

# Draft Minutes

## T10 FCP-4 Ad Hoc Work Group

### 10 July 2007 - 9:00 AM to 10:30 AM

### Colorado Springs CO

The FCP-4 Ad Hoc Work Group of the INCITS SCSI (T10) Technical Committee met at Colorado Springs CO on 10 July 2007, hosted by LSI. Attendance was 11 people from 8 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 at T10@T10.org.

#### 1 Opening remarks and introductions

Chairperson Dave Peterson opened the meeting Tuesday, 10 July 2007 at 9:01 AM. He thanked our host company, LSI, and led a round of introductions.

#### 2 Approval of Agenda

T10/07-331r0

*It was moved by Dave Peterson and seconded by Kevin Butt to accept T10/07-331r0 as the agenda for this meeting. Approved unanimously.*

#### 3 Review of Minutes

T10/07-240r0

*It was moved by Bob Nixon and seconded by Rob Elliott to accept T10/07-240r0 as the minutes of the FCP-4 ad hoc meeting on 8 May 2007. 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.  
(Carry)
- 061107-2 Bob Nixon to present a proposal for negotiating use of CISC in FCP-4, allowing protection for those devices that do not gracefully tolerate it.  
(Closed by presentation of T10/07-318r0)
- 070508-1 Bob Nixon to publish T10/07-136r1 reflecting T10/07-136r0 and the agreements at the FCP-4 meeting 8 May 2007.  
(Completed by posting of T10/07-136r1)
- 070508-2 FCP-4 Editor to change FCP-4 subclause 8.2 to specify that the Sequence Count may be set to zero on retry of Sequences.  
(Carry)

- 070508-3 Dave Peterson to check the implications of retry from a Sequence Count other than either zero or the Sequence Count required by Continuously Increasing Sequence Count.  
(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)
- 070508-5 Dave Peterson to bring in a proposal to resolve ambiguity issues with the current definition of the task tag in FCP-4.  
(Carry)
- 070508-6 FCP-4 editor to modify FCP-4 subclause 12.4.1.5 to reflect the agreements at the FCP-4 work group meeting 8 May 2007.  
(Carry)
- 070508-7 FCP-4 editor to make changes to FCP-4 concerning PRLI negotiation of task retry identification, and capitalization of "Paramenter field", as agreed at the FCP-4 work group meeting 8 May 2007.  
(Carry)
- 070508-8 FCP-4 editor to assure that all acronyms for specific Extended Link Services in FCP-4 are followed by "ELS".  
(Carry)
- 070508-9 FCP-4 editor to update FCP-4 to consistently use the names to be defined in the revision to T10/07-072r1, instead of hex values or bit numbers, to identify values for the task management function field.  
(Carry)

## **5 Old Business**

### **5.1 SAM-4: Task Tag Length and FCP-4**

**T10/07-139r0**

**Peterson (Brocade)**

In response to this proposal that was accepted by CAP but not T10 during the March 2007 meeting week, certain cases were identified at the 8 May 2007 FCP-4 meeting that may lead to ambiguity in the current definition of the task tag value in FCP-4.

Discussion was deferred by request of the presenter.

### **5.2 QUERY TASK task management function**

**T10/07-072r2**

**Elliott (HP)**

This is a revision of an earlier proposal (T10/07-072r1) with changes requested by this work group at its meeting 8 May 2007.

It was agreed not to change the proposal to allow for a REC FCP Link Service to also provide the QUERY TASK SET FUNCTION. (NOTE: the REC FCP Link Service was proposed in a draft of FCP-2, but removed before publication in deference to the REC ELS in FC-FS. Many early initiators and targets supported Sequence retry using the REC FCP Link Service.)

***Rob Elliott moved and Bob Nixon seconded to recommend to T10 to incorporate T10/07-072r2 into FCP-4. Approved unanimously.***

**ACTION** FCP-4 editor to incorporate T10/07-072r2 into FCP-4 as directed by T10.

**5.3 QUERY TASK SET task management function T10/07-143r1 Elliott (HP)**

This is a revision of an earlier proposal (T10/07-143r0) incorporating changes requested by this work group at its meeting 8 May 2007.

*Rob Elliott moved and Bob Nixon seconded to recommend to T10 to incorporate T10/07-143r1 into FCP-4. Approved unanimously.*

**ACTION** FCP-4 editor to incorporate T10/07-143r1 into FCP-4 as directed by the T10 plenary.

**5.4 QUERY UNIT ATTENTION task management function T10/07-144r0 Elliott (HP)**

This is a revision of an earlier proposal (T10/07-067r0) with changes requested by this work group at its meeting 13 March 2007.

*Rob Elliott moved and Bob Nixon seconded to recommend to T10 to incorporate T10/07-144r0 into FCP-4. Approved unanimously.*

**ACTION** FCP-4 editor to incorporate T10/07-144r0 into FCP-4 as directed T10.

**6 New Business**

**6.1 Negotiating CISC T10/07-318r0 Nixon (Emulex)**

It was pointed out that the proposal would cause communication failure for legacy devices that currently gain from being offered CISC, since they would no longer get it. Even with elaborations worked out during the meeting, legacy devices that supported receiving but not sending CISC would fail.

In further discussion, no straightforward way was found for an initiator to distinguish legacy devices that would gain value from receiving CISC from legacy devices that do not fully support it. The former would error in common cases if CISC were offered but not presented (which some cases of the proposal specify), while the latter would error in certain cases if CISC is presented even if it was offered at PLOGI.

The presenter retracted the proposal. The group remains open to other approaches.

**6.2 Identifying boot devices no document Elliott (HP)**

Rob Elliott requested the attention of the group to easing the problem of discovering boot devices without having to open every target and read something (e.g., a new mode page). FC-4 Features (see FC-GS-5) drew his attention, but only two bits are available there. The group was open to using one of them to identify a possible boot device. Rob was advised to consider proposing additional useful information to be added to Fibre Channel Generic Services (e.g., kind of OS boot available; host systems for which the boot is intended).

It was noted information about boot capability might need to be controllable by a management application not resident in the device, which is not directly allowed for some information in Fibre Channel Generic Services.

**6.3 Introduction to Target Port Attributes T10/07-263r0 Elliott (HP)**

Rob will give this proposal in CAP later. He led the FCP group in a review of FCP-specific information that appears in the proposal. Several key ADT people being present, he got ADT review as well.

The group advised that ADT supports full ordering of commands and Task Management Functions.

The group advised to add a column for transport layer reset, since support is specific to protocols and topologies (e.g., Fibre Channel specifies it for loops, but not for Fabrics).

## **7 Meeting Schedule**

Request 2 hours at the T11 Plenary Week 17-21 September 2007 in Vancouver BC Canada, sponsored by PMC-Sierra.

## **8 Review of Action Items**

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(Carry)
- 070508-2 FCP-4 Editor to change FCP-4 subclause 8.2 to specify that the Sequence Count may be set to zero on retry of Sequences.  
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(Carry)

070710-1 FCP-4 editor to incorporate T10/07-072r2 into FCP-4 as directed by the T10 plenary.

070710-2 FCP-4 editor to incorporate T10/07-143r1 into FCP-4 as directed by the T10 plenary.

070710-3 FCP-4 editor to incorporate T10/07-144r0 into FCP-4 as directed by the T10 plenary.

## **9 Adjournment**

*It was moved by Dave Peterson and seconded by Kevin Butt to adjourn. Approved unanimously.*

The meeting was adjourned at 10:43 AM on 10 July 2007.

### 10 Actions on Proposals at This Meeting

Document Title	Presenter	Number	Disposition
QUERY TASK task management function	Elliott (HP)	T10/07-072	Close. Approved T10/07-072v2.
QUERY TASK SET t- m- f-	Elliott (HP)	T10/07-143	Close. Approved T10/07-143r1.
QUERY UNIT ATTENTION t- m- f-	Elliott (HP)	T10/07-144	Close. Approved T10/07-144r0.
SAM-4: Task Tag Length and FCP-4	Peterson (Brocade)	T10/07-139	Deferred. Expect a new revision.
Negotiating CISC	Nixon (Emulex)	T10/07-318	Close. Withdrawn by presenter.

### 11 Attendance

Representative	Organization
Bob Nixon	Emulex
Curtis Ballard	Hewlett Packard
Michael Banther	Hewlett Packard
Rob Elliott	Hewlett Packard
Kevin Butt	IBM
David Geddes	Marvell Semiconductor
Paul Entzel	Quantum
Paul Suhler	Quantum
Gerald Houlder	Seagate Technology
Erich Oetting	Sun Microsystems
Raymond Gilson	Symantec