Don't be silent!

EAG: Say that SRP doesn't require.

RHaagens: If SW must assume the worst, there may be no value.

SPC3r05 7.9.2

b) The saved values of the mode parameters if a MODE SELECT command has not successfully completed since the last power-on or hard reset condition; or

GOP: Don't want logout to be a hard reset.

If Mode Pages changed, must set UA

SRP_x_LOGOUT does not cause a reset event, does not require clearing MPs.

4.3.1.3. Existing tasks at logout

FCP-2: All aborted.

SRP protocol-specific event

4.3.1.4. Non-shared mode pages

FCP-2: reset to default/saved values (7.9.2, 7.9.6)

SRP: Same as for shared MPs (See 4.3.1.2 supra)

SPC3r05 7.9.2:

a) The current values of the mode parameters established by the last successful MODE SELECT command;

4.3.1.5. Prevent Allow Medium Removal state

FCP-2: set to "allow" (7.13)

SRP: If logout is not a reset, there is no reason to change the state.

4.3.1.6. Buffered data for EXTENDED COPY

FCP-2: cleared (e.g. COPY STATUS data, RECEIVE DATA data, FAILED SEGMENT DETAILS data)(7.16.2, 7.16.3, 7.16.5)

This is post-task, per-initiator data about the task.
Essentially a bidir command from before there was bidir.

AR: (SPC needs to add "protocol-specific" wording)

4.3.1.7. Buffered data for XOR commands

FCP-2: cleared (SBC-2 4.2.3.7)

SRP: If init logs out, shall clear. (Same for T_LOGOUT)

AR: (SBC2 will also get "proto-specific".)

4.3.1.8. AccessID enrollment state

FCP-2: forced to pending-enrolled (future SPC-3)

Like PRs, does not go away, even across power cycles.

SRP: Add note "See SPC-3"

4.3.1.9. Preexisting ACA, unit attention, and deferred error conditions

FCP-2:cleared

*SRP: Same as clearing tasks (FOR THAT INITIATOR)
(Does SAM allow?)*

4.3.2. Events not mentioned by FCP-2 clearing effects table

4.3.2.1. log pages

FCP-2: reset (7.6)

SRP: Not affected

4.3.2.2. Alias list associations (7.2.1)

SRP:Clears on logout

AR: (Don't want to say this in SRP, get SPC changed.)

[AR: Need UA for LOGOUT: 29h- SvcDelSubsys Thing Happened](#)

4.3.2.3. Generation value for persistent reservations

FCP-2: set to 0 (7.11.3)

SRP: No effect. (No need to say.)

4.3.2.4. WRITE BUFFER download microcode mode (7.33.5-8)

SRP: LOGOUT signal causes LU to discard DLed ucode

4.3.2.5. Self-test (8.2.9)

SRP: No effect - keeps running. (Same for other Immediate CMDs e.g., REWIND, FORMAT UNIT)

[AR: \(Change SPC 'RESET' to LU RESET\)](#)

4.3.2.6. Power condition state (8.4.11)

SRP: Logout shall not affect.

4.3.2.7. interval timer and report count fields in Informational Exceptions mode page MRIE field (8.4.10)

SRP: No effect.

4.3.3. SSC issues

This is the wording in SSC-2 revision 7 section 8.3 preventing clearing of important mode pages for tapes:

"The device-specific parameters contained in the mode parameter header, mode block descriptor values, and data compression page shall be retained following a reset condition (e.g., Target Reset, SCSI Logical Unit Reset, Fibre Channel Reset LIP or PLOGI)."

SSC-2 clears these on hard resets:

4.3.3.1. SOFTWARE, ASSOCIATED, PERSISTENT, and PERMANENT write protect bits in the device configuration mode page (4.2.9.2-5)

SRP: No effect

4.3.3.2. TapeAlert flags (4.2.1.4.2)

This is a per-initiator log page (maybe the first such). General revulsion.

Not defined: What does a new initiator get? Randy Haagens guesses that a new init gets a copy of the internal page with all current conditions. (This was an HP proposal to SSC-2.)

[AR: Randy Haagens will investigate.](#)

[AR: Need proposal for SAM2 about logout signal.](#)

4.4. SENSE DATA LIST LENGTH four-byte multiple

SPI requires SNS_LEN x2, <= 252 byte

Does FCP require?

If no other Proto, reduce to 2 (like SPI)?

Bob Snively (T10 reflector, March 13)

"A requirement NOT made by FCP-2 is that the sense information be a multiple of 4-bytes. There is no such requirement in SPC-2, nor in FC-PLDA. There is similarly no requirement that lengths be counted by units of 4. I could similarly find no such limitation in SPI-4, since pad bytes are always available to control ending boundaries.

I think this requirement comes from some previous out-of-context discussions and is not necessary or desirable for SRP."

Discussion that this requirement did not appear useful, and if removed there was nothing preventing a target from aligning. Need text stating that extra bytes to be ignored. Rob Elliott moved that this requirement be removed. No disagreements. This requirement to be removed. Will be tracked as edit007.

4.5. edit005 Events clearing alias associations

>Will be considered at Mar13 CAP meeting.

SPC-3 says "These [alias] associations shall be cleared under any event that resets the logical unit and events designated by the SCSI protocol." It appears that we need to have a list or a statement that there are no such events. Where would it go?

Covered under 4.3.2.2 supra.

5. New Business

5.1. Next meeting

Mar 22 0900-1100 PST

1.888.316.5901 or +1.617.801.9781 Passcode: 794.9548

Other possible dates: (Apr 5, 12)

5.2. SRP_T_LOGOUT Reason Code 05h

Missing?

Make it reserved

5.3. ibm087/intel0096 SRP_T_LOGOUT

"Reserved, shall be ignored."

Removed codes 8 & 9 (Invalid count value)

Code 8 now "Invalid length for IU type" - OK.

5.4. SRP-2 requirements

GOP introduced proposed long-distance optimizations (IBM proposal T10/02-096r0)

Cris requested that WG members continue work on requirements.