

Approved Minutes

T11.3 FC-FS Ad Hoc Meeting

8 October 2002 - Noon to 5 PM

New Orleans Louisiana

Version 1: in 5.10.1, corrected Brocade-088 to Brocade-008
In 10, corrected the third-level numbering to second-level.
in 7.3, updated action item.

An ad hoc meeting of work group FC-FS of INCITS Technical Committee T11 Task Group T11.3 was held at New Orleans Louisiana on 8 October 2002. Attendance at this meeting was 33 people from 28 companies and is tabulated at the end of this document.

Minutes were taken by Bob Nixon (bob.nixon@emulex.com)

1 Opening remarks and introductions

John Scheible

Facilitator John Scheible opened the meeting Tuesday, 8 October 2002 at 1:01 PM. He thanked our host company, Infinity I/O, and led a round of introductions. John then indicated that among the rules and policies under which this working group operates are the T11, INCITS, and ANSI patent policies. He directed persons wishing to ask questions or make statements relevant to those policies to do so at the T11.3 or T11 plenary meeting.

2 Call for changes to minutes

2.1 FS report to T11.3 - 08/08/02

02-477v0

John Scheible

Approved as written

2.2 FS minutes - 08/06/02

02-492v0

Bob Nixon

in 5.5.19 and 6.15, "Qlogic-038" should be "Late-006"

Approved as corrected.

2.3 FS minutes - 09/10/02

02-533v0

John Scheible

Approved as written

3 Approval of this agenda

02-568v0

John Scheible

Approved as written

4 Review of old FS action items

02-568v0

John Scheible

4.1 John Scheible to propose a clarifying rewrite of 6.1 and its subsections.
(Opened 6/11/02) (CLOSED 02-569V0)

4.2 Craig Carlson to propose a more complete resolution to Qlogic-027 than contained in the comment.

(Opened 6/11/02) CARRYOVER

4.3 Craig Carlson to prepare a proposal for text concerning Qlogic-044 to be inserted in the relevant tables.

(Opened 7/16/02) CARRYOVER

4.4 Dave Peterson to provide resolution for Qlogic-012

(Opened 8/6/02) CARRYOVER

4.5 Gary Stephens to provide resolution for FSI-011

(Opened 8/6/02) CARRYOVER

4.6 Gary Stephens to provide clarification on the comment for FSI-016

(Opened 8/6/02) CARRYOVER

4.7 Dave Peterson to bring the issues of Late-006 to the attention of T10.

(Opened 8/6/02) CARRYOVER

4.8 Craig Carlson to review the list of ELSs in Qlogic-038.

(Opened 8/6/02) CARRYOVER

4.9 John Scheible takes an action item to let Bob Nixon know the changes so a new revision of 02-498v1 can be uploaded.

(Opened 9/10/02) (CLOSED with email 9/13/02)

4.10 Bob Nixon to update and upload 02-498v2

(Opened 9/10/02) (CLOSED by 02-498v2)

4.11 Claudio DeSanti to update 02-070v2 to reflect the comments raised during the 9/10 WG meeting.

(Opened 9/10/02) (CLOSED by 02-070v3)

4.12 John Scheible to ask for clarification on Tivoli-048, Tivoli-050 (what parameters, what columns?)

(opened 9/10/02) (CLOSED with email 9/13/02)

4.13 John Scheible to ask for justification for the big change requested by Brocade-008

(opened 09/10/02) (CLOSED with email 9/13/02)

4.14 Craig Carlson to request feedback from SW group on meaning of "first" in Andiamo-057

(opened 9/10/02) (CARRYOVER)

5 Scheduled FS Business

5.1 Proposed Resolution for Exabyte-008

02-498v3

Bob Nixon

02-498v2 was prepared at the direction of the FC-FS ad hoc meeting 9/10/02 to eliminate a consistently used but awkward and seemingly unnecessary wording in 02-498v1. Roger Rose, the originator of Exabyte-008 felt that the eliminated wording carried content necessary for a complete resolution. He offered an alternate resolution which was less awkward and resolved the comment to his satisfaction. That wording is proposed in 02-498v3.

John Scheible moved and Bob Nixon seconded to incorporate 02-498v3 into FC-FS. Approved without objections.

5.2 Reverting REC to ELS

02-501v0

Bob Nixon

02-501v0 was prepared at the direction of the FC-FS ad hoc meeting 8/6/02 to resolve letter ballot comment Qlogic-042 taking issue with the discrepancy between the specifications for REC as an FCP Link Service and its almost universal implementation as an ELS. The proposed approach to revert REC to an ELS was unanimously acceptable at recent meetings of both T11.3 FC-FS and T10 CAP. Although one implementation tolerates REC as an FCP-LS, that implementation also tolerates it as an ELS, and never originates it.

It was emphasized that this approach although not architecturally optimal is the only practical approach that the community could devise.

A change will be needed to FCP-2 as well, including reserving the FCP Link Service code point now specified for REC. Members who also attend T10 offered to assure this is done.

Agreed that “vendor-specific” will be replaced by “reserved for legacy implementations” in the row for hex ‘14’ in table 61.

Agreed that the portions of note 2 in table 61 that refer to SRR will be retained.

Agreed that the description of REC will include that its use is restricted to purposes specific to an FC-4.

Agreed that the description of REC will exclude the sentence concerning XID assignment, which is adequately covered elsewhere.

Agreed that in the description of REC, the note concerning FCP use of the parameter field will be replaced by a normative reservation of that field for the FC-4, and that the relative offset present bit shall be zero.

Agreed that the “Data Transfer Count” field in the REC reply will be replaced by an “fc4value” field with FC-4 specific content.

ACTION: Bob Nixon to publish 02-501v1 from 02-501v0 and the changes agreed at the FC-FS meeting 10/8/02.

5.3 ESP header in FC-FS

02-070v3

Claudio DeSanti

This proposal is intended to resolve letter ballot comment Andiamo-044. Claudio presented corrections requested at the last meeting.

He emphasized that every frame of a sequence is expected to have a security “header” if security is enabled.

Agreed that “no...nor” should be “neither...nor”

Agreed that the note after table 37 will be moved into text.

Agreed that at bottom of page 4 in bullet e change “FC-4” to “upper level”

It was moved by John Scheible and seconded by Claudio DeSanti to incorporate 02-070v3 with the changes agreed at the meeting 10/08/02 into FC-FS. Approved without objections.

5.4 FC-4 and ULP Usage

02-557v0

Dave Peterson

The document Dave presented is intended to resolve letter ballot comment Qlogic-012. It is a work in progress, not yet published. He presented a few issues on which he would like group guidance. These are the answers:

In the definition of initial relative offset, “upper level” is ok.

In 19.2 “upper level” should remain, and remove the parenthetic “a level above FC-2”

In table 133, “ULP” should be “FC-4”.

At the bottom of page 199: ULP is ok.

At the top of 200, ULP is ok

in item e on page 200, change ULP to FC-4

In note 85, change several occurrences of Upper Level Protocol, ULP protocol, and ULP to upper level.

In 21.7.3 at the end of para 1, omit FC-4

In note 84 change Upper level Protocol to FC-4 in two places.

02-557v0 will include these corrections when published.

Moved by John Scheible and seconded by Dave Peterson to incorporate 02-557v0 into FC-FS. Approved without objections.

5.5 Platform types

02-384v1

Dave Peterson

This proposal is intended to resolve letter ballot comment Late-019. The IETF FC MIB, The RNID types, and the Platform types are now consistent except there is no definition of virtualization device that was acceptable to IETF for the MIB.

Agreed, all the historical annotation will be removed.

Agreed, the type definitions will be added to the glossary.

Moved by John Scheible and seconded by Dave Peterson to incorporate 02-384v1 with the changes agreed at the meeting 10/8/02 into FC-FS. Approved without objections.

ACTION: Dave Peterson to publish 02-384v2 with the changes agreed at the FC-FS meeting 10/8/02.

5.6 Pre-emption clarification

02-527v0

Mike Foster

Deferred, presenter was not present.

5.7 Tivoli 048 and 050 clarification

02-571v0

George Penokie

John Scheible presented this clarification to the suggested resolutions for Tivoli-048 and Tivoli-050, with complete editorial instructions for their implementation.

Moved by John Scheible and seconded by Craig Carlson to incorporate 02-571v0 into FC-FS. Approved without objections.

5.8 Receiver state diagram rewrite

02-569v0

John Scheible

John presented the changes, which affect the supporting text but not the state diagram figure. He observed what appeared to be an error in the state table, though: a different event moves from zero to one invalid transmission words than for moving on from there. This led some to conclude the table was wrong. They further determined that the FS diagram appears to be a probably incorrect attempt to combine two state machines from FC-PH.

Agreed to substitute event 3 for event 4 in all places, define a new event 4 that is strictly loss of signal, and transition from any state to loss-of-sync state on event 4.

Agreed that several references to invalid transmission character should be invalid transmission word.

ACTION: John Scheible to publish 02-569v1 from 02-569v0 including the agreements at the meeting of FC-FS 10/8/02.

5.9 Proposed Resolution Against Reject 02-597v0 Brad Soloman

This proposal is intended to resolve letter ballot comments Vixel-19, Inrange-017, Andiamo-053, and Qlogic-037. In the absence of Brad Solomon, the presentation was made by Greg Koellner.

It was observed that the reference to FC_Port, which was carried over from the original text in FC-FS, is too broad. This will not be fixed as part of this resolution.

Moved by John Scheible and seconded by Greg Koellner to incorporate 02-597v0 into FC-FS. Approved without objections.

5.10 FC-FS problem compilation 02-161v7 John Scheible

5.10.1 Brocade-008: Accepted. Name Identifier format descriptions will be adjusted to reference T10 SPC-3 for NAA type 6 and forbid use of type 6 in FC. (and add reference information for SPC-3 to clause 2)

5.10.2 Andiamo-044: Accepted. See 02-070v3.

5.10.3 Exabyte-008: Accepted. See 02-498v3.

5.10.4 Late-019: Accepted, see 02-384v2

5.10.5 Late-020: Accepted.

5.10.6 Qlogic-012: Accepted. Fixed by 02-557v0. In addition to anything else, also change table 28 so code DF is "reserved for use by RNID" and strike the reference in the entry for DF in table 133.

5.10.7 Tivoli-048: Accepted, see 02-571v0.

5.10.8 Tivoli-050: Accepted, see 02-571v0.

5.10.9 Vixel-19: accepted, see 02-597v0.

5.10.10 Inrange-017: accepted, see 02-597v0.

5.10.11 Andiamo-053: accepted, see 02-597v0.

5.10.12 Qlogic-037: accepted, see 02-597v0.

5.10.13 Qlogic-051: Reject, belongs in MI-2

ACTION: Bill Martin to bring FC-FS comment Qlogic-051 to the attention of the FC-MI-2 work group.

5.10.14 FSI-003: Accepted.

5.10.15 Qlogic-024: Accept in principle. 5.5.4.2 to point to 7.6.4 rather than redefine the list.

5.10.16 Boeing-013: Accept in principle. A minimum impact wording was wordsmithed.

5.10.17 IBM-027: Accepted, see 02-195v4.

5.10.18 FSI-041: Accepted.

5.10.19 Qlogic-061: On hold pending a proposal from Craig Carlson.

ACTION: Craig Carlson to publish a document proposing a resolution to Qlogic-061.

6 Late comments for T11.3 this week (will not cover)

6.1 Late-Domain Controller addr wrong 02-514v0 Bob Nixon

6.2 Late-Shall in informative annexes 02-556v0 John Scheible

6.3 Late-Editorial Corrections to Annex K 02-594v0 Claudio DeSanti

7 Review of FS action items

- 7.1 Craig Carlson to propose a more complete resolution to Qlogic-027 than contained in the comment.
(Opened 6/11/02) CARRYOVER
- 7.2 Craig Carlson to prepare a proposal for text concerning Qlogic-044 to be inserted in the relevant tables.
(Opened 7/16/02) CARRYOVER
- 7.3 Dave Peterson to provide resolution for Qlogic-012 (need to post 02-557v0)
(Opened 8/6/02) CARRYOVER
- 7.4 Gary Stephens to provide resolution for FSI-011
(Opened 8/6/02) CARRYOVER
- 7.5 Gary Stephens to provide clarification on the comment for FSI-016
(Opened 8/6/02) CARRYOVER
- 7.6 Dave Peterson to bring the issues of Late-006 to the attention of T10.
(Opened 8/6/02) CARRYOVER
- 7.7 Craig Carlson to review the list of ELSs in Qlogic-038.
(Opened 8/6/02) CARRYOVER
- 7.8 Craig Carlson to request feedback from SW group on meaning of "first" in Andiamo-057
(opened 9/10/02) (CARRYOVER)
- 7.9 Bob Nixon to publish 02-501v1 from 02-501v0 and the changes agreed at the FC-FS meeting 10/8/02.
(opened 10/8/02)
- 7.10 Dave Peterson to publish 02-384v2 from 02-384v1 with the changes agreed at the FC-FS meeting 10/8/02.
(opened 10/8/02)
- 7.11 John Scheible to publish 02-569v1 from 02-569v0 including the agreements at the meeting of FC-FS 10/8/02.
(opened 10/8/02)
- 7.12 Bill Martin to bring FC-FS comment Qlogic-051 to the attention of the FC-MI-2 work group.

(opened 10/8/02)

7.13 Craig Carlson to publish a document proposing a resolution to Qlogic-061.
(opened 10/8/02)

7.14 Bob Nixon to send email advising the community that comments pending action items not met by December will be rejected, and late comments will be difficult to approve after the T11.3 plenary meeting on 10/10/02.
(opened 10/8/02)

8 Future meeting plans

We have 8 hours at the November T10 plenary week.

Request as much time as possible at the December T11 plenary week.

Request 8 hours at the January T10 plenary week.

ACTION: Bob Nixon to send email advising the community that comments pending action items not met by December will be rejected, and that late comments will be difficult to approve after the T11.3 plenary meeting on 10/10/02.

9 Adjournment

The meeting was adjourned at 5:10 pm.

10 Summary of Accepted Proposals

10.1 02-498v3 - Resolves Exabyte-008.

10.2 02-070v3 with the changes agreed at the meeting 10/08/02 - Resolves Andiamo-044.

10.3 02-557v0 - Resolves Qlogic-012.

10.4 02-384v1 with the changes agreed at the FC-FS meeting 10/8/02 - Resolves Late-019.

10.5 02-571v0 - Resolves Tivoli-048 and Tivoli-050.

10.6 02-597v0 - Resolves Vixel-19, Inrange-017, Andiamo-053, and Qlogic-037.

11 Attendance

Company Represented	Last Name	First Name	Email
Akara	Wanamaker	Neil	nwanamaker@akara.com
Andiamo Systems	DeSanti	Claudio	cds@andiamo.com
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Data Device Corp	Molny	Adam	molny@ddc-web.com
Emulex	Nixon	Bob	bob.nixon@emulex.com
ENDL Texas	Weber	Ralph	roweber@acm.org
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