

# Draft Minutes

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

### 20-21 January 2008 - 10-6, 9-5 PST

### Sunnyvale CA

The FC-BB-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a interim meeting at Sunnyvale CA on 20-21 January 2008, hosted by NetApp and Fred Knight. Attendance was 19 people from 10 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/Wednesday, 20-21 January 2008 at 10:36 AM PST. He thanked NetApp and Fred Knight, for the meeting facilities, and Dave Peterson (Brocade) and Roger Cummings (Symantec) for teleconferencing facilities. He led a round of introductions.

## 2 Meeting Policy

### 2.1 Attendance and Membership

The chair explained that attendance is recorded electronically at [www.t11.org/att](http://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 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.

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 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](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

The 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 20-21 January 2008 has been posted as T11/09-016v0.

It was agreed to add a discussion of logout behavior, to be introduced by Dave Peterson.

***Landon Noll (Cisco) moved and Bob Nixon (Emulex) seconded to accept T11/09-016v0 with the change 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 regular meeting 10 December 2008 have been posted as T11/08-748v0. Review of these minutes was deferred until the next regular meeting.

### **4 Review of Old Action Items**

- 080806-6 Roger Hathorn to define a mapping from Ethernet physical link statistics to at minimum some of the counters in the Link Status Block.  
(Carry)
- 081210-1 FC-BB-5 editor to incorporate T11/08-564v0 into FC-BB-5.  
(Carry)
- 081210-2 Bob Nixon to publish a new document reflecting T11/08-676v0 amended as agreed at the FC-BB-5 ad hoc work group regular meeting 10 December 2008.  
(Completed by posting of T11/08-676v1)
- 081210-3 FC-BB-5 editor to incorporate T11/08-676v0 amended as agreed at the FC-BB-5 ad hoc work group regular meeting 10 December 2008 into the FC-BB-5 letter ballot comment database.  
(Carry)

081210-4 FC-BB-5 chair to schedule an all-day interim meeting in Salt Lake City, Denver, or San Jose the week of January 19, 2009.  
(Completed)

## 5 Old Business

No old business was presented.

## 6 Scheduled Business

### 6.1 Logout behavior no document      Peterson (Brocade)

The question was raised on the expected effect on VN\_Ports obtained by FDISC when the VN\_Port obtained by the original FLOGI logs out from the Fabric. The general belief is the other VN\_Ports are unaffected, and that this is expressed in FC-LS, but this was not confirmed.

It was agreed to add a new letter ballot comment to review the need for text clarifying expected logout behavior.

### 6.2 FC-BB-5: Letter Ballot Comments database T11/09-010v0      DeSanti (Cisco)

The presenter captured comment resolutions recommended by the workgroup, and will publish a revision of the comment database reflecting these recommendations.

The secretary considered the following recommendations noteworthy:

- There was substantial discussion of the lack of specific required methods of assuring Lossless Ethernet behavior of the Ethernet substrate. The majority favored leaving specific (i.e., standard) methods as examples, so that alternate (possibly proprietary) methods and future standard methods could also be compliant.
- Jumbo frames are no longer a requirement. There are currently specified Fabric mechanisms that deal with frame length limits (in response to SolutionTechnology-017).
- It was agreed that the use of intermediate bridges does not violate the intent of QSA-related specifications, since this behavior is relevant only to N\_Port to Fabric connections, not to the Ethernet routing. It does, however, require the F\_Port S\_ID/D\_ID checks recommended for FCoE security.
- It was clarified that a separate virtual link is instantiated for each VN\_Port, even when multiple VN\_Ports share the same MAC address (i.e., in SPMA).
- The number of missing FKA\_ADV\_PERIOD keepalive events that are interpreted as failure is changed instead to a timer equal to 2.5 times FKA\_ADV\_PERIOD. This assures that two keepalives are missed (although three may be). The same will be done to the keepalives based on the 90-second timer.
- In a Discovery Solicitation sent by an SPMA-only FCF, the value of the FP-MAP field shall be zero, not reserved. This is consistent with a more specific requirement already written on the same field.

It was agreed to add a late letter ballot comment to review all uses of the term "Lossless", assuring it is capitalized as needed to invokes the formal definition.

**ACTION    Bob Nixon to recommend more accurate titles for what are now called the Virtual Link Instantiation and Virtual Link Maintenance subclauses.**

## 7 Unscheduled Business

No unscheduled business was presented.

## 8 Review of Action Items

- 080806-6 Roger Hathorn to define a mapping from Ethernet physical link statistics to at minimum some of the counters in the Link Status Block.  
(Carry)
- 081210-1 FC-BB-5 editor to incorporate T11/08-564v0 into FC-BB-5.  
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(Carry)
- 081210-4 FC-BB-5 chair to schedule an all-day interim meeting in Salt Lake City, Denver, or San Jose the week of January 19, 2009.  
(Completed)
- 090121-1 Bob Nixon to recommend more accurate titles for what are now called the Virtual Link Instantiation and Virtual Link Maintenance subclauses.

## 9 Meeting Schedule

Six hours have been scheduled on Wednesday, 4 February 2009 at the T11 plenary week hosted by HP in San Antonio TX.

## 10 Attendance Check

The chair reminded those present that they needed to register their attendance electronically for it to become part of the official record.

## 11 Adjournment

***Bob Nixon (Emulex) moved and Joe Pelissier (Cisco) seconded to adjourn. Approved unanimously.***

The interim meeting was adjourned at 5:07 PM PST on 21 January 2008.

## 12 Attendance

<b>Organization</b>	<b>Representative</b>
BLADE NETWORK TECHNOLOGIES	Chetan Yaliwal
BLADE NETWORK TECHNOLOGIES	Rakesh Saha
BROADCOM	Pat Thaler
BROADCOM	Uri Elzur
BROCADE	David Peterson
BROCADE	Steven L. Wilson
CISCO	Joe Pelissier
CISCO SYSTEMS	Fabrizio Corno
CISCO SYSTEMS	Claudio DeSanti
CISCO SYSTEMS	Landon Noll
CISCO SYSTEMS	Silvano Gai
EMC	David Black
EMULEX	Bob Nixon
EMULEX	Tuan Nguyen
IBM	Roger Hathorn
IBM	Scott Carlson
NETAPP	Frederick Knight
SYMANTEC	Roger Cummings
HUFFERD ENTERPRISES, Visitor	John Hufferd