

## T10/04-105 revision 1

Date: March 26, 2004

To: T10 Committee (SCSI)

From: George Penokie (IBM/Tivoli)

Subject: SPC-3 Persistent Reservation Fix Fix

### 1 Overview

The wording that describe what happens when an initiator preempts itself was modified in SPC-3 rev 6 based on proposal 02-065r2 in such a way as to cause a conflict with the description of normal preempts and also no longer describes the original case.

Proposal 02-065r2 wording:

Issue #2: Preempting self

5.5.3.7.3.3 (PREEMPT) says that preempting with the new key (SERVICE ACTION RESERVATION KEY) equal to the old key (RESERVATION KEY) is not an error; the reservation key (registration) remains in place and a new persistent reservation is established. However, the list of preempt actions direct the device server to "remove the registration for the initiators specified" which would include the initiator running the PREEMPT. Its key needs to remain for the new persistent reservation to be established.

Accepted fix:

A PERSISTENT RESERVE OUT ~~specifying a~~with PREEMPT service action or PREEMPT AND ABORT service action with the SERVICE ACTION RESERVATION KEY value equal to the reservation holder's reservation key [Editor's note: rev 1: reworded "reservation key" to better indicate the key of the current reservation, not the RESERVATION KEY field] is not an error. In that case the device server shall establish the new persistent reservation and maintain the registration.

SPC-3 revision 5 wording:

A PERSISTENT RESERVE OUT specifying a PREEMPT service action with the SERVICE ACTION RESERVATION KEY value equal to the reservation key is not an error. In that case the device server shall establish the new persistent reservation.

SPC-3 revision 6 wording:

A PERSISTENT RESERVE OUT with a PREEMPT service action or a PREEMPT AND ABORT service action with the SERVICE ACTION RESERVATION KEY value equal to the persistent reservation holder's reservation key is not an error. In that case the device server shall establish the new persistent reservation and maintain the registration.

### 2 Proposed fix

The last paragraph in section 5.6.8.4.3 Preempting persistent reservations and registration handling from:

A PERSISTENT RESERVE OUT with a PREEMPT service action or a PREEMPT AND ABORT service action with the SERVICE ACTION RESERVATION KEY value equal to the persistent reservation holder's reservation key is not an error. In that case the device server shall establish the new persistent reservation and maintain the registration.

to:

If an all registrants persistent reservation is not present and a PERSISTENT RESERVE OUT with a PREEMPT service action or a PREEMPT AND ABORT service action with the SERVICE ACTION RESERVATION KEY value equal to the persistent reservation holder's reservation key that is received from the persistent reservation holder (i.e., the persistent reservation holder is preempting itself) is not an error. In that case the device server shall establish the new persistent reservation and maintain the registration.