

Draft Minutes

T11.3 FC-FS Working Group Meeting

April 10-11, 2001 – Toronto, Ontario, Canada

10th, 3 PM – 6 PM; 11th, 1 PM – 6 PM

A joint ad hoc meeting of working groups FC-AL-3 and FC-FS of NCITS Technical Committee T11 Task Group T11.3 was held at Toronto, Ontario, Canada on April 10-11, 2001, in conjunction with the plenary meeting of the ANSI/NCITS T11 Technical Committee. Attendance at this meeting is tabulated at the end of this document.

1. Opening remarks and introductions: **John Scheible**

Facilitator John Scheible opened the meeting at 3:18 PM Tuesday April 10 2001. He thanked our host company, Brocade, for the facilities. He led a round of introductions.

2. Call for changes to minutes

2.1 AL-2 / FS report to T11.3 – 2/8/01 [01-068v1](#) John Scheible

Accepted with no changes

2.2 FC-FS minutes – 2/6/01 [01-081v0](#) Bob Nixon

Accepted with no changes.

3. Approval of agenda: [01-160v0](#) John Scheible

Discussion of an AL-2 Amendment by Bill Martin was deferred from this meeting.

Discussion of a motion to withdraw AL-3 was moved to the beginning of the meeting.

4. Motion to withdraw FC-AL-3

It was observed that there have been no significant grounds proposed for continuing the FC-AL-3 project since its original prime motives were set aside. This has been over a year.

It was moved by John Scheible and seconded by Bill Martin that "The FS WG recommends that T11.3 recommend the withdrawal of the FC-AL-3 project." The motion was passed 19Y-0N-4A.

ACTION: John Scheible to recommend to T11.3 plenary in behalf of the FS working group that the FC-AL-3 project be withdrawn.

5. Review of old AL-3/FS action items: [01-160v0](#) John Scheible

5.1.1 Horst Truedstedt will write a proposal to show how a second FL_Port or a new FL_Port will be detected so that an F/NL_Port can retire from its fabric functions.

CARRYOVER. (DROPPED)

- 5.1.2 Upload Horst Truestedt proposal presented at the meeting (When an FL_Port detected, how does F/NL Port retire?) . (DROPPED)
CARRYOVER.
- 5.1.3 Bill Martin to write an amendment to FC-AL-2 proposing ERRINIT behavior be deprecated.
(OPENED 10/00) (COMBINED WITH THE BELOW)
- 5.1.4 Bill Martin and Jim Coomes to prepare a proposed amendment to FC-AL-2 to resolve the starvation problem as described in [00-714v0](#).
(OPENED 12/5/00) (COMBINED WITH THE ABOVE)

ACTION: Bill Martin to bring in an amendment to FC-AL-2 deprecating ERRINIT behavior and resolving the starvation problem as described in [00-714v0](#).

5.2 FS

- 5.2.1 John Scheible to provide text for new definitions([01-021v0](#) as modified at the 2/6/01 meeting) to Jim Nelson to incorporate into FC-FS.
(OPENED 2/6/01) (CLOSED by [01-021v1](#))
- 5.2.2 Dave Peterson to provide text for obsoleting the FC-PH version numbers ([01-041v3](#) as modified at the 2/6/01 meeting) to Jim Nelson to incorporate into FC-FS.
(OPENED 2/6/01) (text provided to editor, still need 01-041v4 upload.)
- 5.2.3 John Scheible will write up the necessary document changes to resolve the ambiguity about response to ESTC
(OPENED 2/6/01) (CLOSED by [01-061v1](#))
- 5.2.4 John Scheible to prepare a form to encourage easy organization of letter ballot comments.
(OPENED 2/6/01) (CLOSED by [01-070v0](#))

6. Old AL-3 Business (none)

7. Scheduled New Business AL-3 (none)

8. Scheduled New Business FS

8.1 FC-FS Comment Compilation ([01-138v2](#)) – John Scheible

8.1.1 Agreed approach to comment resolution

The intention of the workgroup is to call for discussion in open meetings of all technical issues and any editorial issues the editor feels are complex or controversial. The editor will propose resolutions to all other (strictly editorial) issues, and these resolutions will be discussed in open meetings only if raised there.

The following enumerates the comments discussed in the remainder of this meeting and summarizes the resolution (or lack thereof) of each.

8.1.2 Agilent-004

The problem was recognized but the resolution was not fully satisfactory. It will be revisited at the next meeting, when alternate resolutions will be entertained.

8.1.3 Agilent-005

The resolution expressed in FCP-2 section 12.4.2.3 was proposed. A volunteer to document it was requested.

8.1.4 Agilent-006

Proposed putting a sequence count in recovery qualifiers. Improves performance, not integrity, and only in error recovery. Need volunteer to write it.

8.1.5 Agilent-007

Sequence ids should be constrained to be unique only within exchange, not across all exchanges. Generally agreeable but needs a writer.

8.1.6 Cisco-001

ELS timeout was not found. It was there, but hard to find. Will move the ELS timeout statement from 15.1.2 to 15.5.

8.1.7 Cisco-002

15.6.1 has a list of ELSs that get ACC reply. It is not complete. The list will be removed, since most of the individual ELS descriptions define the proper responses, and the rest (if any) will be made to do so.

8.1.8 HP-003

Figure 91 purports to be a model of a loop. It contains a block labeled "fabric". The issue suggested removing the term, but the group felt the whole middle block needs to be removed.

8.1.9 Rhapsody-01

Request definition of BB_Credit to be added to the Glossary. It was observed that what should be added is "Buffer-to-Buffer Credit" (BB_Credit is already in the acronym directory). Definition should be "The controlling parameter in Buffer-to-Buffer flow control. See 20.5.2."

8.1.10 Rhapsody-02

Rejected. This is a process, not a simple term.

8.1.11 Rhapsody-03

Venkat to provide revised text

8.1.12 Rhapsody-04

Instead of defining the term in the glossary, the single point of reference (in 4.1) was eliminated.

8.1.13 Rhapsody-05

Rejected. It is a flag in a structure, and our convention is to define those only in the structure definition

8.1.14 Rhapsody-06 and -07

Instead of glossary entries, define FT_0 and FT_1 in the acronyms, and reference the defining clause, which is 11.4. Also, all references should be corrected if necessary to be "FT_0" or "FT_1"

8.1.15 Rhapsody-08

Bob Snively to provide a definition of "Initial Relative Offset"

8.1.16 Rhapsody-10

Rejected, they are fields in a defined structure.

8.1.17 Rhapsody-20

The currently unexplained initial reference to "Sequence Context" will be qualified by identifying its containing structure (F_CTL)

8.1.18 Tivoli-256

Many TBDs remain in the document. Expect individual comments later.

8.1.19 Vixel-026

Needs a volunteer, or will be left alone.

8.1.20 IBM-008

Need to implement a standard list presentation. Distinguish ordered (numbered) from unordered (lettered) lists. Nested list presentation also needs careful standardization. These conventions should be documented in the conventions section.

8.1.21 Tivoli-736, -742

Nested unordered lists should not use numbering to distinguish nesting level...numbers mean ordering. Editor will design a convention.

8.1.22 Tivoli-78

Accepted, sort of. The normative statements will be removed, rather than reworded, leaving only the references to other sections.

8.1.23 Tivoli-79 and -85

"Shall" for "is", "shall" for "will". Carry this throughout the document. Accepted.

8.1.24 Tivoli-98

Normative information shall not be in "NOTE"s. Only informative. Most places, if the note is intended to be normative, simply insert the note inline.

8.1.25 Gadzoox-009

"FC-4 Regions" is a term without a use. Remove the definition and section 4.14.

The meeting was suspended until 1 PM April 11, 2001.

The meeting was resumed at 1:38 PM on April 11, 2001

8.1.26 Brocade-001

Partially accepted. The text in question was removed without replacement.

8.1.27 Brocade-004

This issue raised several further issues with the character of the abstract. The abstract will be rewritten.

8.1.28 Brocade-032

Rejected. Live current users of class 6 (FC-AE, Boeing) presented themselves at the meeting. They reminded us this question was previously considered and rejected.

8.1.29 Brocade-047

Rejected. Live current users of class 1 (Boeing) presented themselves at the meeting.

8.1.30 Brocade-013

Partially accepted. The text in question was removed without replacement.

8.1.31 Gadzoox-036

Accepted. See Gadzoox-009.

8.1.32 Qlogic-008

Accepted.

8.1.33 Qlogic-009

Accepted.

8.1.34 Tivoli-105

Accepted.

8.1.35 Tivoli-106

Accepted.

8.1.36 Inrange-009

Accepted in principle. The table and its tags will be replaced by the equivalent table from AL-2, and the related text will be adjusted if necessary.

8.1.37 Inrange-010

Accepted

- 8.1.38 Gadzoox-041**
Accepted.
- 8.1.39 Inrange-011**
Accepted in principle. The table and its tags will be replaced by the equivalent table from AL-2, and the related text will be adjusted if necessary.
- 8.1.40 Tivoli-120**
Accepted, and change the notes in question to inline text since they are normative.
- 8.1.41 Tivoli-121**
Accepted.
- 8.1.42 Tivoli-123**
Accepted, and change the notes in question to inline text since they are normative.
- 8.1.43 Emulex-002, -004**
Accepted
- 8.1.44 Emulex-007, -008**
Accepted
- 8.1.45 Qlogic-011**
Accepted.
- 8.1.46 Qlogic-012**
Accepted.
- 8.1.47 Qlogic-013**
Accepted.
- 8.1.48 Qlogic-014**
Accepted.
- 8.1.49 Gadzoox-036**
Accepted, see Emulex-004.
- 8.1.50 Akara-005**
The question was appropriate. Bill Martin provided an acceptable rewording.
- 8.1.51 Akara-006**
Rejected, sort of, though the maximum link length is now 50 Km. The transmission delay is still much less than 5 milliseconds. But the note will be removed
- 8.1.52 Qlogic-015**
Accepted, though with a somewhat streamlined text change.

- 8.1.53 Qlogic-016**
Accepted.
- 8.1.54 Brocade-162**
Open, need proposed text.
- 8.1.55 Brocade-178**
Proposed a reorganization of the material in clause 10 and annex E. Bob Snively to work with editor to develop the requested text changes.
- 8.1.56 Problems with class 1 in general**
A new activity was accepted to identify and consider eliminating Class 1 and Class 6 features that are new in FS, unused, and problem-ridden. No assignment was made, though.
ACTION: "John Doe" to review all the Class 1 and Class 6 issues to consider eliminating features that are new in FS, unused, and problem-ridden.
- 8.1.57 Akara-007**
Rejected. Only LRR has Class 4 specific behavior that needs exception documentation.
- 8.1.58 Gadzoox-058**
Remains open, submitter will propose a resolution.
- 8.1.59 Gadzoox-059**
Open pending resolution to Brocade-178.
- 8.1.60 Tivoli-173**
Accepted, and promote the note to inline text.
- 8.1.61 Gadzoox-058**
Accepted, see Emulex-004.
- 8.1.62 Emulex-009, Qlogic-023**
Resolved by an earlier commitment to search and destroy all relevant instances of "(Idle and R_Rdy)".
- 8.1.63 Qlogic-024, -025, -026**
Accepted.
- 8.1.64 Qlogic-027, -029**
Accepted, including Class 6.
- 8.1.65 Gadzoox-066**
Accepted.
- 8.1.66 Gadzoox-071**
Change the requirement to retransmit to a requirement to use the same sequence count if retransmission is attempted.

- 8.1.67 Qlogic-035**
Accepted. A new bullet for the identified EOFs will be added. The behavior needs to be determined. Editor will research and propose.
- 8.1.68 Qlogic-036**
Accepted. In the last paragraph before table 11, state that addresses FFFC01-FFFCFE will be reserved for domain controller addresses. Add "Domain Controller" to the Glossary or somewhere more appropriate at the editor's discretion. Find references to domain number or domain id, and assure they are consistently described as a one-byte field.
- 8.1.69 Boeing-001**
Accepted with a small change in wording.
- 8.1.70 Tivoli-157**
Accepted.
- 8.1.71 Qlogic-038**
Accepted. Simply "Reserved".
- 8.1.72 Qlogic-039**
Accepted. Reserved. Also changed some FC-AL codes to reserved
- 8.1.73 Tivoli-175, -178**
Accepted.
- 8.1.74 Qlogic-041**
Rejected. This is as intended.
- 8.1.75 Emulex-013, -014**
Accepted, statement will be extended with a specific IEEE reference.
- 8.1.76 WG-001**
Accepted, pending proposed resolution from editor.
- 8.1.77 WG-002**
Accepted, pending proposed resolution from "Mike and Mike" (Dorsett and Foster) concerning the RX_IDs used in class 6. Editor to pursue them.
- 8.1.78 Tivoli-196**
Accepted, but resulted in the direction to pull out the definition of WWN as a separate top-level clause and locate it just before current clause 17.
- 8.1.79 Emulex-015, -017, -019**
The table entries were completely eliminated rather than reworded

8.1.80 Qlogic-042

Issue accepted but resolution of Qlogic-044 is considered sufficient. Delete the offending sentence.

8.1.81 Qlogic-044

Accepted.

8.1.82 Qlogic-045

Accepted.

8.1.83 Gadzoox-089

Accepted. The sentence in question will be deleted.

9. Unscheduled new FS business (none)

10. Review of FS action items

10.1 AL-3

10.1.1 Bill Martin to bring in an amendment to FC-AL-2 deprecating ERRINIT behavior and resolving the starvation problem as described in [00-714v0](#).
(OPENED 4/10/01)

10.1.2 John Scheible to recommend to the T11.3 plenary in behalf of the FS working group that the FC-AL-3 project be withdrawn. (OPENED 4/10/01) (COMPLETED 4/12/01)

10.2 FS

10.2.1 Dave Peterson to provide text for obsoleting the FC-PH version numbers ([01-041v3](#) as modified at the 2/6/01 meeting) to Jim Nelson to incorporate into FC-FS.
(OPENED 2/6/01) PARTIAL CARRYOVER – need 01-041v4 upload.

10.2.2 “John Doe” to review all the Class 1 and Class 6 issues to consider eliminating features that are new in FS, unused, and problem-ridden. (OPENED WITHOUT ASSIGNMENT 4/11/01)

10.2.3 Volunteers are needed to write text for the following issues, otherwise they will be dropped for lack of interest:

Agilent-005

Agilent-006

Agilent-007

Vixel-026

Brocade-162

10.3 Changes to the FC-FS specification approved at this meeting

Not tabulated here. See the latest published version of the comment resolution document [01-138vX](#).

10.4 Amendments to the FC-AL-2 specification approved at this meeting

None.

11. Future meeting plans

An interim meeting is being planned for Denver, May 9-10. (10AM-7PM, 8AM-4:30PM)

12 hours will be requested at the June T11 plenary for FS.

Time will be requested at the July T10 Plenary meeting.

12. Adjournment (FS WG)

The meeting was adjourned at 6:30 PM Wednesday April 11 2001.

T11 FC-FS Working Group Meeting Attendance - 4/10-11/01

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