

# Draft Minutes

## T10 FCP-4 Ad Hoc Work Group Regular Meeting

### 9 September 2008 - 9 AM to 11 AM MDT

### Colorado Springs CO

The FCP-4 Ad Hoc Work Group Regular Meeting of the INCITS SCSI (T10) Technical Committee met at Colorado Springs CO on 9 September 2008, hosted by LSI. Attendance was 13 people from 13 companies and is tabulated at the end of this document.

Minutes were taken by Bob Nixon (bob.nixon@emulex.com). Please report any corrections by email to the T10 reflector, T10@T10.org.

#### 1 Opening remarks and introductions

Chairperson Dave Peterson opened the FCP-4 Ad Hoc Work Group Regular Meeting on Tuesday, 9 September 2008, at 9:00 AM MDT. He thanked our host company, LSI, and led a round of introductions.

#### 2 Approval of Agenda

T10/08-363r0

An agenda for this meeting was posted as T10/08-363r0.

Bob Nixon requested a discussion of a proposal by Rob Elliott on SCSI Device Name in FCP.

Bob Nixon requested a discussion of Oddities in use of N\_Port.

***Dave Peterson (Brocade) moved and Bob Nixon (Emulex) seconded to accept T10/08-363r0 with the changes noted above as the agenda for this meeting. Approved unanimously.***

#### 3 Review of Minutes

T10/08-296r0

Minutes for the meeting 15 July 2008 have been posted as document T10/08-296r0.

***Dave Peterson (Brocade) moved and Bob Nixon (Emulex) seconded seconded to accept T10/08-296r0 as the minutes of the FCP-4 Ad Hoc Work Group ad hoc work group meeting on 6 May 2008. Approved unanimously.***

#### 4 Review of Old Action Items

060509-2 Dave Peterson: Look at XDREAD and XDWRITE behavior regarding retries. Do we fix it here or in SBC.

(Expect it will become an SBC issue, but for now, Carry)

070508-4 FCP-4 editor to clarify that an FCP\_Port should behave the same if it receives either reason code 03h or 09h in response to an REC ELS if the reason code explanation is either 15h or 17h.

(Carry)

## 5 Old Business

### 5.1 Defects in FCP-4r00a

T10/08-137r0

Butt (IBM)

It was agreed to treat the issues in this document as letter ballot comments. The chair will transcribe the issues and recommended fixes from T10/08-137r0 to the letter ballot comment document.

## 6 New Business

### 6.1 FC-SB-4 reuse of FCP FC-4 TYPE 08h

T11/08-452v0

Peterson (Brocade)

Dave showed a portion of a T11 FC-SB-4 proposal to use the FCP FC-4 TYPE code (08h) in some FC-SB-4 (SBCON) frame headers, in order to take advantage of widespread implementation of hardware DMA acceleration for frame TYPE 08h. Many possibilities for interoperability difficulties with concurrent operation of FCP implementations had been cleverly pre-empted, but two additional issues were raised:

- a) The portion of the SB\_COMMAND IU that would be the CDB LUN field in an FCP\_COMMAND IU is defined to provide some additional information fields for FC-SB-4. This would cause issues with some known implementations. Ralph Weber and Dave Peterson will look at assignment of a special LUN prefix value that these implementations will not find problematic.
- b) There may be issues with misinterpretation of an SB\_RESPONSE IU as a FCP\_RESPONSE IU. No problematic implementations are known, but the concern has not been fully relieved yet.

Resolutions to these concerns will be considered in the T11 FC-SB-4 work group, and returned to FCP for review.

### 6.2 Additional FC-4 Feature bits

T10/08-366r0

Peterson (Brocade)

This presentation proposed to assign an additional FC-4 TYPE code to FCP. It would not be used in Frame\_Headers but as a key to a set of four additional FC-4 Feature bits for use by FCP. Then FCP (TYPE 08h) Feature bit 3 would indicate support for the additional set of Feature bits.

An FCP use case for at least one additional FC-4 Feature bit is being developed in the T11 FC-SCM project.

The work group had no issues with the general approach.

### 6.3 Enhanced Discovery bit in PRLI

T10/08-365r1

Smith, Black (EMC)

The presentation proposed that an FCP PRLI bit be assigned. It would be used by an FCP initiator to request that an FCP target refuse an image pair to the requesting initiator if the Target does not make any LUNs other than default LUNs (including well-known LUNs) accessible to the requesting initiator. This is intended to accelerate PRLI responses and preserve resources on both the initiator and the target.

Several editorial corrections were accepted.

***David Black (EMC) moved and Fred Knight (NetApp) seconded to recommend to the T10 plenary that FCP-4 incorporate a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008. The motion passed with 8 favoring, zero opposed, and 4 abstaining.***

**Action** David Black to post a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008.

**Action** FCP-4 work group chair to recommend to the T10 plenary that FCP-4 incorporate a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008.

**Action** FCP-4 editor, on approval of the T10 plenary, to incorporate a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008

**6.4 SCSI Device Name in FCP** **nodoc** **Elliott (HP)**

Bob Nixon reported that Rob Elliott sought guidance on equating the SCSI Device Name for FCP devices to the FC-GS-6 Platform Name. A few issues were raised, mostly with unusual but possible cases:

- a) As a "shall", this may be unduly restrictive for FC devices that also supported other FC protocols;
- b) As a "shall", this may be unduly restrictive for SCSI devices that also supported other SCSI protocols;
- c) As a "shall", this may be ambiguous for FC platforms that expose more than one SCSI device.

It was uncertain that the FCGS-6 Platform Name is widely implemented.

The need for this specification was questioned.

The group advised that any letter ballot comment to this effect should be supported by use cases.

**6.5 Oddities in use of N\_Port** **nodoc** **Nixon (Emulex)**

Bob identified some peculiarities in use of the term N\_Port and related terms, especially in their consistency with FC standards. The editor advised he had the resolution of several of these issues on his work list already.

The group encouraged a letter ballot on the remaining issue, raised with table 7. This links resetting of BB\_Credit, a link-level activity, with PLOGI and LOGO, which are end-to-end functions.

**7 Schedules**

**7.1 Meeting Schedule**

The chair will request 4 hours at the T10 plenary week 3-7 November 2008 in Santa Ana CA.

**7.2 Project Schedule**

The work group agreed that a final proposal for the additional FC-4 Features bits and a proposed use case for them could appropriately be submitted as letter ballot comments.

Milestone	Date
Last technical input	January 2008
Target date for Letter Ballot	September 2008

*Dave Peterson (Brocade) moved and Bob Nixon (Emulex) seconded to request that the T10 chair conduct a letter ballot on forwarding FCP-4 Revision 1 to INCITS for further processing. The motion passed with 11 favoring, zero opposed, and zero abstaining.*

**Action** FCP-4 work group chair to request that the T10 chair conduct a letter ballot on forwarding FCP-4 Revision 1 to INCITS for further processing.

## **8 Review of Action Items**

- 060509-2 Dave Peterson: Look at XDREAD and XDWRITE behavior regarding retries. Do we fix it here or in SBC.  
(Expect it will become an SBC issue, but for now, Carry)
- 070508-4 FCP-4 editor to clarify that an FCP\_Port should behave the same if it receives either reason code 03h or 09h in response to an REC ELS if the reason code explanation is either 15h or 17h.  
(Carry)
- 080909-1 David Black to post a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008.
- 080909-2 FCP-4 work group chair to recommend to the T10 plenary that FCP-4 incorporate a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008.
- 080909-3 FCP-4 editor, on approval of the T10 plenary, to incorporate a revision to T10/08-365r1 that includes the changes agreed at the FCP-4 work group meeting 9 September 2008.
- 080909-4 FCP-4 work group chair to request that the T10 chair conduct a letter ballot on forwarding FCP-4 Revision 1 to INCITS for further processing.

## **9 Adjournment**

***Dave Peterson (Brocade) moved and David Black (EMC) seconded to adjourn. Approved unanimously.***

The FCP-4 Ad Hoc Work Group Regular Meeting was adjourned at 10:37 AM MDT on 9 September 2008.

## 10 Attendance

<b>Representative</b>	<b>Organization</b>
Noud Snelder	BDT
David Peterson	Brocade
David Black	EMC
Bob Nixon	Emulex
Ralph O. Weber	ENDL Texas
Curtis Ballard	Hewlett Packard
Kevin Butt	IBM
Matthew Ball	M.V. Ball Technical Consulting
Frederick Knight	NetApp
Craig W. Carlson	QLogic
Paul Suhler	Quantum
Gerald Houlder	Seagate
Dale LaFollette	Sun Microsystems