To: T10 Technical Committee

From: Rob Elliott, Compaq Computer Corporation (Robert.Elliott@compaq.com)

Date: 25 May 2001

Subject: Minutes of the SRP teleconference – 25 May 2001

#### **Revision History**

Revision 0: (25 May 2001) first revision

#### Agenda

- 1. Opening remarks and introduction
- 2. Attendance
- 3. Approve agenda
- 4. Review Minutes of SRP WG 3 May 2001 (01-150r2) (Rob Elliott)
- 5. Review Minutes of SRP teleconference 11 May 2001 (01-169r1) (Rob Elliott)
- 6. Review old action items
- 6.1 Action items from 3 May WG
- 6.1.1 Cris Simpson will propose a Login Reject IU that can be carried as PrivateData with the CM\_REJ message.
- 6.1.2 Cris Simpson will research whether a Login Logout Acknowledge IU is needed.
- 6.1.3 Cris Simpson will work with the InfiniBand Trade Association to fix the IOController attributes page in AWG (perhaps replacing it with a new page).
- 6.1.4 The SRP editor should add a note should be added to SRP indicating that linked commands are not supported.
- 6.1.5 The SRP editor should clarify that the initiator port identifier is also a name that needs to be persistent.
- 6.1.6 The SRP editor should incorporate 01-164r0 (Reduce CMD\_IU types).
- 6.1.7 Jim Hafner will propose eliminating the initiator port identifier and target port identifier sizes from SAM-2 in an upcoming port name proposal.
- 6.2 Action items from 11 May
- 6.2.1 Ed Gardner will incorporate editorial changes and any technical changes for which consensus is reached on the T10 reflector into revision 5 by 5/24/2001.
- 6.2.2 Cris Simpson will create a proposed rewrite for section 4.1 (the model section). He will ask Ed for any material he has so far and create a combined or competing proposals for that section.
- 6.2.3 Cris Simpson will ensure there are enough reserved fields for the future multichannel proposal.
- 6.2.4 George Penokie will write a SAM mapping annex.
- 7. SRP LOGIN REJECT proposal (01-171r0) (Cris Simpson)
- 8. SRP to SAM-2 protocol (01-172r0) (George Penokie)
- 9. SRP bidirectional residuals (01-173r1) (Rob Elliott)
- 10. SRP Model for RDMA communication services (01-177r0) (Ed Gardner)
- 11. SRP InfiniBand annex (01-028r4) (Rob Elliott) [no change yet from last meeting]
- 12. Document review of SRP Revision 5 (srp-r05) (Ed Gardner)
- 12.1 Editor's notes
- 12.1.1 Editor's note 1: (Section 4.1) RDMA model rewrite/terminology
- 12.1.2 Editor's note 2: (Table 3) add note there is no limit to number of segments in an indirect data buffer descriptor?
- 12.1.3 Editor's note 3: (Table 16) code values for Task Management Flags
  - a) bitwise vs. encoded?
  - b) SPI-3/4 vs. FCP-2 on LOGICAL UNIT RESET value
  - c) document 20h as obsolete or reserved?
  - d) separate row for 20h?
- 12.2 Other issues
- 12.2.1 (after Table 8) are TAGs "unique among all of the requestor's requests" per responder or across all responders?

- 12.2.2 (Table 10) Rules for MULTI-CHANNEL ACTION of 01h (independent operation)
- 13. SRP MIB (Rob Elliott)
- 14. Review new action items
- 15. Meeting schedule
- 16. Adjourn

#### **Topics**

#### 1 Opening Remarks and introduction

The teleconference started at 3pm Central time.

#### 2 Attendance and membership

Name	S	Organization	Electronic Mail Address
Mr. Robert C. Ellio Mr. Robert H. Nixon Mr. Ralph O. Weber Mr. Cris Simpson Ms. Divya Vijayarag Mr. Xai Phan Mr. Edward Gardner Mr. Gerald Maurer	P P P navan V	Intel Corp. V LSI Logic Corp. McData Corp	Robert.Elliott@compaq.com bob.nixon@emulex.com roweber@acm.org cris.simpson@intel.com divyav@lsil.com Xai.Phan@McDATA.com eag@ophidian.org gerald.maurer@qlogic.com
8 People Present			
Status Key: P - Principal A,A# - Alternate AV - Advisory Member L - Liaison V - Visitor			

#### 3 Approve agenda

The agenda was approved as listed above.

#### 4 Review Minutes of SRP WG 3 May 2001 (01-150r2) (Rob Elliott)

The minutes from the previous meeting were approved.

# 5 Review Minutes of SRP teleconference 11 May 2001 (01-169r1) (Rob Elliott)

The minutes from the previous meeting were approved.

#### 6 Review old action items

- 6.1 Action items from 3 May WG
- 6.1.1 Cris Simpson will propose a Login Reject IU that can be carried as PrivateData with the CM\_REJ message.

Status: Done.

- **6.1.2 Cris Simpson will research whether a Login Logout Acknowledge IU is needed.** Status: Done.
- 6.1.3 Cris Simpson will work with the InfiniBand Trade Association to fix the IOController attributes page in AWG (perhaps replacing it with a new page).

Status: Cris has sent an email to the InfiniBand AWG asking for clarification about these fields. Still open.

# 6.1.4 The SRP editor should add a note should be added to SRP indicating that linked commands are not supported.

Status: Rejected. Nothing in SRP mentions linked commands and nothing breaks them. If they are obsoleted in SAM-2 and SPC-3 nothing needs to change in SRP.

# 6.1.5 The SRP editor should clarify that the initiator port identifier is also a name that needs to be persistent.

Status: Still open.

#### 6.1.6 The SRP editor should incorporate 01-164r0 (Reduce CMD\_IU types).

Status: Done.

### 6.1.7 Jim Hafner will propose eliminating the initiator port identifier and target port identifier sizes from SAM-2 in an upcoming port name proposal.

Status: George Penokie's 00-268r8 replaces all the sections of SAM-2 (4.7.1 and 4.7.2) that mention 64 bit identifiers, so no additional proposal is necessary. Done.

#### 6.2 Action items from 11 May

6.2.1 Ed Gardner will incorporate editorial changes and any technical changes for which consensus is reached on the T10 reflector into revision 5 by 5/24/2001.

Status: Done.

# 6.2.2 Cris Simpson will create a proposed rewrite for section 4.1 (the model section). He will ask Ed for any material he has so far and create a combined or competing proposals for that section.

Status: Still open.

# 6.2.3 Cris Simpson will ensure there are enough reserved fields for the future multichannel proposal.

Status: Still open.

#### 6.2.4 George Penokie will write a SAM mapping annex.

Status: Done.

#### 7 SRP LOGIN REJECT proposal (01-171r0) (Cris Simpson)

Cris reviewed the proposal. Ed asked about the 8 byte reserved field at the end of the IU. Since this IU will be piggybacked on a connection message, it should be as short as possible. The IU was compared to the LOGOUT IU which is 16 bytes long. Cris agreed to move the REASON field into bytes 4-7 to match the LOGOUT IU and shorten the LOGIN REJECT IU to entire length 16. The group recommended unanimously that 01-171r0 as revised into 01-171r1 be included in SRP.

Bob Nixon asked whether targets can choose not to support MULTICHANNEL TYPE of 01h. Ed said yes. Bob asked that a reason code be added that indicates this. Ed noted another reason code that would be useful is one that indicates when the initiator attempts to open more channels than are supported by the target. The group agreed that Cris Simpson should post suggested reason codes to the reflector, and Ed may incorporate additional codes as he sees fit.

#### 8 SRP to SAM-2 protocol (01-172r0) (George Penokie)

Deferred.

#### 9 SRP bidirectional residuals (01-173r1) (Rob Elliott)

Ed requested that underscores be removed from field names. The group discussed the "shall" vs "is expected to" wording, and agreed to a phrase like "The XYZ field contains <definition>. Target behavior if the XYZ does not contain <requirement> is unpredictable." Ed will provide wording for the sentences in question. The group recommended unanimously that 01-173r1 as revised into 01-173r2 be included in SRP.

#### 10 SRP Model for RDMA communication services (01-177r0) (Ed Gardner)

Ed briefly reviewed the RDMA model proposal. The group recommended the material be left in section 4 rather than be moved into an annex. Ed will revise the proposal for the next meeting.

# 11 SRP InfiniBand annex (01-028r4) (Rob Elliott) [no change yet from last meeting]

Deferred.

#### 12 Document review of SRP Revision 5 (srp-r05) (Ed Gardner)

#### 12.1 Editor's notes

#### 12.1.1 Editor's note 1: (Section 4.1) RDMA model rewrite/terminology

This is being covered with 01-177.

### 12.1.2 Editor's note 2: (Table 3) add note there is no limit to number of segments in an indirect data buffer descriptor?

Ed will leave the editor's note pending.

The group discussed what SRP should include on this topic. If any mention of a limit is included, test groups will probably insist on testing the limit (65 million segments). The length field could be limited to 2 bytes to make a testable boundary.

#### 12.1.3 Editor's note 3: (Table 16) code values for Task Management Flags

The group discussed the discrepancy between SPI-3/4 and FCP-2 for the LOGICAL UNIT RESET code value (08h vs. 10h). Ed will mark code 20h (TARGET RESET in the other protocols) as "restricted".

# 12.2.1 (after Table 8) are TAGs "unique among all of the requestor's requests" per responder or across all responders?

The group gave no objection to adding "per responder" type wording.

#### 12.2.2 (Table 10) Rules for MULTI-CHANNEL ACTION of 01h (independent operation)

Action Item for Ed to write a description of this state, both with a formal rule and examples.

#### 13 SRP MIB (Rob Elliott)

Rob asked whether anyone was interested in working on an SRP MIB (Management Information Block). This will sit between the InfiniBand channel adapter MIB being developed in the (proposed) IETF Infini Working Group and the SCSI MIB being developed in the IETF IP Storage working group (with T10 assistance). Cris Simpson suggested that a generic IO Controller MIB might also be appropriate.

The group was not sure if any CIM (common information model) schema work is needed at the SRP level.

#### 14 Review new action items

Cris Simpson will work with the InfiniBand Trade Association to fix the IOController attributes page in AWG (perhaps replacing it with a new page).

The SRP editor should clarify that the initiator port identifier is also a name that needs to be persistent.

Cris Simpson will create a proposed rewrite for section 4.1 (the model section). He will ask Ed for any material he has so far and create a combined or competing proposals for that section.

Cris Simpson will ensure there are enough reserved fields for the future multichannel proposal.

Ed Gardner will write a description of the MULTICHANNEL=01h state, both with a formal rule and with examples.

Ed Gardner will incorporate 01-171r1 and 01-173r2, add "per responder" text, add "restricted", and add additional reason codes in SRP revision 6.

Ed Gardner will release SRP revision 6 well in advance of the Redmond meeting.

#### 15 Meeting schedule

NOTICE: Per the last conference call, the SRP meeting in Redmond has moved from Mon/Tue to Tue/Wed.

#### Interim meeting:

19 June 2001 Tue Redmond, WA 9am – 7pm (RSVP recommended – Rob Haydt, Microsoft) 20 June 2001 Wed Redmond, WA 9am – 1pm Topics:

- 01-172 SAM-2 mapping annex
- 01-177 and other rewrites of section 4.1
- 01-028 SRP InfiniBand annex
- page-by-page review of SRP revision 6
- 01-085 multichannel proposal.

The group may request letter ballot after the meeting. The T10 chair is unavailable during June which may delay this.

#### T10 Week:

18 July 2001 Wed Colorado Springs CAP

19 July 2001 Thu Colorado Springs SRP (begins 1 hour after T10 plenary, usually around 1:00 pm

20 July 2001 Fri Colorado Springs SRP

Topics: maybe letter ballot review, multichannel proposal

#### 16 Adjournment

The meeting adjourned at 4:30 Central time.