

Draft Minutes

T10 FCP-4 Ad Hoc Work Group

6 November 2007 - 9 AM to 10:30 AM

Las Vegas NV

The FCP-4 Ad Hoc Work Group of the INCITS SCSI (T10) Technical Committee met at Las Vegas NV on 6 November 2007, hosted by Hitachi Global Storage Technology. Attendance was 9 people from 9 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, 6 November 2007 at 9:03 AM. He thanked our host company, Hitachi Global Storage Technology, and led a round of introductions.

2 Approval of Agenda

It was moved by Dave Peterson and seconded by Bob Nixon to accept T10/07-487r1 with the changes noted above as the agenda for this meeting. Approved unanimously.

3 Review of Minutes

It was moved by Bob Nixon and seconded by Dave Peterson to accept T10/07-410r0 as the minutes of the FCP-4 ad hoc meeting on 18 September 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.
(Expect it will become an SBC issue, but for now, 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.
(Completed by discussion at this meeting)

- 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.
(Completed)
- 070508-7 FCP-4 editor to make changes to FCP-4 concerning PRLI negotiation of task retry identification, and capitalization of "Parameter field", as agreed at the FCP-4 work group meeting 8 May 2007.
(Completed)
- 070508-8 FCP-4 editor to assure that all acronyms for specific Extended Link Services in FCP-4 are followed by "ELS".
(Completed)
- 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.
(Completed)
- 070710-1 FCP-4 editor to incorporate T10/07-072r2 into FCP-4 as directed by the T10 plenary.
(Completed)
- 070710-2 FCP-4 editor to incorporate T10/07-143r1 into FCP-4 as directed by the T10 plenary.
(Completed)
- 070710-3 FCP-4 editor to incorporate T10/07-144r0 into FCP-4 as directed by the T10 plenary.
(Completed)
- 070918-1 Erich Oetting to look into any current interest in pursuing standards for FCP-4 multipathing.
(Carry)

5 Old Business

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

T10/07-139r0

Peterson (Brocade)

It was agreed to drop this proposal on the author's recommendation.

6 New Business

6.1 Standardize Annex D

Peterson (Brocade)

Dave pointed out that certain Name Server registrations recommended in informative annex D were very valuable and should be required in normative text. He clarified that his intent was to make only the registrations normative, not the overall discovery process described in annex D. With that clarification, it was observed that the registrations Dave wanted to require are already required in subclauses 7.2 and 7.3. No further action is needed.

6.2 I_T Nexus Discussion

Peterson (Brocade)

It was agreed that in FCP-x, an I_T nexus is identified by the Fibre Channel S_ID/D_ID pair of the Initiator port and Target port.

It was agreed that in FCP-x, an I_T_L nexus is identified by the Fibre Channel S_ID/D_ID pair of the Initiator port and Target port, together with the LUN.

It was agreed that in FCP-x, if Sequence Recovery is not enabled, an I_T_L_Q nexus is identified by the Fibre Channel fully qualified exchange identifier.

It was agreed that in FCP-x, 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.

ACTION 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.

6.3 Recovery Abort Terminology

Peterson (Brocade)

It was agreed that the concept of "Recovery Abort" was redundant to the (recently) well-defined term ABTS-LS in FC-FS-x.

ACTION FCP-4 editor to incorporate the definition of ABTS-LS from FC-FS-3, and use it to replace all references to, and most or all discussion of, Recovery Abort.

6.4 Schedule for remaining work

Peterson (Brocade)

There is no remaining new work for FCP-4 unless the interest in multipathing is revived. It was agreed that there is no immediate motivation to begin work on FCP-5 after FCP-4 is complete, and that, barring major new needs, any further FCP work may be absorbed into CAP.

7 Project Schedule

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

8 Meeting Schedule

Request 2 hours at the T10 Plenary Week 14-18 January 2008 sponsored by Western Digital in Santa Ana 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)
- 070508-3 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)

- 070918-1 Erich Oetting to look into any current interest in pursuing standards for FCP-4 multipathing. (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.
- 071106-2 FCP-4 editor to incorporate the definition of ABTS-LS from FC-FS-3, and use it to replace all references to, and most or all discussion of, Recovery Abort.

10 Adjournment

It was moved by Dave Peterson and seconded by Paul Suhler to adjourn. Approved unanimously.

The meeting was adjourned at 10:04 AM on 6 November 2007.

11 Actions on Proposals at This Meeting

Document Title	Presenter	Number	Disposition
SAM-4: Task Tag Length and FCP-4	Peterson (Brocade)	T10/07-139	Close. Dropped by author's recommendation.

12 Attendance

representative	organization
David Peterson	Brocade
Robert H. Nixon	Emulex
Kevin Butt	IBM
Dennis Moore	KnowledgeTek
Geoffrey Barton	Overland Storage
Paul Suhler	Quantum
Erich Oetting	Sun Microsystems
Raymond Gilson	Symantec
Halvard Eriksen	Tandberg Storage