ENDL
T E X A S

Date: 17 August 2004
To: T10 Technical Committee
From: Ralph O. Weber
Subject: Changing 'mapping' to 'associating' in Persistent Resv. Registration Model

During the incorporation of 03-337r7, questions were raised regarding the actions list for REGISTER, REGISTER AND IGNORE EXISTING KEY, and REGISTER AND MOVE.

The following proposed changes should address the questions:

In 5.6.6 (Registering) …

In response to a PERSISTENT RESERVE OUT command with a REGISTER service action or a REGISTER AND IGNORE EXISTING KEY service action the device server shall perform a registration for each specified I_T nexus by doing the following as an uninterrupted series of actions:

   a) Process the registration request regardless of any persistent reservations;
   b) Process the APTPL bit;
   c) Ignore the contents of the SCOPE and TYPE fields;
   d) ~~Map the reservation key to the I_T nexus being registered using the indication of the target port associated with the registration and either the initiator port name (see 3.1.49) on SCSI transport protocols where port names are required or the initiator port identifier (see 3.1.48) on SCSI transport protocols where port names are not required;~~
   d) Associate the reservation key with the I_T nexus being registered, where:
      A) The I_T nexus being registered is one of the following with each case being applied until the applicable choices are exhausted:
         a) The I_T nexus on which the PERSISTENT RESERVE OUT command was received;
         b) If the SPEC_I_PT bit is set to one, an I_T nexus with the initiator port being specified by a TransportID in the additional parameter data (see 6.12.3) and the target port being the same as in the I_T nexus on which the PERSISTENT RESERVE OUT command was received; and
         c) If the ALL_TG_PT bit is set to one; an I_T nexus with the initiator port being one of those listed in item A) item a) or in item A) item b) and the target port being one of the other target ports in the SCSI target device;
         and
      B) Regardless of how the I_T nexus initiator port is specified, the association for the initiator port is based on either the initiator port name (see 3.1.49) on SCSI transport protocols where port names are required or the initiator port identifier (see 3.1.48) on SCSI transport protocols where port names are not required;
   e) Register the reservation key without changing any persistent reservation that may exist; and
   f) Retain the reservation key and associated information.

In 5.6.7 (Registering and moving the reservation) …

In response to a PERSISTENT RESERVE OUT command with a REGISTER AND MOVE service action the device server shall perform a register and move by doing the following as an uninterrupted series of actions:

   a) Process the APTPL bit;
   b) Ignore the contents of the SCOPE and TYPE fields;
   c) ~~Map the reservation key to the I_T nexus specified as the destination of the register and move (i.e., I_T nexus identified by the TransportID and the RELATIVE TARGET PORT field (see 6.12.4)) using the indication of the target port associated with the registration and either the initiator port name (see 3.1.49) on SCSI transport protocols where port names are required or the initiator port identifier (see 3.1.48) on SCSI transport protocols where port names are not required;~~
   c) Associate the reservation key with the I_T nexus specified as the destination of the register and move, where:
       A) The I_T nexus is specified by the TransportID and the RELATIVE TARGET PORT field (see 6.12.4); and
       B) Regardless of the TransportID format used, the association for the initiator port is based on either the initiator port name (see 3.1.49) on SCSI transport protocols where port names are required or the initiator port identifier (see 3.1.48) on SCSI transport protocols where port names are not required;
   d) Register the reservation key without changing any persistent reservation that may exist;
   e) Retain the reservation key and associated information;
   f) Release the persistent reservation for the persistent reservation holder (i.e., the I_T nexus on which the command was received);
   g) Establish a persistent reservation for the specified I_T nexus using the same scope and type as the persistent reservation released in item f); and
   h) If the UNREG bit is set to one, then unregister (see 5.6.10.3) the I_T nexus on which PERSISTENT RESERVE OUT command was received.