

Draft Minutes

T11.3 FC-BB-5 ad hoc work group teleconference

27 April 2009 - 11 AM to 12 PM PDT

The FC-BB-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a teleconference on 27 April 2009, hosted by Cisco. Attendance was 16 people from 8 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

As chairperson Claudio DeSanti (Cisco) was delayed in traffic, secretary Bob Nixon opened the teleconference Monday, 27 April 2009 at 11:02 AM PDT. He thanked our host organization, Cisco, and led a round of introductions.

2 Meeting Policy

2.1 Attendance and Membership

The secretary 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).

The secretary 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.

Those responding are included in the attendance record. They were advised that by remaining in this meeting, they submit themselves and their organizations to INCITS policy for intellectual property, antitrust, and guest membership policy.

2.2 Patents

The secretary 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 directed those attending to review these pages, and directed that questions about the policy should be referred to the questioner's legal counsel or the ANSI General Counsel.

2.3 Antitrust

The secretary 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

The announced agenda was to review any proposals that had been posted in response to letter ballot comment resolution actions. This agenda was accepted by consensus.

3.2 Review of Minutes

Minutes for the FC-BB-5 ad hoc work group meeting 1 April 2009 have been posted as T11/09-232v0. Minutes for the FC-BB-5 ad hoc work group teleconference 16 April 2009 have been posted as T11/09-245v1. Review of minutes was deferred until the next regular meeting.

4 Review of Old Action Items

Review of incomplete action items was deferred until the next regular meeting.

5 Scheduled Business

5.1 FCoE Link Error Status Block

T11/09-204v2

Hathorn (IBM)

The presentation proposes content for the Link Error Status Block for an FCoE MAC, in resolution to letter ballot comment IBM-020. It has been updated to reflect changes advised at its last review, and to incorporate offline expert advice from Pat Thaler.

The proposal defines a new counter, Errored Block Count, that reflects an Ethernet counter that is similar to FC Invalid Transmission Words.

It was agreed to replace the previously proposed Errored Frame Count with the new Errored Block Count.

It was noted that the current counters do not reflect Fibre Channel CRC errors in the absence of a concurrent Ethernet FCS error. This circumstance was thought to be unusual, and indicative of errors within a device rather than on a link.

It was agreed that the Frame Check Sequence Errors counter would reflect only Ethernet FCS errors and not Fibre Channel CRC errors.

An issue was posed with the relevance of the "Missing FIP Keep Alive or Discovery Advertisement Counter". He who posed, will dispose, providing a resolution at the FC-BB-5 teleconference 11 May 2009.

ACTION Dave Peterson to prepare proposed text for incorporation of proposal T11/09-204v2, amended as agreed at the FC-BB-5 ad hoc work group teleconference 27 April 2009, and post that text for review at the FC-BB-5 teleconference 11 May 2009.

5.2 Private Enterprise Number for FCoE MIB T11/09-250v0 DeSanti (Cisco)

Claudio reported that in resolution to action 090401-5, he had requested a private enterprise number from IANA for identification of MIBs created by T11, and that private enterprise number 33317 has been assigned by IANA. Means of management of the OID hierarchy under this private enterprise number will be discussed in later meetings.

5.3 FCoE frame or FCoE PDU? T11/09-251v0 DeSanti or FIP(Cisco)

This presentation proposes text changes to clarify the distinction between an Ethernet frame containing FCoE material or FIP material (henceforth, an FCoE frame or FIP frame, respectively) and the contained FCoE material or FIP material (henceforth, an FCoE PDU or FIP PDU, respectively). It also defines the FC-BB-5 terms for unicast and multicast with appropriate references to IEEE 802.3 terms.

It was agreed to remove the definition of PDU from the proposal, since it was already defined in FC-BB-5.

ACTION FC-BB-5 Editor to incorporate T11/09-251v0, amended as agreed at the FC-BB-5 ad hoc work group teleconference 27 April 2009, into FC-BB-5.

This closes an action item 090401-3.

6 Project Schedule

It was noted that in order to forward FC-BB-5 to INCITS at the next meeting of T11 in June 2009 as scheduled, a draft containing all approved changes needs to be posted by two weeks prior to that T11 plenary meeting.

ACTION FC-BB-5 Editor to prepare a new revision of FC-BB-5 and post it for review at the FC-BB-5 ad hoc work group teleconference 11 May 2009.

7 Review of Action Items

Review of incomplete action items was deferred until the next regular meeting. Incomplete action items are listed here for convenience of the reader.

090401-1 David Black to review Annex D of FC-BB-5 1.05.

090401-2 Claudio DeSanti to publish a new document reflecting T11/09-200v0 amended as agreed at the FC-BB-5 ad hoc work group regular meeting 1 April 2009.
(Completed by posting of T11/09-200v1)

- 090401-3 FC-BB-5 editor to check all uses of "FCoE frame" to assure that they do not exceed the scope of the definition of FCoE frame.
(Completed by posting of T11/09-251v0)
- 090401-4 Claudio DeSanti to publish T11/09-201v0, reflecting the unpublished draft developed at the FC-BB-5 ad hoc work group regular meeting 1 April 2009.
(Completed by posting of T11/09-201v0)
- 090401-5 FC-BB-5 chair to request T11.3 to request T11 to acquire a private enterprise number from IANA for use in standards developed by T11.
(Completed by posting of T11/09-250v0)
- 090401-6 FC-BB-5 secretary to send email to the T11.3 reflector advising that the FC-BB-5 work group expects to adopt specifications based on T11/09-204v0, which includes different definitions of the LESB counters in FCoE than those in FC-FS-3.
(Completed by email 21 April 2009, Nixon to T11.2 and T11.3 distributions)
- 090401-7 Silvano Gai to post a T11 proposal documenting the pre-FIP implementation.
- 090401-8 FC-BB-5 chair to schedule up to 5 teleconferences to discuss resolutions to open technical issues.
(Completed by postings on the T11 web site)
- 090427-1 Dave Peterson to prepare proposed text for incorporation of proposal T11/09-204v2, amended as agreed at the FC-BB-5 ad hoc work group teleconference 27 April 2009, and post that text for review at the FC-BB-5 teleconference 11 May 2009.
- 090427-2 FC-BB-5 Editor to incorporate T11/09-251v0, amended as agreed at the FC-BB-5 ad hoc work group teleconference 27 April 2009, into FC-BB-5.
- 090427-3 FC-BB-5 Editor to prepare a new revision of FC-BB-5 and post it for review at the FC-BB-5 ad hoc work group teleconference 11 May 2009.

8 Meeting Schedule

8.1 Interim meetings

The following teleconferences have been scheduled:

- 11 AM - 12 PM PDT Monday 11 May 2009
- 11 AM - 12 PM PDT Friday 15 May 2009
- 11 AM - 12 PM PDT Tuesday 26 May 2009

8.2 Next Plenary Week

Five hours have been scheduled on Wednesday June 3 at the T11 plenary week hosted by FCIA in Coeur d'Alene ID, 1-5 June 2009.

9 Adjournment

The teleconference was adjourned by consensus at 12:15 PM PDT on 27 April 2009.

10 Status of Open Proposals

Document Title	Number	Disposition	Author
Letter Ballot Comment database	T11/09-010	Carry for continued comment resolution. Latest version presented was T11/09-010v5	Peterson (Brocade)
FCoE Link Error Status Block	T11/09-204	Carry for posting of change text per action item 090427-1. Version presented was T11/09-204v2.	Hathorn (IBM)
FCoE frame or FCoE PDU?	T11/09-251	Close. Version accepted was T11/09-251v0 with a minor change.	DeSanti (Cisco)
Private Enterprise Number for FCoE MIB	T11/09-250	Close. Version accepted was T11/09-250v0.	DeSanti (Cisco)

11 Attendance

Organization	Representative
BROADCOM	Pat Thaler
BROCADE	Anoop Ghanwani
BROCADE	David Peterson
BROCADE	John Hufferd
CISCO SYSTEMS	Fabrizio Corno
CISCO SYSTEMS	Landon Noll
CISCO SYSTEMS, INC.	Claudio DeSanti
EMULEX	Bob Nixon
HCL TECHNOLOGIES	Venkatasubraman Ganesan
HCL TECHNOLOGIES LTD	Mahesh Kumar Lakshminarayana
HCL TECHNOLOGIES LTD.	Prakash Venkatesen
HCL TECHNOLOGIES LTD.,	rijesh kp
IBM	Roger Hathorn
NETAPP	Frederick Knight
QLOGIC CORP	Alan Spalding
QLOGIC CORP.	Craig W. Carlson