To: T10 Technical Committee  
From: Cris Simpson, Intel Corp.  
Date: 18 July 2001  
Subject: SRP Session issues

Revision History
Rev 0 18 July 2001 Original version

Related Documents
T10/srp-r06 SCSI over RDMA Protocol revision 06 (Gardner)

Overview
This document attempts to define the term ‘session’ for SRP while raising questions about ‘independent’ as used in the MULTI CHANNEL ACTION definition.

Introduction
The SRP_LOGIN_REQ MULTI-CHANNEL ACTION field specifies the target’s behavior upon receipt of an SRP_LOGIN_REQ IU from an initiator that is already logged-in.

### Table 9 - MULTI-CHANNEL ACTION CODE VALUES

<table>
<thead>
<tr>
<th>MULTI-CHANNEL ACTION</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00h</td>
<td>Terminate existing channels before attempting to establish the new channel. For each existing channel associated with the same I_T nexus, abort all outstanding tasks received on that channel and send an SRP_LOGOUT.</td>
</tr>
<tr>
<td>01h</td>
<td>Independent operation. Allow any existing channel to continue operation independent of the new channel.</td>
</tr>
<tr>
<td>02h-03h</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

I propose that ‘session’ be used to refer to a channel (or group of channels, if supported in the future) that operates independently of other channels (sessions) of the same I_T nexus.

Discussion
‘Independent operation’ is rather vague. To what degree are sessions independent? It appears desirable that initiator-based attributes (reservations, etc.) be common. Does ‘independent’ implicitly create an I_T_S_L nexus? Or must the sessions coordinate to ensure that L_Q identifiers are distinct?

If an implicit I_T_S_L nexus is created, is the target responsible for mapping S_L_Q into L_Q to prevent collisions? Or do we want to force a change to the CONTROL mode page to support a task set per logical unit per session mode?

Should we split our really big Initiator Port Identifier Field into IPID and Session ID?