

Draft Minutes

T11.3 FC-LS-3 ad hoc work group regular meeting 8 April 2013 – 9:30AM to 10:45PM PST Palm Springs, California, USA

The FC-LS-3 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Albuquerque, New Mexico, USA on 8 April 2013, hosted by FCIA and Chris Lyon. Attendance was 15 people from 10 organizations and is tabulated at the end of this document.

Minutes were taken by Patty Driever (IBM) (pgd@us.ibm.com). Please report any corrections by email to the T11.3 reflector at T11_3@mail.T11.org.

1 Opening Remarks

1.1 Introductions

New Chairperson Lou Ricci (EMC) opened the regular meeting on Monday 8 April 2013 at 9:30 AM PST.

1.2 Review of Minutes

Craig Carlson (QLogic) moved and Mike Roy (Oracle) seconded to accept T11/13-101v0 as the official minutes for the regular meeting on February 4 2013. Approved by acclamation.

2 Approval of Agenda

An agenda for the FC-LS-3 ad hoc work group regular meeting 4 February 2013 was posted as T11/13-127v0.

Craig Carlson (QLogic) moved and Patty Drieverl (IBM) seconded to accept T11/13-127v0 as the agenda for this regular meeting. Approved by acclamation.

3 Meeting Policy

3.1 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.

3.2 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.

3.3 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>

4 Review of Old Action Items

- 1206-002 Craig Carlson (Qlogic) to incorporate T11/12-206v1 into FC-LS-3 (**CARRY**)
- 1212-001 Roger Hathorn to post updated version of presentation: VN_Port Phy Type Identification (12-384v2) (**COMPLETE—posted as 13-054v0**)
- 1212-002 Craig Carlson (Qlogic) to incorporate T11/13-054v0 into FC-LS-3 (**CARRY**)
- 1302-001 Roger Hathorn (IBM) to follow up on units of measure and ranges for values in the SFP Diagnostic Descriptor (13-030v0) (**CARRY**)
- 1302-002 Editor to incorporate T11/13-030v0 slide 11 changes (regarding bit definitions for 32Gb FC) into FC-LS-3 section 4.2.36.4 (**CARRY**)
- 1302-003 Claudio Santi (Cisco) to post amended 13-035v0 as 13-035v1 (**COMPLETE**)
- 1302-004 Editor to incorporate T11/13-035v1 text changes into FC-LS-3 (**CARRY**)
- 1313-005 Dave Peterson (Brocade) to provide updated presentation describing TLV format and usage incorporating group discussion and decisions. (**COMPLETE – agenda item 13-028v1**)

5 Old Business

5.1 Link Service timeout (12-207v0) Peterson (Brocade)

Today's New Business agenda item 13-130v0.

5.3 WWPN Persistence via FLOGI (12-381v0) Smith (EMC)

Deferred to future meeting by presenter.

6 New Business

6.1 Type, Length, Value (TLV) Usage (13-028v1) Peterson (Brocade)

This was an update to the proposal originally presented in February (13-028v0). Dave updated text from last time based on the feedback he had received. Discussion occurred relative to whether or not a zero-length descriptor was valid, and final consensus was that it is (could cover the case where you have nothing to return for a descriptor that is mandated by the ELS). Dave also provided examples of the ELS request, along with SW_ACC as asked for last time, but the group felt now these should not be included in the standard (was valuable for the discussion to see them though). On the ELS request, word 0, today other than the command code the other 3 bytes are zeroes...should add words "reserved and shall be set to 0". Similarly in the LS_ACC the last 3 bytes of word 0 should also be zeroes.

Discussion on use of pad bytes to keep next descriptor word aligned....consensus was that the length in the TLV is the length of the valid data, not the data plus pads. The number of pad bytes can be inferred based on the rule that all TLVs must start on word boundaries.

Dave proposed two explicit new tag values: one for the Link Service Request descriptor that this proposal is also seeking to add to reflect back on the LS_ACC the LS_REQ command code (word 0). This is proposed to be an optional descriptor in the payload of an LS_ACC. The tag value is '0001'h, the length is 4, and Dave will collapse these 4 bytes into one field that will be defined to be equal to what was sent in word 0 of the Link Service Request this is in response to (the proposal as written broke out the 4 bytes into 3 fields). The second tag value was for the proposed 'Exchange Energy Efficiency Parameters', but since this is not an adopted proposal, Dave will take the tag value for it out of this proposal.

(New Action Item: Dave to prepare update based on group discussion and decisions).

6.2 How Loong is Your Login? (13-130v0) Peterson (Brocade)

This was a proposal to bring forward the issue that 20 seconds (2* R_A_TOV) is too long to hold off end devices for a fabric login. Although FLOGIs do not traverse the whole fabric, in FCoE they can traverse much more of it than for native Fibre Channel. And there are many more FLOGIs expected to be occurring in a fabric due to virtualization. FLOGI still needs to complete in a relatively short time (under 2 seconds?) for upper level protocols like FC-SB-5. The time limit is based on the need to restore end-to-end communications (i.e. drive a successful PLOGI or RNID) before timeouts occur and links are considered failed. Dave initially proposed 2*E_D_TOV as the FLOGI timeout, but others suggested a new F_L_TOV (or some such construct) instead.

Discussion also indicated that we may need to allow the FLOGI to be accepted, but followed by an asynchronous indication that it is now okay to send frames. Suggestion was made for a new bit in FLOGI that says 'FLOGI successful, but not all the way logged in yet'. Then creation of a new asynchronous notification when frames can be sent....perhaps a form of RSCN. s, 5 in favor, and one abstention. **(New Action item: Dave to prepare update incorporating group comments in proposing solution to the problem identified in 13-130v0)**

7 Project Schedule

Milestone	Expected Date
Last technical input	December, 2013
T11 Letter Ballot	TBD
Forward to INCITS	TBD

8 Review of Action Items

1206-002 Craig Carlson (Qlogic) to incorporate T11/12-206v1 into FC-LS-3 **(CARRY)**

1212-001 Roger Hathorn to post updated version of presentation: VN_Port Phy Type Identification (12-384v2) (**CARRY**)

1212-02 Craig Carlson (Qlogic) to incorporate T11/12-384v2 into FC-LS-3 (**CARRY**)

1302-001 Roger Hathorn (IBM) to follow up on units of measure and ranges for values in the SFP Diagnostic Descriptor (13-030v0) (**CARRY**)

1302-002 Editor to incorporate T11/13-030v0 slide 11 changes (regarding bit definitions for 32Gb FC) into FC-LS-3 section 4.2.36.4 (**CARRY**)

1302-004 Editor to incorporate T11/13-035v1 text changes into FC-LS-3 (**CARRY**)

Two new action items:

1304-001 Dave Peterson (Brocade) to provide update to presentation 13-028v1 incorporating group discussion and decisions.

1304-002 Dave Peterson (Brocade) to revise 13-130v0 incorporating group comments in proposing solution to the problem identified in 13-130v0.

9 Meeting Schedule

Request 2 hours at the T11 plenary week in Coeur d'Alene, ID, 3-6 June 2013.

10 Adjournment

Mike Roy (Oracle) moved and Erik Smith (EMC) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 10:45 AM MST on 8 April 2013.

Organization	Representative
BROCADE	David Peterson
BROCADE	Howard Johnson
CISCO	J Metz
CISCO SYSTEMS	Landon Noll
EMC	Erik Smith
EMC	Louis Ricci
EMULEX CORPORATION	Gautam Shiroor
FIBRE CHANNEL INDUSTRY ASSOCIATION	Chris Lyon
HEWLETT-PACKARD COMPANY	Barry Maskas
IBM	Patty Driever
IBM	Roger Hathorn
JUNIPER	Joseph White
NETAPP	Frederick Knight
ORACLE	Michael Roy
ORACLE	Roger Dickerson