

# Draft Minutes

## T11.3 FC-BB-5 ad hoc work group regular meeting 10 December 2008 - 9 AM to 4:30 PM (GMT-6) Cancun MX

The FC-BB-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Cancun MX on 10 December 2008, hosted by Solution Technology and Dave Deming. Attendance was 24 people from 18 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

Claudio DeSanti (Cisco) opened the regular meeting Wednesday, 10 December 2008 at 9:17 AM (GMT-6). He thanked our host organization, Solution Technology and Dave Deming, and led a round of introductions.

### 2 Meeting Policy

#### 2.1 Attendance and Membership

Claudio DeSanti (Cisco) 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).

Claudio DeSanti (Cisco) 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.

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

#### 2.2 Patents

Claudio DeSanti (Cisco) 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

Claudio DeSanti (Cisco) 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 regular meeting 10 December 2008 has been posted as T11/08-718v0.

***Landon Noll (Cisco) moved and Fred Knight (NetApp) seconded to accept T11/08-718v0 as the agenda for this regular meeting. Approved unanimously.***

#### **3.2 Review of Minutes**

Minutes for the FC-BB-5 ad hoc work group regular meeting 9 October 2008 have been posted as T11/08-623v1.

***Bob Nixon (Emulex) moved and Diego Crupnicoff (Mellanox) seconded to accept T11/08-623v1 as the minutes of the FC-BB-5 ad hoc work group meeting on 9 October 2008. Approved unanimously.***

### **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)
- 081008-1 Bob Nixon (Emulex) to publish T11/08-548v1 reflecting T11/08-548v0 and the agreements at the FC-BB-5 ad hoc work group regular meeting 8 October 2008.  
(Completed by posting of T11/08-548v1)
- 081008-2 FC-BB-5 Chair to reopen the motion from the FC-BB-5 ad hoc work group regular meeting 8 October 2008 "to incorporate T11/08-564v0 into FC-BB-5".  
(Completed by agenda for this meeting)
- 081008-3 Joe Pelissier to publish T11/08-588v1, reflecting T11/08-588v0 and the agreements at the FC-BB-5 ad hoc work group regular meeting 8 October 2008.  
(Completed by posting of T11/08-588v1)
- 081008-4 Joe Pelissier to provide source for T11/08-588v1 to FC-BB-5 editor.  
(Completed)

- 081008-5 FC-BB-5 editor to incorporate T11/08-588v1 into FC-BB-5.  
(Completed by T11/08-569v1)
- 081008-6 Joe Pelissier to publish T11/08-264v5 reflecting T11/08-264v4 and the agreements at the FC-BB-5 ad hoc work group regular meeting 8 October 2008.  
(Completed by posting of T11/08-264v5)
- 081008-7 Joe Pelissier to provide source for T11/08-264v5 to FC-BB-5 editor.  
(Completed)
- 081008-8 FC-BB-5 editor to incorporate T11/08-264v5 into FC-BB-5 to replace the existing equivalent annex.  
(Completed by T11/08-569v1)
- 081008-9 FC-BB-5 ad hoc work group chair to request T11 to conduct a letter ballot on forwarding Revision 1.03 of FC-BB-5 (T11/08-569v1), Project 1871-D, to INCITS for further processing including public review.  
(Completed at T11.3 plenary meeting 9 October 2008)
- 081008-10 Dave Peterson to publish T11/08-569v1, reflecting T11/08-569v0 and the agreements at the FC-BB-5 ad hoc work group regular meeting 8 October 2008.  
(Completed by posting of T11/08-569v1)

## **5 Old Business**

### **5.1 Status of dpANS FC-BB-5 T11/08-569v1      Peterson (Brocade)**

Letter ballot results on forwarding FC-BB-5 to INCITS were 29 favoring, 4 opposing, 10 abstaining, and 3 not voting. There were 691 comments submitted, though there was much duplication.

### **5.2 Motion to incorporate T11/08-564v0 into FC-BB-5 Gai (Cisco), Knight (NetApp)**

*At the last meeting, the following motion was deferred:*

*Silvano Gai (Cisco) moved and Fred Knight (NetApp) seconded to incorporate T11/08-564v0 into FC-BB-5. The motion passed 11 Favoring, 0 Opposing, 5 Abstaining.*

**ACTION** FC-BB-5 editor to incorporate T11/08-564v0 into FC-BB-5.

## **6 Scheduled Business**

### **6.1 Weakness in Uniqueness T11/08-676v0      Nixon (Emulex)**

The work group advised that the proposed material was acceptable, given some minor changes to the scopes of uniqueness

The editor was given freedom to move portions of the material indicated for the glossary into the FC-BB\_E model subclause.

**ACTION** 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.

**ACTION** FC-BB-5 chair 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.

**6.2 Updated FCoE Models** **T11/08-727v0** **DeSanti (Cisco)**

The presentation diagrammatically introduced a revision to the FCoE models, using the terminology recently introduced in FC-FS-3 for N\_Port virtualization.

There were some issues with the presentation and terminology of the model, though not with its intent.

A generally agreeable diagram was constructed showing that the FC-2M and FC-2P sublevels of FC as defined by FC-FS-3 is replaced by the FCoE Entity level of FCoE as defined by FC-BB-5.

Claudio will incorporate the recommended diagram changes into a revision of T11/08-728v0, from which the diagrams were taken.

**6.3 Incorporating the V\* Architecture in FC-BB-5** **T11/08-728v0** **DeSanti (Cisco)**

In response to concerns from some present, the presenter clarified that the impact of this proposal is intended to affect only FC-BB\_E, and not any of the established mappings carried from FC-BB-4.

The work group accepted T11/08-728v0 with the recommended changes, including diagram revisions (see 6.2), as the resolution of several letter ballot comments

**6.4 FIP Error Reporting** **T11/08-717v0** **Peterson (Brocade)**

The presentation offered a means of reporting FIP errors using FIP messages and descriptors. The effect is to be able to report FIP-related errors with FIP mechanisms, both for known and possible future error situations involving FIP as a transport.

There was concern that the only known error cases appeared to be related to Fabric Logins, and this introduced questions about the appropriate FLOGI ELS response in context of a FIP-reported error. The result appeared to be the need to partially report error status in an LS\_Reject ELS and partly in the FIP envelope of the LS\_Reject ELS.

There was an additional concern that FIP is currently an inherently unidirectional protocol, and does not architecturally provide either status for an operation or relationship of a later status-carrying operation and an earlier status-generating operation.

**6.5 FIP Errors** **T11/08-578v1** **DeSanti (Cisco)**

This presentation is a revision to incorporate changes advised at the prior meeting of this work group. It offered a means of reporting FLOGI/FDISC errors related to information in the FIP envelope carrying the FLOGI/FDISC request. It proposed to carry the error information in new LS\_Reject error codes.

The presenter accepted advice to entitle the errors "FC-BB errors" rather than "FIP errors".

**6.6 Proposed FC-BB-5 Clause 4** **T11/08-726v0** **DeSanti (Cisco)**

This presentation extends the FC-BB-5 model clause to cover FC-BB\_E as well as the existing WAN-presumptive methods.



- 081210-3 FC-BB-5 chair 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.
- 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.

## **10 Meeting Schedule**

### **10.1 Interim request**

It was agreed that an all-day interim meeting was desirable to expedite comment resolution. It was further agreed to be least objectionable to hold it in Salt Lake City, Denver, or San Jose the week of January 19, 2009.

**ACTION 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.**

### **10.2 Next Plenary Week**

Request 8 hours at the T11 plenary week hosted by HP in San Antonio TX, 2-6 February 2009.

## **11 Adjournment**

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

The regular meeting was adjourned at 4:30 PM (GMT-6) on 10 December 2008.

## 12 Status of Open Proposals

Document Title	Number	Disposition	Author
FKA Optimization	T11/08-544	Close. Overtaken by events. Final version presented was T11/08-544v0	DeSanti (Cisco)
FIP VLAN Discovery	T11/08-564	Close. Version approved was T11/08-564v1.	DeSanti (Cisco)
dpANS FC-BB-5	T11/08-569	Carry for further comment resolution. Current version was T11/08-569v1.	Peterson (Brocade)
Letter Ballot Comment database	T11/08-654	Carry for continued comment resolution. Latest version presented was T11/08-654v0	Peterson (Brocade)
Weakness in Uniqueness	T11/08-676	Close. Accepted version was T11/08-676v1.	Nixon (Emulex)
Updated FCoE Models	T11/08-727	Close. Will be incorporated with changes into a revision of T11/08-728v0. Version presented was T11/08-727v0.	DeSanti (Cisco)
Incorporating the V* Architecture in FC-BB-5	T11/08-728	Close. Will be incorporated with changes into FC-BB-5. Final version presented was T11/08-728v0.	DeSanti (Cisco)
FIP Error Reporting	T11/08-717	Carry for further discussion. Version presented was T11/08-717v0.	Peterson (Brocade)
FIP Errors	T11/08-578	Carry for further discussion. Version presented was T11/08-578v1.	DeSanti (Cisco)
Proposed FC-BB-5 Clause 4	T11/08-726	Close. Will be incorporated with changes into FC-BB-5. Final version presented was T11/08-726v0.	DeSanti (Cisco)
MIB Concern resolutions	T11/08-729	Carry for further discussion. Version presented was T11/08-729v0.	Pelissier (Cisco), Peterson (Brocade)

### 13 Attendance

<b>Organization</b>	<b>Representative</b>
BROADCOM	Uri Elzur
BROCADE	David Peterson
CIENA	Martin Hunt
CISCO	Joe Pelissier
CISCO	Landon Noll
CISCO	Silvano Gai
CISCO	Claudio DeSanti
DELL	Gaurav Chawla
EMC	Gary S. Robinson
EMULEX	Bob Nixon
EMULEX	Tuan Nguyen
EMULEX	William R. Martin
ENDL TEXAS	Ralph Weber
HEWLETT PACKARD	Jieming Zhu
HITACHI DATA SYSTEMS	Eric Hibbard
HUAWEI TECHNOLOGIES USA	Linda Dunbar
IBM	Louis Ricci
IBM	Roger Hathorn
MELLANOX TECHNOLOGIES	Diego Crupnicoff
MICROSOFT	Albert Chen
NETAPP	Frederick Knight
QLOGIC	Craig W. Carlson
SUN MICROSYSTEMS	Matt Gaffney
TRUE FOCUS	Horst Truestedt