Draft Minutes
T10 FCP-4 Ad Hoc Work Group
15 July 2008 - 9 AM to 12:30 PM
Anchorage AK

The FCP-4 Ad Hoc Work Group of the INCITS SCSI (T10) Technical Committee met at Anchorage AK on 15 July 2008, hosted by Emulex. Attendance was 10 people from 10 companies and is tabulated at the end of this document.

Minutes were taken by Bob Nixon (bob.nixon@emulex.com). Please report any corrections by email to the T10 reflector, T10@T10.org.

1 Opening remarks and introductions

Chairperson Dave Peterson opened the meeting Tuesday, 15 July 2008 at 9:08 AM. He thanked our host company, Emulex, and led a round of introductions.

2 Approval of Agenda T10/08-285r0

An agenda for this meeting was posted as T10/08-285r0. No changes were requested.

Dave Peterson (Brocade) moved and Bob Nixon (Emulex) seconded to accept T10/08-285r0 with the changes noted above as the agenda for this meeting. Approved unanimously.

3 Review of Minutes T10/08-229r0

Minutes for the meeting 6 May 2008 have been posted as document T10/08-229r0.

Kevin Butt (IBM) moved and Paul Suhler (Quantum) seconded to accept T10/08-229r0 as the minutes of the FCP-4 ad hoc work group meeting on 6 May 2008. Approved unanimously.

4 Review of Old Action Items

<table>
<thead>
<tr>
<th>Action Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>060509-2</td>
<td>Dave Peterson: Look at XDREAD and XDWRITE behavior regarding retries. Do we fix it here or in SBC. (Expect it will become an SBC issue, but for now, Carry)</td>
</tr>
<tr>
<td>070508-4</td>
<td>FCP-4 editor to clarify that an FCP_Port should behave the same if it receives either reason code 03h or 09h in response to an REC ELS if the reason code explanation is either 15h or 17h. (Carry)</td>
</tr>
<tr>
<td>071106-1</td>
<td>FCP-4 editor to clarify that, if Sequence Recovery is enabled, an I_T_L_Q nexus is identified by the Fibre Channel fully qualified exchange identifier together with the task retry identifier. (Complete)</td>
</tr>
</tbody>
</table>
080506-1 Dave Peterson to publish T10/08-127r2 reflecting T10/08-127r1 and the agreements at the FCP-4 ad hoc work group meeting 15 July 2008. (Completed by posting of T1/08-127r2)

080506-2 FCP-4 chairperson to recommend to T10 to incorporate T10/08-127r2 into FCP-4. (Completed at T10 plenary meeting 8 May 2008)

080506-3 FCP-4 editor, on approval of T10, to incorporate T10/08-127r2 into FCP-4. (Complete)

5 Old Business

5.1 Defects in FCP-4r00a T10/08-137r0 Butt (IBM)

Discussion was deferred pending further feedback from interested members of the community.

6 New Business

6.1 Task Identifier discussion Peterson (Brocade)

Dave displayed his proposed resolution to action 071106-1. He pointed out that there were already some inconsistencies related to the resolution directed by the action item, and led a discussion.

It was agreed that in FCP-4, the I_T nexus maps to the initiator port identifier plus the target port identifier.

There are two conflicting mappings for the I_T_L_Q nexus, one qualified by the logical unit number and one not qualified by the logical unit number. It was understood that the mapping without the qualification was formally sufficient, being unique to the logical unit number. However, it was also understood that the mapping without the qualification did not provide a standard means of identifying the logical unit number. The FCP-4 mapping of the I_T_L_Q nexus is most clearly made by including the logical unit number explicitly.

It was agreed to retain the FCP-4 mapping of the I_T_L_Q nexus that includes explicit qualification by the logical unit number, but specify the LUN qualification as the FCP_LUN value, in order to use a well-defined value in the FCP protocol.

It was agreed to delete the I_T_L_Q mapping that lacks explicit qualification by the logical unit number.

It was agreed that "task identifier" should be changed globally in FCP-4 to "command identifier", since task identifier has never been defined in SAM-x.

It was agreed that the glossary definition of command identifier should reference SAM and FCP-4 mapping annex for detailed specifications rather than repeating them in the definition.

It was agreed that in FCP-4, the SAM command identifier maps to the OX_ID if retransmission is not enabled, and to the OX_ID plus the command retry identifier if retransmission is enabled.

7 Schedules

7.1 Meeting Schedule
The chair will request 2 hours at the T11 Plenary Week 8-11 September 2008 in Colorado Springs CO.

7.2 Project Schedule

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last technical input</td>
<td>January 2008</td>
</tr>
<tr>
<td>Target date for Letter Ballot</td>
<td>September 2008</td>
</tr>
</tbody>
</table>

8 Review of Action Items

060509-2  Dave Peterson: Look at XDREAD and XDWRITE behavior regarding retries. Do we fix it here or in SBC. (Expect it will become an SBC issue, but for now, Carry)

070508-4  FCP-4 editor to clarify that an FCP_Port should behave the same if it receives either reason code 03h or 09h in response to an REC ELS if the reason code explanation is either 15h or 17h. (Carry)

9 Adjournment

It was moved by Dave Peterson and seconded by Bob Nixon to adjourn. Approved unanimously.

The meeting was adjourned at 10:30 AM on 15 July 2008.

10 Attendance

<table>
<thead>
<tr>
<th>Representative</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noud Snelder</td>
<td>BDT</td>
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<tr>
<td>David Peterson</td>
<td>Brocade</td>
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<tr>
<td>Sean Dolan</td>
<td>EMC</td>
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<tr>
<td>Bob Nixon</td>
<td>Emulex</td>
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<tr>
<td>Curtis Ballard</td>
<td>Hewlett Packard</td>
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<tr>
<td>Eric Hibbard</td>
<td>Hitachi Data Systems</td>
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<tr>
<td>Kevin Butt</td>
<td>IBM</td>
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<tr>
<td>Frederick Knight</td>
<td>NetApp</td>
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<tr>
<td>Paul Suhler</td>
<td>Quantum</td>
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<tr>
<td>Roger Cummings</td>
<td>Symantec</td>
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