

FC-BB-5 Ad Hoc Group Meeting Report New Orleans, LA, 16th April 2008 (08-248v0)

1. Introductions

The FC-BB-5 Ad Hoc group met on 16th April, 2008 in New Orleans, LA. The meeting was facilitated by Claudio DeSanti (Cisco) and started at 9:06 am.

Claudio reminded the meeting of the general T11 membership requirements.

Claudio reviewed the INCITS anti-trust and patent policy guidelines under which the group operates and reminded attendees that patents are discussed only in the T11.3 and T11 plenaries.

Attendance (electronic): 45 representatives from 25 companies as shown in Annex 1.

The agenda (08-188v0) was reviewed. Landon Noll (Cisco) moved and Graham Copley (Nortel Networks) seconded acceptance. Approved by acclamation.

The minutes of the FC-BB-5 meeting held on 6th February, 2008 in Austin, TX (08-111v1) were reviewed and approved. Graham Copley moved and Silvano Gai (Nuova Systems) seconded acceptance. Approved by acclamation.

2. Old Action Items

A1: Further general analysis of MAC address duplication scenarios and refinement of the prevention rules as laid out in 08-055. Closed.

A2: R. Snively to send out an email to the membership regarding duplicated MAC address for comment: all. Closed (Overtaken by events).

A3: R. Snively (for Brocade) and Claudio DeSanti (for Cisco) to verify 'donation' of two Ethertypes for, respectively, FIP and FCoE. Closed: see T11/08-159v0 and 08-165v0.

3. Scheduled Business

3.1 Donation of Ethertypes

Contribution 08-159v0 (Cisco) provided the Ethertype value 8906h to identify FCoE.

Contribution 08-165v0 (Brocade) provided the Ethertype value 8914h to identify FIP (Fibre Channel over Ethernet Initialization Protocol).

Motion: Moved by Claudio DeSanti (Cisco) and seconded by Bob Snively (Brocade) that two Ethertypes in contributions T11/08-159v0 and 08-165v0 be accepted.

Discussion none
Motion carried unanimously.

3.2 FIP Details

Contribution 08-208v0 (Cisco, Emulex, Brocade, QLogic and Nuova Systems) presents the results of collective work to consolidate the concept of the FIP protocol. The contribution provides comprehensive detailed information on various aspects of the protocol including discovery, solicitations, advertisements, LOGI, (Request, Accept and Reject), NPIV, LOGO, ELP, detection of loss of connectivity and virtual link verification.

Issues relating to response times and timeouts in the context of advertisements and solicitations need to be determined and contributions are invited.

Motion:

To accept the FIP protocol specified in this document as the basis for the FIP protocol in FC-BB-5.

Moved: Silvano Gai (Nuova Systems)

Seconded: Bob Nixon (Emulex)

After some general discussion the vote was taken and the motion passed: 17/0/4.

3.3 FIP Text Proposal

Contribution 08-172v1 (Cisco) provides baseline text describing the FIP and covers the following aspects: definitions, overview and description of the FIP process, FIP frame format and operation, the various FIP descriptors,

During discussion, the issue of encryption was raised and acknowledged as needing more study. Also, the treatment of priority, timeouts and the necessity for default values need further analysis.

The contribution is provided for information and on going analysis and it was agreed to be taken into drafting by the FC-BB-5 editor (Dave Peterson).

3.4 FCoE Functional Models

Contribution 08-209v0 (Cisco) provides text and diagrams for FCoE functional models based on earlier slide-based presentation material which was approved in October 2007. The text covers definitions, overview, FCoE VN_Port/ENode Functional Model, FCoE VE_Port/VF_Port Functional Model, and FCoE Virtual Links.

It was agreed that this contribution be taken into drafting by the FC-BB-5 editor.

3.5 Threat models

Contribution 08-212 (Cisco) presents introductory observations and examples on scope of threat models and how we might go about establishing these for FCoE. The contribution concludes with proposals for next steps.

It was agreed that this initiative should be pursued and that Landon Noll (Cisco) would lead a group of interested parties, via the email exploder, to work up a set of criteria for FCoE threat models for consideration by the FC-BB-5 ad hoc.

3.6 Ethernet Direct Attached Fabrics

Contribution 08-207v1 (IBM) presents information on network scenarios supporting Ethernet direct attached fabrics in which an EDAF is an FCoE fabric that consists of:

- An Ethernet fabric consisting of any number of enhanced ethernet switches, hubs, bridges, etc.
- One or more ENodes with VN_Ports attached directly to the Ethernet fabric.
- One or more FCFs with VF_Ports attached to the Ethernet fabric.

Details supporting mechanisms and communications and proposes new EDC FIP operations such as EDC PLOGI and FLOGI proposals and examples.

Much discussion ensued with many questions on the scope of this work (i.e., is it beyond the scope of FC-BB-5?), such as validity of the problem (what value are we trying to bring?), security concerns, impact on name servers, error cases, and requirements. Also, the potential impact on other FC standards must also be quantified and furthermore, potential delay to the FC-BB-5 schedule should be taken into consideration.

It was agreed to examine this topic again at the June meeting. Contributions are invited.

4. Unscheduled Business

None.

5. Action Items

A1: Further clarification to be provided on the need for and requirements for timeouts relating to advertisements and solicitations: Cisco, Brocade, Nuova, QLogic and Emulex.

A2. Landon Noll (Cisco) to lead a group of interested parties, via the email exploder, to work up a set of criteria for FCoE threat models for consideration by the FC-BB-5 ad hoc.

A3. Dave Peterson to integrate the current FC-BB-5 text and new texts in T11/08-172v2 and 08-209v1 in time for the interim meeting.

6. Work Plan

Last technical input: June 2008.

Target date for Letter Ballot is currently scheduled for August 2008.

Requesting 7 hours at the June meeting.

7. Next Meetings

Interim meeting on 8th May (Thursday afternoon 4-8pm) week of T10 meeting; purpose: FC-BB-5 text review.

The next T11 meeting will be in Coeur d'Alene, ID 4th June, 2008.

8. Adjournment

Meeting adjourned at 5:07 pm.

Annex 1

Company	Attendee
BROADCOM	Pat Thaler
BROADCOM	Uri Elzur
BROADCOM CORP.	Andrew Li
BROCADE	Anoop Ghanwani
BROCADE	David Peterson
BROCADE	Ezio Valdevit
BROCADE	John Hufferd
BROCADE	Robert Snively
BROCADE	Scott Kipp
CISCO	Joe Pelissier
CISCO SYSTEMS	Fabrizio Corno
CISCO SYSTEMS	Landon Noll
CISCO SYSTEMS, INC.	Claudio DeSanti
DELL	Gaurav Chawla
EMC	David Black
EMC	Erik Smith
EMC	Stuart Miniman
EMC	Mark Lippitt
EMULEX	Bob Nixon
EMULEX	Parag Bhide
EMULEX	William R. Martin
ENDL TEXAS	Ralph Weber
FIBRE CHANNEL INDUSTRY ASSOCIATION	Chris Lyon
FINISAR	Alex Pavlovsky
FINISAR	Scott Baxter
FINISAR	Joy Jiang
HEWLETT PACKARD	Sean Fitzpatrick
IBM	Roger Hathorn
IBM	Scott Carlson

INTEL CORPORATION	Gary Tsao
LSI CORP.	John Lohmeyer
MICROSOFT CORPORATION	Robert Griswold
NETWORK APPLIANCE	Frederick Knight
NORTEL NETWORKS	Graham Copley
NUOVA SYSTEMS	Silvano Gai
PANDUIT CORPORATION	Robert Elliott
QLOGIC CORP	Ed McGlaughlin
QLOGIC CORP	Alan Spalding
QLOGIC CORP.	Craig W. Carlson
SERVERENGINES	David Ridgeway
SOLUTION TECHNOLOGY	Robert Kembel
SPIRENT	Harshad Kolte
SUN MICROSYSTEMS	Matt Gaffney
TRUE FOCUS, INC	Horst Truestedt
VMWARE	Scott Davis
