Draft Minutes
T10 FCP-4 ad hoc work group meeting
11 March 2008 - 9 :00 AM to 10:30 AM
Durham NC

The FCP-4 ad hoc work group meeting of the INCITS SCSI Interfaces (T10) Technical Committee met at Durham NC on 11 March 2008, hosted by Network Applications. Attendance was 12 people from 11 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, 11 March 2008 at 9:01 AM. He thanked our host company, Network Applications, and led a round of introductions.

2 Approval of Agenda   T10/08-134r0

It was moved by Dave Peterson and seconded by Bob Nixon to accept T10/08-134r0 as the agenda for this meeting. Approved unanimously.

3 Review of Minutes

3.1 Regular meeting, 15 January 2008   T10/08-071r0

The minutes of the ad hoc work group meeting held on 15 January 2008 have been posted as T10/08-071r0.

3.2 Joint teleconference with T11 FC-SCM work group, 26 February 2008   T10/08-125r0

The minutes of the joint teleconference with the T11 FC-SCM work group 26 February 2008 have been posted as T10/08-125r0.

3.3 Approval motion

It was moved by Bob Nixon and seconded by Paul Suhler to accept T10/08-071r0 as the minutes of the FCP-4 ad hoc work group on 15 January 2008 and to accept T10/08-125v0 as the minutes of the joint teleconference with T11 FC-SCM work group 26 February 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)

071106-1   FCP-4 editor to clarify that, if Sequence Recovery is enabled, an I_T_L_Q nexus is identified by the
             Fibre Channel fully qualified exchange identifier together with the task retry identifier.
             (Carry)

080115-1   FCP-4 ad hoc work group chairperson to recommend to T10 to incorporate T10/07-519r0 into FCP-4
             ad hoc work group.
             (Completed)

080115-2   FCP-4 editor to incorporate T10/07-519r0 into FCP-4 ad hoc work group.
             (Complete)

5 Old Business

No old business was presented.

6 New Business

6.1 Annex D Proposed Changes   T10/08-122r0   Smith (EMC)

In the absense of Eric Smith, David Black led the discussion. This reviewed the status of the EMC proposal for
FCP changes in support of Simplified Configuration and Management (the T11 FC-SCM project). Much of the
proposal was contested at the interim teleconference on 26 February 2008. Study since then has reached some
less contentious conclusions, some of which are captured here.

The presenters have determined that FCP-4 permits return of an empty LUN inventory if LUN 0 is used for the
REPORT LUNS. This may therefore be used as an indication to the initiator to release resources by logging out.
FCP does not prevent such a logout, and SCM (but not FCP) may require it.

A target may still be allowed as an optimization to reject a PRLI in the event of an empty LUN inventory for the
initiator, but it is no longer intended to be an FC-SCM requirement.

The need for FC-SCM specific information in the Name Server, and its possible impact on the recommended
discovery process, is still open, but not clearly needed. It may fall into the category of SCM features that are
documented in FC-SCM but not FCP.

There is currently no need seen for an "enhanced discovery" bit in the PRLI.

There is currently no need seen for a procedure in FCP for targets to discover initiators.

RSCN rules will appear only in FC-SCM, not FCP. An RSCN rule in serious consideration is for a target to initiate
an RSCN on change of LUN inventory. It was determined that FC-LS allows RSCNs that represent events in a ULP
(e.g., SCSI).

The presenter was invited to look into the possibility of considering RSCNs for changes of asymmetric logical unit
groups as well.

A revision to the original proposal will be forthcoming.

6.2 FC-4 Features object and device type support T10/08-127r0 Peterson (Brocade)

This proposal reports on an offline discussion of the advantages of discovering SCSI device type information via the FC Name Server. Serveral options for representing this information were considered. One was reccommended. It indicates only two specific device types, and uses up the remaining two bits in the FC-4 Features for FCP. It solves what the presenter feels are two critical issues: finding a tape drive among hundreds of disks; and finding boot devices.

There were several concerns about the proposal, including:

- lack of a good description of the motivation;
- interaction with legacy devices which have the desired features but leave these bits reset;
- use of the last remaining bits FCP can register with the Name Server; and
- lack of distinction among the logical units behind the port.

ACTION **FCP-4 chair to schedule a teleconference to consider T10/08-127r0 for 11 AM to 1 PM CDT on Wednesday 2 April 2008.**

6.3 Defects in FCP-4r00a T10/08-137r0 Butt (IBM)

Several issues with the clarity and completeness of the normative text were raised by an engineering team at a member company. This document lists them, each identified by number. The editor will prepare responses to some, and these, along with the original document, will be considered in leftover time during the teleconference on April 2.

7 Project Schedule

Reflecting the recent opening of new technical issues, it was agreed to adjust the target date for letter ballot from March 2008 to May 2008.

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

8 Meeting Schedule

Request 3 hours at the T10 Plenary Week sponsored by NVidia 5-9 May 2008 in Santa Clara CA.

9 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)

071106-1   FCP-4 editor to clarify that, if Sequence Recovery is enabled, an I_T_L_Q nexus is identified by the Fibre Channel fully qualified exchange identifier together with the task retry identifier.
(Carry)

080311-1   FCP-4 chair to schedule a teleconference to consider T10/08-127r0 and T10/08-137r0 for 11 AM to 1 PM CDT on Wednesday, 2 April 2008.

10 Adjournment

It was moved by Erich Oetting and seconded by Kevin Butt to adjourn. Approved unanimously.

The meeting was adjourned at 10:57 AM on 11 March 2008.

11 Attendance

Representative	Organization
Noud Snelder	BDT
David Peterson	Brocade
David Black	EMC
Robert H. Nixon	Emulex
Curtis Ballard	Hewlett Packard
Rob Elliott	Hewlett Packard
Kevin Butt	IBM
Matthew Ball	M.V. Ball Technical Consulting
Robert Griswold	Microsoft
Paul Suhler	Quantum
Erich Oetting	Sun Microsystems
Halvard Eriksen	Tandberg Storage