

Draft Minutes

T11.3 FC-FS Working Group Interim Meeting

May 9-10, 2001 – Denver, Colorado

9th, 10 AM – 7 PM; 10th, 8 AM – 3 PM

An interim meeting of working group FC-FS of NCITS Technical Committee T11 Task Group T11.3 was held at Denver Colorado to continue resolution of letter ballot comments. 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 10:10 AM Wednesday May 9 2001.

2. Resolution of FC-FS Comments ([01-138v4](#)) – John Scheible

2.1 Brocade-093

Accepted.

2.2 Brocade-100

Accepted.

2.3 Brocade-107

Sources were found that claimed dedicated simplex is not obsolete, but the acronym DS may be. The acronym DS does not appear. On hold until a bigger meeting.

ACTION: Bob Nixon to send email expressing intent to remove dedicated simplex from the standard unless interested parties appear (via email or in person) to defend it.

2.4 Brocade-161

Accepted.

2.5 Brocade-169

Accepted.

2.6 AE-001

Held. Concerns were expressed about side effects, particularly but not exclusively on the Speed Negotiation algorithm.

ACTION: Rick Allison to trace all dependencies on RT_TOV in this and other standards to assure no deleterious side effects.

2.7 Gadzoox-005

See Brocade-025 (next).

2.8 Brocade-025

There was an earlier resolution that was later found inaccurate. The term “Beginning Running Disparity” is in question. Its glossary definition appears not to be correct, given its usage. But its usage does not make its definition clear, either. Also, the acronym “RD” is used frequently without ever having been defined.

- Remove “Beginning Running Disparity” from the glossary.
- In 5.2.2, Change “Initial Running Disparity” to “initialize the current running disparity”...this will take a little surrounding rewording.
- In 5.4, early on, define “Beginning Running Disparity” as the current running disparity at the beginning of an ordered set.

2.9 Brocade-043

Accepted.

2.10 Brocade-046

Accepted to replace “dedicated duplex” as suggested. “Dedicated Simplex” is on hold in connection with Brocade-107.

2.11 Tivoli-256 (also IBM-013)

Accepted

There are TBDs that need resolution:

- 16.x.x: TBD was already resolved. Remove it.
- Table 40: “Action Code” column has a lot of TBDs. They carry through to the supporting text as well. There is a formatting inconsistency that Jim Nelson will fix. There is a definition of “retryable” that includes the possibility of correcting a condition as well as simply repeating the action. This needs to be taken into account when assigning the action codes. Error recovery is generally much more intelligent than the 2-state action code implies. But it is conceivable that existing hardware validates the combination of error code and action field. Resolution: Add a code for “action not specified” and use it for all TBDs and only for TBDs.
- others-reword the reason codes as descriptive sentences

2.12 Tivoli-648

Objection to several references to “SID_X” and no description of what “X” means. 17.3.1 was an example. A lot of time was spent trying to figure out what the section was trying to communicate. This led to identifying several problems with the structure and content of the section and its surrounding sections and tables. “Clause 17 needs a rewrite” seemed to get a lot of sympathy.

ACTION: Jim Coomes will provide a rewrite of clause 17 to improve organization and define the X’s and R’s.

2.13 Tivoli-343

Questions the appropriateness of reference to “IU transfers”, which is considered FC-4 specific, and in any case is undefined.

Resolution:

- change it to “FC-4 transfers”;
- delete table 100;

- **ACTION Bob Snively to rewrite 15.5.25-27 to eliminate inappropriate examples using "IU";**
- Table 216, in three places change "protocol and IU specific" to "specific to the protocol and context within the protocol";
- 26.3: change "request/reply IUs" to "requests and replies";
- F.1.1.1: replace "IU" with "sequence";

2.14 Brocade-026

Accepted, with the precaution that "sub-block" can not unconditionally be removed; it is correctly used in some places (eg, definition of 8B10B encoding)

2.15 Qlogic-097

Accepted.

2.16 Qlogic-105

Actually, FLOGI in classes 4 and 6 seemed inappropriate to the group, so language will be added to exclude rather than allow FLOGI in those classes.

2.17 IBM-028

More issues on lack of reference to classes 4 and 6 in clause 17. Jim Coomes will cover this in his rewrite of section 17.

2.18 Boeing-007

Do FLOGIs have to be in the order specified in section 17.3.3? Yes, but the text should be clearer to start in the lowest class supported, which may not be class 1. And never start above or continue past class 3 (ie, no FLOGI in classes 4 and 6)

2.19 Qlogic-107, -108, and -111

similar fixes to IBM-028 / Boeing-007

2.20 Qlogic-115, -117, -118, -125, -126, IBM-029

ACTION Mike Dorsett to rewrite clauses 17.6.7-8 to include class 6 support.

2.21 McData-011

Rejected, the field in question is part of a structure used in several other places as well, in most of which the field is useful.

2.22 IBM-038

The intent of the text in question is to ignore received data while transmitting OLS for 5 milliseconds.

2.23 Qlogic-121

Change the "Class 1" header to "Class 1 and 6". Also see Qlogic-115

2.24 Boeing-082

Accepted

2.25 Expert assistance with Class 4 issues is needed

ACTION John Scheible will request assistance from Gary Stephens in resolving questions concerning Class 4.

2.26 Boeing-115 to -186

All are cases where class 6 should be included with class 1. Accepted

2.27 Qlogic-132, -133

Tables 211 and 212: For class 6, change table headers to treat class 6 along with Class 1. Class 4 is unresolved.

2.28 Qlogic-137

For class 6, duplicate of Boeing-175 to -194. Class 4 is unresolved.

2.29 Tivoi-595

Accepted. Several duplicates were found.

2.30 Tivoi-637

Accepted. Delete "{invalid protocol}".

2.31 Boeing-069

Accepted

2.32 Akara-023

Defer to the Boeing comment on same issue. It has a proposed resolution.

2.33 Brocade-109

This refers to intermix of different classes of service within a single exchange. SB-2 is a possible user. There might be others.

ACTION: Bob Nixon to send email requesting any known uses of intermix of different classes of service within a single exchange.

2.34 Brocade-123

This refers to intermix of different categories of information within a single sequence. There are no known uses but...

ACTION: Bob Nixon to send email requesting any known uses of different categories of information within a single sequence.

If no issues are raised, fix the text and delete figure 9, assure the supporting text is self sufficient, and remove the (example only) reference from clause 4.

2.35 Brocade-125

Accepted. Figure 10 describes the use of relative offset to support application data sub-blocks. Delete it, assure the supporting text is self sufficient, and remove the (example only) reference from clause 4.

2.36 Brocade-126

Duplicate of an earlier accepted Brocade comment

2.37 Brocade-129

The offending text will be removed.

2.38 Brocade-068

This objects to the poor state of definition and diverse methods of implementation (or lack thereof) of Loopback mode. The chapter defining Loopback mode, and the references to it in clause 6, will be removed.

ACTION: Bob Nixon to send email expressing intent to remove loopback mode from the standard for reasons documented in comment Brocade-068 unless interested parties appear (via email or in person) to defend it.

2.39 Brocade-097

Accepted.

2.40 Brocade-148

The comment suggests keeping only a single paragraph of clause 8 concerning diagnostic mode, which can hardly be said to specify, only talk about. Instead, delete the whole clause 8.

2.41 Brocade-048

Accepted in principle. Use "FC port".

2.42 Brocade-070

Accepted, plus intend to remove Annex A.

ACTION: Bob Nixon to send email expressing intent to remove Annex A from the standard unless interested parties appear (via email or in person) to review and resolve any comments against it.

2.43 Rhapsody-08

Accepted

2.44 Brocade-048

See Brocade-048

2.45 Vixel-101

Accepted when it refers to a field or code point. Use "reserved".

2.46 Brocade-081

must remain open until Brocade-018 is resolved.

2.47 Brocade-083

Accepted.

2.48 Tivoli-049

Accepted, remove parentheses and add dash in every occurrence of the names.

2.49 Brocade-085

Accepted. Also remove primitives

2.50 Brocade-124

Remove figure 11 and its referencing sentence.

2.51 Tivoli-103

The referenced EOF serves two purposes, depending on whether it terminates a class 1 or 6 frame or a class 4 frame. Clearer words will be wrapped around this concept.

The meeting was suspended at 7:05 PM.

The meeting was resumed at 8:20 AM on May 10, 2001

2.52 Gadzoox-044

Accepted. Reference 6.1.2 for preconditions for regaining synchronization.

2.53 Akara-004

We can not understand the comment.

ACTION: John Scheible to send email requesting clarification from Neil Wanamaker on comment Akara-4.

2.54 Brocade-160

The offending sentence will be removed; however, the means of removing the peer connection by the fabric is nowhere explained. Section 22.7 seemed like a good place, but the group was not confident to propose the proper behavior. There is behavior specified in 10.5.2.1 Class 1, but it is considered immoral.

ACTION: Craig Carlson and Mike Dorsett will report on the behavior of existing switches with respect to terminating a Class 1 or 6 connection in the event of a link reset.

2.55 Brocade-162, -163, -164, -165, -167, -169

Suggestion is to rewrite 10.5 as a separate major clause. In each subclause, organize its connection management discussion around "Connection", "Connectionless", and "Intermixed", and specific class parameter management by class. Defer to FC-AL-2 for ports supporting a loop port state machine. All of the resetting actions of LR and LRR should be duplicated under NOS and OLS. Editor will take a try at it.

2.56 Brocade-170

The original issue was withdrawn. A new issue was resolved by agreement that all of the resetting actions of LR and LRR should be duplicated under NOS and OLS.

2.57 Rhapsody-030

Accepted. The "data field" included in the CRC includes both optional headers and fill bytes. This will be clarified by removing the dashed line within the data field that separates the fill bytes from the rest of the data field in figure 20.

2.58 Gadzoox-076

Accepted. In figure 21 and its descriptive text, change "Payload" to "Data Field". Indicate position of optional fill bytes in figure 24.

2.59 Rhapsody-022

Accepted.

2.60 Vixel-096

Accepted. Take the "reserved" field out of figure 24 and its supporting text (before and after). Patch up the remaining text to fit. Delete 13.2.

2.61 Tivoli-198

Accepted. In the paragraph in question, replace the second sentence with "This standard does not provide a 128-bit data structure for node, FC port, or fabric names.

2.62 Tivoli-211

Accepted. Delete all of 13.6. Insert in 13.1 text describing optional headers as defined by individual FC-4s and not controlled by FS, other than if an optional header is used in a sequence, it shall be present in the first frame of that sequence and may be present in all frames of the sequence. Then delete clause 19.

ACTION: Bob Nixon to send email expressing intent to remove any specification of how FC-4s should use optional headers, including all of clause 19.

2.63 Tivoli-239

The referenced note is "left over debris" from removing ACK-n. Delete it.

2.64 Tivoli-241

In the text in question, the list in parentheses will be prefaced with "e.g.,".

2.65 Gadzoox-096

Withdrawn after a relevant case was constructed.

2.66 Tivoli-286

Accepted. The referenced text will be changed to "The Payload shall contain the requested End-to-end Credit in the End-to-end Credit field..."

2.67 Tivoli-287, -292

Accepted in principle. The key issue is that "bit=1" should be "bit shall be set to 1". The sentence was also reworded for better clarity.

2.68 Tivoli-293

Accepted with embellishment...Change the first sentence of the clause in question to express a two-way exchange of parameters, and delete the second paragraph of the clause in question. Then define a common structure in one place for reference by the payload figures for ADVG, FLOGI, PLOGI, and all their ACCs.

2.69 Boeing-004

See Tivoli-293

2.70 Gadzoox-099

Accepted in principle. Login requirement for every ELS will be added to table 49 and removed elsewhere.

ACTION: Bill Martin to provide a proposal for the login requirement for every ELS.

2.71 Gadzoox-103

Rejected. But the reference for R_A_TOV in table 72 will be changed to 17.7.1.6, the reference for E_D_TOV in table 72 will be changed to 17.7.1.5, and the paragraph and note immediately after the table will be removed.

2.72 Gadzoox-105

Accepted.

2.73 Gadzoox-107

Accepted.

2.74 Gadzoox-108

Accepted.

ACTION: Bob Nixon to send email expressing intent to delete the LPC ELS unless interested parties appear (via email or in person) to defend it.

2.75 Tivoli-330

The text in question is resolved to "...byte 0 of the first word of the AL_PA position map..."

2.76 Gadzoox-117

Accepted.

ACTION: Bob Nixon to send email expressing intent to obsolete the SCN ELS unless interested parties appear (via email or in person) to defend it.

2.77 Agilent-001

OPEN:

ACTION: Bob Nixon to write up a revised statement replacing "shall" with "if you do this, this is how it will hurt", and review it with Tom Lindsey and Bill Ham.

2.78 Agilent-002

Rejected, the vagueness was very carefully constructed.

2.79 Agilent-003

Rejected, topology determination requires communication requires speed negotiation.

2.80 IBM-071

The comment was accepted sort of. The meaning of the referenced text was explained, but it was rewritten for better clarity.

2.81 Tivoli-248

Accepted.

2.82 Tivoli-360

Accepted.

2.83 Qlogic-063

Accepted.

2.84 Emulex-021, -024, -026

Accepted. The clause will be rewritten to better match the rest of the ELSs. Also remove references to class F except definition and its SOF

ACTION: George Penokie to provide a revised description of RTIN.

2.85 Emulex-028

ACTION: Bob Nixon to provide a revised description of the management IP address parameters.

2.86 Tivoli-392

Accepted.

2.87 Tivoli-394

Accepted.

2.88 Qlogic-066

ACTION: George Penokie to provide a revised description of RNID.

2.89 Tivoli-426

Accepted.

2.90 McData-010

Accepted.

2.91 Tivoli-464

Accepted.

3. Review of FS action items

- 3.1 Dave Peterson to provide text for obsoleting the FC-PH version numbers (01-041v0 as modified at the 2/6/01 meeting) to Jim Nelson to incorporate into FC-FS.
(OPENED 2/6/01) PARTIAL CARRYOVER – need 01-041v1 upload.
- 3.2 Not assigned to review all the Class 1 and Class 6 issues to consider eliminating features that are new in FS, unused, and problem-ridden.
(OPENED 4/01) (CLOSED, this was not intended as an action item)
- 3.3 Bob Nixon to send email expressing intent to remove dedicated simplex from the standard unless interested parties appear (via email or in person) to defend it.
(OPENED 5/9/01)
- 3.4 ACTION: Rick Allison to trace all dependencies on RT_TOV in this and other standards to assure no deleterious side effects.
(OPENED 5/9/01)
- 3.5 ACTION: John Scheible to email Rick Allison about his action item to trace all dependencies on RT_TOV in this and other standards to assure no deleterious side effects of making it adjustable.
(OPENED 5/9/01)
- 3.6 Jim Coomes will provide a rewrite of clause 17 to improve organization and define the X's and R's.
(OPENED 5/9/01)
- 3.7 Bob Snively to rewrite 15.5.25-27 to eliminate inappropriate examples using "IU"
(OPENED 5/9/01)
- 3.8 Bob Snively to propose structure for intermix to the reflector.
(OPENED 5/9/01)
- 3.9 ACTION Mike Dorsett to rewrite clauses 17.6.7-8 to include class 6 support.
(OPENED 5/9/01)
- 3.10 John Scheible will request assistance from Gary Stephens in resolving questions concerning Class 4.
(OPENED 5/9/01)
- 3.11 Bob Nixon to send email requesting any known uses of intermix of different classes of service within a single exchange.
(OPENED 5/9/01)
- 3.12 Bob Nixon to send email requesting any known uses of different categories of information within a single sequence.
(OPENED 5/9/01)

- 3.13 Bob Nixon to send email expressing intent to remove loopback mode from the standard for reasons documented in comment Brocade-068 unless interested parties appear (via email or in person) to defend it.
(OPENED 5/9/01)
- 3.14 Bob Nixon to send email expressing intent to remove Annex A from the standard unless interested parties appear (via email or in person) to review it and resolve any comments against it.
(OPENED 5/9/01)
- 3.15 ACTION: John Scheible to send email requesting clarification from Neil Wanamaker on comment Akara-4.
(OPENED 5/10/01)
- 3.16 ACTION: Bob Nixon to send email expressing intent to remove any specification of how FC-4s should use optional headers, including all of clause 19.
(OPENED 5/10/01)
- 3.17 ACTION: Bill Martin to provide a proposal for the login requirement for every ELS.
(OPENED 5/10/01)
- 3.18 ACTION: Bob Nixon to send email expressing intent to delete the LPC ELS unless interested parties appear (via email or in person) to defend it.
(OPENED 5/10/01)
- 3.19 ACTION: Bob Nixon to send email expressing intent to obsolete the SCN ELS unless interested parties appear (via email or in person) to defend it.
(OPENED 5/10/01)
- 3.20 ACTION: Bob Nixon to write up a revised statement replacing "shall" with "if you do this, this is how it will hurt", and review it with Tom Lindsey and Bill Ham.
(OPENED 5/10/01)
- 3.21 ACTION: George Penokie to provide a revised description of RTIN.
(OPENED 5/10/01)
- 3.22 ACTION: Bob Nixon to provide a revised description of the management IP address parameters.
(OPENED 5/10/01)
- 3.23 ACTION: George Penokie to provide a revised description of RNID.
(OPENED 5/10/01)

4. Adjournment (FS WG)

The meeting was adjourned at 3:58 PM Thursday May 10, 2001.

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

Company Represented	Last Name	First Name	Email
Boeing	Dorsett	Mike	michael.a.dorsett@boeing.com
Brocade	Snively	Robert	rsnively@brocade.com
Emulex	Nixon	Bob	bob.nixon@emulex.com
Gadzoox	Martin	William R.	bmartin@gadzoox.com
IBM	Scheible	John	jpscheible@aol.com
Inrange Technology	Koellner	Greg	gregory.koeller@inrange.com
JNI	Stuber	Craig	cstuber@jni.com
McData	Kipp	Scott	
Qlogic	Carlson	Craig	craig.carlson@qlogic.com
Seagate	Coomes	James	jim_coomes@seagate.com
Tivoli	Penokie	George	g_penokie@tivoli.com
Vixel	Nelson	James	Jnelson@vixel.com