

Draft Minutes

T10 FCP-3 Ad Hoc Meeting

14 September 2004 - 10 AM to 1 PM

Nashua NH

An Ad Hoc Meeting of work group FCP-3 of INCITS Technical Committee T10 was held at Nashua NH on 14 September 2004, hosted by Hitachi Cable. Attendance at this Ad Hoc Meeting was 12 people from 10 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 mail@T10.org.

1 Opening remarks and introductions

Dave Peterson

Chairperson Dave Peterson opened the meeting Tuesday, 14 September 2004 at 10:01 AM. He thanked our host company, Hitachi Cable, and led a round of introductions.

1.1 Attendance and Membership

Dave Peterson stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. Attendance at this meeting does not count toward attendance at the plenaries of T11 and its task groups (i.e., being here will not get you out or keep you out of membership jeopardy).

1.2 Patents

Dave Peterson indicated that among the rules and policies under which this working group operates is the ANSI patent policy. He directed persons wishing to make statements or ask questions relevant to this policy to do so at the T10.g or T10 plenary meeting.

1.3 Antitrust

Dave Peterson indicated that among the rules and policies under which this working group operates is the INCITS Antitrust Guidelines. Any member of the meeting is responsible for objecting if he believes discussion in the meeting violates those guidelines.

2 Approval of Agenda

04-302r0

All

It was moved by Paul Suhler and seconded by Bob Nixon to accept 04-302r0 as the agenda for this meeting. Approved unanimously.

3 Approval of Minutes of Prior Meetings

04-233r1

It was moved by Bob Nixon and seconded by Paul Suhler to accept 04-233r1 as the minutes of the FCP-3 ad hoc meeting on 13 July 2004. Approved unanimously.

4 Review of Old Action Items

- AI 4 Kevin Butt. Investigate clarification of target initiated REC behavior.
(opened 11/04/03) (Carryover)
- AI 6 Jim Coomes to take the issue with First Burst Size and Maximum Burst Size for other protocols to CAP.
(opened 3/9/03) (CLOSED)
- AI 13 Erich Oetting to revise 03-393r0 to reflect discussion today and pursue it in CAP.
(opened 13 July 2004)(CARRYOVER)
- AI 14 Rob Elliot to publish 04-154r1 reflecting 04-154r0 and the agreements at the FCP-3 meeting 14 September 2004.
(opened 13 July 2004) (CLOSED by 04-154r1)
- AI 15 FCP-3 facilitator to recommend to T10 to incorporate 04-154r1 into FCP-3.
(opened 13 July 2004) (CLOSED)

5 Discussion Items

5.1 Logical Unit Control mode page cleanup 04-292r1 Dave Peterson

Dave proposed some cleanup of the wording for the Logical Unit Control Mode Page.

It was observed that the text being changed has an additional issue: The introductory paragraph requires the device to support the mode page; a later sentence describes behavior if a logical unit does not support it. It is useful only for tape devices. It may be the page should be required in SSC-2.

Agreed to remove the requirement to support the Logical Unit Control Mode Page from FCP-3.

It was moved by Jim Coomes and seconded by Mike Banther to recommend to T10 to incorporate 04-292r2 into FCP-3, reflecting 04-292r1 and the agreements at the FCP-3 meeting 14 September 2004. Approved unanimously.

ACTION: Dave Peterson to publish 04-292r2, reflecting 04-292r1 and the agreements at the FCP-3 meeting 14 September 2004

ACTION: FCP-3 facilitator to recommend to T10 to incorporate 04-292r2 into FCP-3.

5.2 FCP-3 & Optional Headers 04-294r0 Ralph Weber

Ralph pointed out that FCP-3 might be interpreted to prevent use of optional frame headers. This would at least make it impossible to use FC-SP ESP headers. Ralph proposed changing the text to permit but not require

It was moved by Ralph Weber and seconded by Kevin Butt to recommend to T10 to incorporate 04-294r0 into FCP-3.

In discussion, issue was raised with permitting any optional header.

The motion was withdrawn.

Ralph will revise the proposal.

ACTION: Ralph Weber to publish 04-294v1, reflecting 04-294r0 and the agreements at the FCP-3 meeting 14 September 2004.

5.3 RR_TOV Timer(s)

04-293r1

Dave Peterson

RR_TOV currently has two uses, one of which may need a large value in some configurations. The fact that the same timer applies to both may make some error recovery take much longer than necessary.

This proposes to split the current RR_TOV into two timers of different use and substantially different length. If this proposal is accepted, additional work will be necessary to propagate the change through FCP-3.

The mode page will be able to set only the value for sequence initiative, not the value for exchange authentication.

It was moved by Kevin Butt and seconded by Bill Martin to recommend to T10 to incorporate 04-293r1 into FCP-3. Approved unanimously.

ACTION: Dave Peterson to propose changes to make all references to RR_TOV in FCP-3 consistent with 04-293r1.

ACTION: FCP-3 facilitator to recommend to T10 to incorporate 04-293r1 into FCP-3.

6 New Business

6.1 An issue with lost FCP_RSP

nodoc

Dave Peterson

Dave Peterson pointed out an apparent flaw in sequence recovery: For a command with no data transfer (REQ/RSP only), if both the RSP and the first REC from the initiator are lost, but later recovery commands get through, it is unclear what if anything stops the target's RR_TOV on the RSP. If the RR_TOV actually times out, it is not possible to distinguish between a lost command and a lost response, so the recovery is difficult. In addition, the time between the retried REC and the RR_TOV expiration is less than one second based on the arithmetic for RR_TOV.

Dave's proposal is not to tie cancellation (and possible restart) of the RR_TOV to the exchange that is stalled, but broaden it to include any activity on the same I_T nexus, especially REC.

Dave will publish proposals for this direction.

Kevin Butt reports that this problem has been seen, and he is under some pressure (resisted so far) to increase RR_TOV. No one was enthusiastic for this.

Another issue was raised over whether an initiator needed to maintain RR_TOV. It is believed some do and some don't. Dave will look for text supporting or prohibiting this.

7 Meeting Schedule

Dave Peterson

Request 3 hours at the T10 Plenary Week starting 8 November 2004 in Austin Texas.

8 FCP-3 Schedule

All

A December letter ballot may be possible, but possible OSD requirements may delay that.

Remaining issues from the work plan:

- a) Normative text for Class 2 error detection and recovery (currently buried in the diagrams);
- b) Editorial cleanup;
- c) Clarification and making consistent the rules about FCP_DL violation.

9 Review of Action Items

Bob Nixon

- AI 4 Kevin Butt. Investigate clarification of target initiated REC behavior.
(opened 11/04/03) (Carryover)
- AI 13 Erich Oetting to revise [03-393r0](#) to reflect discussion today and pursue it in CAP.
(opened 13 July 2004)(CARRYOVER)
- AI 16 Dave Peterson to publish [04-292r2](#), reflecting [04-292r1](#) and the agreements at the FCP-3 meeting 14 September 2004.
(opened 14 September 2004) (Closed by [04-292r2](#))
- AI 17 FCP-3 facilitator to recommend to T10 to incorporate [04-292r2](#) into FCP-3.
(opened 14 September 2004) (Closed at T10 Plenary 16 September 2004)
- AI 18 Ralph Weber to publish [04-294v1](#), reflecting [04-294r0](#) and the agreements at the FCP-3 meeting 14 September 2004.
(opened 14 September 2004) (Closed by [04-294v1](#))
- AI 19 Dave Peterson to propose changes to make all references to RR_TOV in FCP-3 consistent with [04-293r1](#).
(opened 14 September 2004)
- AI 20 FCP-3 facilitator to recommend to T10 to incorporate [04-293r1](#) into FCP-3.
(opened 14 September 2004) (Closed at T10 Plenary 16 September 2004)
- AI 21 Next AI

10 Adjournment

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

The meeting was adjourned at 11:30 AM on 14 September 2004.

11 Status of Proposals

Document Title	Number	Status
FCP-3: Logical Unit Control mode page cleanup	<u>04-292r1</u>	Approved <u>04-291r2</u> . See AI 16. CLOSED.
FCP-3 & Optional Headers	<u>04-294r0</u>	See AI 18. CARRY.
FCP-3: RR_TOV Timer(s)	<u>04-293r1</u>	Approved, but supplementary document needed. See AI 19. CARRY.
An issue with lost FCP_RSP	nodoc	Document(s) will be provided. CARRY.

12 Attendance

Person	Company
Robert Snively	Brocade Comm. Systems, Inc.
David Peterson	CNT
Robert Nixon	Emulex
Ralph O. Weber	ENDL Texas
Neil Wanamaker	Finisar
Michael Banther	Hewlett Packard Co.
George O. Penokie	IBM / Tivoli Systems
Kevin Butt	IBM Corp.
Paul Entzel	Quantum Corp.
Jim Coomes	Seagate Technology
Paul Suhler	Seagate Technology
William Martin	Sierra Logic