

ENDL TEXAS

Date: 20 September 2004
To: T10 Technical Committee
From: Ralph O. Weber
Subject: Changing 'mapping' to 'associating' in Persistent Resv. Registration Model

Revision summary:

- r0 Initial revision
- r1 Respond changes requested by e-mail
- r2 Respond changes requested by e-mail
- r3 Make changes requested by September CAP working group

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(es) being registered are shown in table x; 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.

Table x — I_T Nexuses being registered

SPEC_I_PT	ALL_TG_PT	I_T nexus(es) being registered	
		Initiator port	Target port
0	0	The port's names or identifiers to be registered are determined from the I_T nexus on which the PERSISTENT RESERVE OUT command was received	
0	1	The port's name or identifier to be registered is determined from the I_T nexus on which the PERSISTENT RESERVE OUT command was received	Register all of the target ports in the SCSI target device
1	0	a) The port's name or identifier to be registered is determined from the I_T nexus on which the PERSISTENT RESERVE OUT command was received; and b) Specified by each TransportID in the additional parameter data (see 6.12.3)	The port's name or identifier to be registered is determined from the I_T nexus on which the PERSISTENT RESERVE OUT command was received
1	1	a) The port's name or identifier to be registered is determined from the I_T nexus on which the PERSISTENT RESERVE OUT command was received; and b) Specified by each TransportID in the additional parameter data	Register all of the target ports in the SCSI target device

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;
- e) ~~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.