

Draft Minutes

T11.3 FC-BB-6 ad hoc work group regular meeting

9 February 2011 - 9:00 AM to 5:30 PM EST

Charleston SC

The FC-BB-6 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Charleston SC on 9 February 2011, hosted by FCIA and Chris Lyon. Attendance was two Emeritus members and 30 people from 17 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 regular meeting Wednesday, 9 February 2011 at 9:02 AM EST. He thanked our hosts, FCIA and Chris Lyon, and 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, 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. 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

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. 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-6 ad hoc work group regular meeting 9 February 2011 has been posted as T11/11-028v0.

It was agreed to add presentation of "FIP Clear Virtual Link Reason Codes" (T11/11-064v0) by Erik Smith of EMC.

It was agreed to add a report on IETF status of the Fibre Channel PseudoWire specification by David Black of EMC.

It was agreed to defer the agenda item for discussion of T11/1-517.

Dave Peterson (Brocade) moved and Bill Martin (Emulex) seconded to accept T11/11-028v0 with the changes noted above as the agenda for this regular meeting. Approved by acclamation.

3.2 Review of Minutes

Minutes for the FC-BB-6 ad hoc work group regular meeting 8 December 2010 have been posted as T11/10-533v0.

Dave Peterson (Brocade) moved and Lou Ricci (IBM) seconded to accept T11/10-533v0 as the minutes of the FC-BB-6 ad hoc work group meeting on 8 December 2010. Approved by acclamation.

4 Review of Old Action Items

There are no open action items.

5 Old Business

5.1 Status of the IETF FC PseudoWire draft no document Black (EMC)

David reported that the IETF PseudoWire draft is in IETF Last Call.

For those who have joined T11 in recent years, this draft is an as-yet-unmet dependency of FC-BB-4, for which development was completed in 2007.

6 Scheduled Business

6.1 FC-BB-6 Functionality

T11/11-024v0

Peterson (Brocade)

The presentation was co-authored by Steve Wilson, Dave Peterson, and John Crandall, all of Brocade. Each led parts of the discussion.

The presentation raised some questions about the expected characteristics of an FDF, and identified a need to develop a rigorous FDF behavioral model. This would give grounds both for evaluating different protocol proposals, and for developing management facilities inclusive of FDFs.

Other recommendatons in the presentation included:

- a) the motivations for the FDF concept needed to be revisited;
- b) switch behavior should be specified in FC-SW-x, not in FC-BB-x; and
- c) management models need to reflect expected physical packaging, which is out of scope of the normative material but a desirable subject for informative models.

6.2 FC-BB-6/FC-SW-6

T11/10-517v0

Peterson (Brocade)

This presentation was deferred.

6.3 Distributed FCF - Presentation

T11/11-070v0

DeSanti (Cisco)

This presentation provided an overview introduction to the detailed text specification in T11/11-026v0.

The diagrams in the presentation did not answer all the questions raised in T11/11-024v0, but gave a context in which to better explain both the questions and the answers.

It appeared to be undesirable for a Controlling FCF to allocate virtual domain addresses to N_Ports that are connected to VF_Ports on the Controlling FCF itself. Presuming this to be allowed quickly raised several questions, leaving the majority of the membership unsure that the ability was worth the risk of unresolvable, or incompletely resolved, issues.

The presenter reported an outside conversation with a redundant systems expert who questioned the need for the redundant configurations that are being pursued. The expert observation was that this problem today was typically resolved by redundant Fabrics. A contrary opinion was that redundancy also provides extra capacity, and using finer granularity redundancy reduces the scope of capacity reduction when an element fails.

At 12:23, the chair called for a recess until 2:00 PM for lunch.

The meeting resumed at 2:00 PM.

The discussion continued for the remainder of the meeting time, providing a combination of detailed introduction to the motivations and capabilities of the proposed model, and tutorial for new members.

6.4 Distributed FCF

T11/11-026v0

DeSanti (Cisco)

This presentation was deferred because time was exhausted.

7 Unscheduled Business

7.1 FIP Clear Virtual Link Reason Codes

T11/11-064v0

Smith (EMC)

The presentation introduced an issue that there is no information accompanying a FIP CLEAR VIRTUAL LINK to explicate the reason for terminating the link. This means that installation management can not easily diagnose losses of virtual connectivity. The proposal was intended only to introduce the issue, and did not offer a proposed resolution.

It was observed that the information would need to be embedded in the FIP CLEAR VIRTUAL LINK, since FIP requests do not carry any information that could relate them to any other carriers of additional information.

It was observed that in traditional Fibre Channel, such information is not available for OLS, etc. Others felt this was not a valid comparison, because FCoE link resets may result for more diverse reasons, and may be much more slowly detected.

It was observed that the information requested is most relevant at intermediate devices (e.g., FC analyzers), since CLEAR VIRTUAL LINKs may never reach the end device.

8 Review of Action Items

There are no carried action items.

9 Meeting Schedule

Request 12 hours at the T11 plenary week hosted by FCIA in Philadelphia PA, 4-8 April 2011.

10 Adjournment

Roger Hathorn (IBM) moved and Erik Smith (EMC) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 5:34 PM EST on 9 February 2011.

11 Status of Open Proposals

Document Title	Number	Disposition	Author
Distributed FCF functionality	T11/10-028	Close, tutorial. Most recent version presented was T11/10-028v0	Gai (Cisco)
VN_Port to VN_Port Virtual Links	T11/10-037	Close, presenter will not further develop. Most recent version presented was T11/10-037v0	Peterson (Brocade)
Jet Assist for FCoE P2P N_Port_ID Selection	T11/10-119	Close, tutorial. Most recent version presented was T11/10-119v0	Weber (ENDL Texas)

Document Title	Number	Disposition	Author
FCoE Topologies	T11/10-130	Close, tutorial. Most recent version presented was T11/10-130v3.	Gai (Cisco)
The sFCF	T11/10-131	Close, presenter will not further develop. Most recent version presented was T11/10-131v0.	Hufferd (Hufferd Ent.)
Harmonized (Direct Mode) Adapter Based Shortcut	T11/10-133	Close, presenter will not further develop. Most recent version presented was T11/10-133v0.	Hufferd (Hufferd Ent.)
VN_Port WWPN to Fabric association	T11/10-224	Close, tutorial. Version presented was T11/10-224v1	Smith (EMC)
VA_Ports: FDF / Controlling FCF Protocols	T11/10-271	Close, replaced by T11/11-026. Version last posted was T11/10-271v4	DeSanti (Cisco)
FC-BB-6 FDF Requirements	T11/10-343	Carry for further development. Version presented was T11/10-343v0.	Hathorn (IBM)
Flow Control Enforcement	T11/10-552	Close, necessary action was completed. Version presented was T11/10-552v0	Pelissier (Cisco)
FC-BB-6 Functionality	T11/11-024	Close, tutorial. Version presented was T11/11-024v0.	Peterson (Brocade)
Distributed FCF	T11/11-026	Carry for future presentation. Deferred version was T11/11-026v0	DeSanti (Cisco)
FIP Clear Virtual Link Reason Codes	T11/11-064	Close, tutorial. Version presented was T11/11-064v0.	Smith (EMC)
Distributed FCF - Presentation	T11/11-070	Close, tutorial. Version presented was T11/11-070v0.	DeSanti (Cisco)

12 Attendance

Organization	Representative
BROADCOM	Pat Thaler
BROCADE	David Peterson
BROCADE	John Crandall
BROCADE	Scott Kipp
BROCADE	Steven L. Wilson
CISCO	Claudio DeSanti
CISCO	Joe Pelissier
CISCO SYSTEMS	Landon Noll
DELL	Gaurav Chawla
EMC	David Black
EMC	Erik Smith
EMULEX	Bob Nixon
EMULEX	William R. Martin
ENDL TEXAS	Ralph Weber
HEWLETT-PACKARD	Siamack Ayandeh
HEWLETT-PACKARD COMPANY	Barry Maskas
HUFFERD ENTERPRISES	John Hufferd
IBM	Chetan Yaliwal
IBM	Louis Ricci
IBM	Roger Hathorn
IBM	Scott Carlson
IBM	Deepak Kumar
INTEL CORPORATION	Prafulla Deuskar
JDSU	Jason Rusch
JUNIPER	Joseph White
LSI CORP.	John Lohmeyer
NETAPP	Frederick Knight
QLOGIC CORP	Alan Spalding
QLOGIC CORP.	Craig W. Carlson
Emeritus	Robert Kembel
Emeritus	Horst Truestedt
VMWARE	Leah Schoeb