

Draft Minutes

T11.3 FC-BB-5 ad hoc work group interim meeting

3, 4 March 2009 - 10-6, 9-5 PST

Santa Clara CA

The FC-BB-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a interim meeting at Santa Clara CA on 3 March 2009, hosted by NetApp. Attendance was 15 people from 9 organizations and is tabulated at the end of this document.

Minutes were taken by Bob Nixon (Emulex) (bob.nixon@emulex.com). Please report any corrections by email to the T11.3 reflector at T11_3@mail.T11.org.

1 Opening remarks

1.1 Introductions

Chairperson Claudio DeSanti (Cisco) opened the interim meeting Tuesday, 3, 4 March 2009 at 10:35 AM PST. He thanked our host organization, NetApp, and led a round of introductions.

2 Meeting Policy

2.1 Attendance and Membership

chair explained that attendance is recorded electronically at www.t11.org/att, and explained the procedure. 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).

chair stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. He advised that although T11 does not limit participation in the activities of its work groups to representatives of T11 member organizations, it requires nonmembers to identify themselves as such. Nonmembers that expect they may participate in the activities of T11 regularly were encouraged to become members.

No person identified himself as a member of an organization that is not a member of T11.

2.2 Patents

chair indicated that among the rules and policies under which this working group operates are the ANSI intellectual property policies as specified in pages 1-3 of http://www.incits.org/pat_slides.pdf. He displayed these pages without comment or explanation, and directed that questions about the policy should be referred to the questioner's legal counsel or the ANSI General Counsel.

2.3 Antitrust

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

violates those guidelines. As examples, there should never be discussion of the following topics at any INCITS or INCITS subgroup meeting:

- Any company's prices or pricing policies;
- Specific R&D, sales and marketing plans;
- Any company's confidential product, product development or production strategies;
- Whether certain suppliers or customers will be served;
- Prices paid to input sources; or
- Complaints about individual firms or other actions that might tend to hinder a competitor in any market.

If such discussion is not immediately terminated, it is the chairperson's responsibility to terminate the meeting. The INCITS Antitrust Guidelines are available at

<http://www.incits.org/inatrust.htm>

3 Administrivia

3.1 Approval of Agenda

An agenda for the FC-BB-5 ad hoc work group interim meeting 3, 4 March 2009 has been posted as T11/09-128v0.

It was agreed to add a discussion of the diagram of the FCF architectural model (T11/09-129v0).

Silvano Gai (Cisco) moved and Bill Martin (Emulex) seconded to accept T11/09-128v0 with the changes noted above as the agenda for this interim meeting. Approved unanimously.

3.2 Review of Minutes

Minutes for the FC-BB-5 ad hoc work group interim meeting 4 February 2009 have been posted as T11/09-088v0. Review and approval of T11/09-088v0 was deferred until the next regular meeting.

4 Review of Old Action Items

Review of action items was deferred until the next regular meeting. The action items carried from the prior meeting are listed here for reference.

- 090121-1 Bob Nixon to recommend more accurate titles for what are now called the Virtual Link Instantiation and Virtual Link Maintenance subclauses.
(Overtaken by reality)
- 090204-1 David Black SHALL review Claudio's use of "shall", "should", and "may" when Claudio posts his rewrite of subclause 7.7.
(Carry)
- 090204-2 David Black to bring in a proposal for reasonable checks FCFs shall make for MAC Address duplication.
(Carry)
- 090204-3 Chair to schedule a two-day interim meeting late February or early March, probably in Sunnyvale CA.
(Completed by timely posting of this meeting to the T11 web site)

5 Old Business

No old business was presented.

6 Scheduled Business

6.1 FCF Model Revisions

T11/09-129v0

Knight (NetApp)

The presentation proposed to show two models of an FCF, one with and one without the optional Ethernet bridge interfacing between FCF-MACs and the Ethernet. There were several ballot comments that claimed the current diagram with many optional components was confusing. Some present felt the the revision in fact further confused the issue. The discussion rat-ho... ahhh ... focused on the earlier disconnect in the group: Does the current model of an FCF with optional components represent "an FCF" or "an FCF with external extensions".

Afer prolonged discussion, the presenter withdrew the proposal.

6.2 FC-BB-5 Letter Ballot Comments and Resolutions

T11/09-010v3 DeSanti (Cisco)

The discussion of several comments focused on text in proposal T11/09-118v0, and on notes added to that proposal since it was posted.

A discussion of comment EMC-061 identified certain FIP error conditions that may need some sort of treatment beyond discard (e.g., tightening the specification, reporting in some manner). Among the conditions raised were:

- The length of a FIP message does not match the sum of the lengths of the included (nonpad) descriptors;
- A FIP message is malformed in one of several ways;
- The value appearing in a length field is large enough to cause unintended treatment as a negative number;
- Pad fields are used as a covert channel;
- Illegal settings of SP and FP flags in a FIP Operation header are not detected because descriptors later in the operation payload are wrong;
- Certain messages are received by certain FCoE_Port types that should not receive them (e.g., an ENode MAC should not process FIP messages from other ENodes);
- Embedded FC operations within FIP operations are malformed and passed to an FC element that does not check carefully;
- A multicast address appears within a FIP payload in a way that causes it to destructively replace a unicast address;
- A pathologically large or small value is sent as FKA_ADV_PERIOD; and
- Illegal values of VLAN ID appear in a FIP VLAN descriptor.

These issues were all resolved by either referring to existing text or adding new text that was captured in a markup of T11/09-118v0 that will become T11/09-118v1.

There remain only 9 open comments.

ACTION David Black to provide IETF FC Pseudowire references.

ACTION Dave Peterson to prepare a new draft of FC-BB-5 incorporating T11/09-117v1, "FC-BB-5 Annex C Updated", and "FC-BB-5 Annex D Updated".

7 Unscheduled Business

No unscheduled business was presented.

8 Project Schedule

Milestone	Expected date
Last Technical Input	June 2008
T11 letter Ballot	October 2008
Forward to INCITS	June 2009

9 Review of Action Items

- 090204-1 David Black SHALL review Claudio's use of "shall", "should", and "may" when Claudio posts his rewrite of subclause 7.7.
(Carry)
- 090204-2 David Black to bring in a proposal for reasonable checks FCFs shall make for MAC Address duplication.
(Carry)
- 090304-1 David Black to provide IETF FC Pseudowire references.
- 090304-2 Dave Peterson to prepare a new draft of FC-BB-5 incorporating T11/09-117v1, "FC-BB-5 Annex C Updated", and "FC-BB-5 Annex D Updated".

10 Meeting Schedule

Six hours have been reserved on Wednesday April 1 at the T11 plenary week hosted by Brocade in Memphis TN, 30 March-3 April 2009.

11 Adjournment

Landon Noll (Cisco) moved and Bill Martin (Emulex) seconded to adjourn. Approved unanimously.

The interim meeting was adjourned at 3:20 AM PST on 4 March 2009.

12 Status of Open Proposals

Document Title	Number	Disposition	Author
Letter Ballot Comment database	T11/08-654	Close, replaced by T11/09-010.	Peterson (Brocade)
Letter Ballot Comment database	T11/09-010	Carry for continued comment resolution. Latest version presented was T11/09-010v2	Peterson (Brocade)
FIP Error Reporting	T11/08-717	Close, resolved instead by T11/08-578. Version presented was T11/08-717v0.	Peterson (Brocade)
FIP Errors	T11/08-578	Close, accepted as letter ballot comment resolution. Version presented was T11/08-578v1.	DeSanti (Cisco)
MIB Concern resolutions	T11/08-729	Close. Replaced by T11/09-068v0. Last version presented was T11/08-729v0.	Pelissier (Cisco), Peterson (Brocade)
MIB Concern resolutions	T11/09-068	Carry for HBA/CNA vendor input. Version presented was T11/09-077v0.	Pelissier (Cisco), Peterson (Brocade)
Virtual Links	T11/09-077	Close, resolutions to issues raised were captured in input to the next revision of FC-BB-5. Version presented was T11/09-077v0.	Hathorn (IBM)

13 Attendance

Organization	Representative
BROADCOM	Pat Thaler
BROCADE	Steven L. Wilson
CISCO	Joe Pelissier
CISCO SYSTEMS	Fabrizio Corno
CISCO SYSTEMS	Landon Noll
CISCO SYSTEMS	Silvano Gai
CISCO SYSTEMS, INC.	Claudio DeSanti
EMC	David Black
EMULEX	Bob Nixon
EMULEX	Tuan Nguyen
EMULEX	William R. Martin
ENDL TEXAS	Ralph Weber
IBM	Roger Hathorn
NETAPP	Frederick Knight
QLOGIC CORP.	Craig W. Carlson