Date: June 26, 2003

To: T10 Committee (SCSI)

From: George Penokie (IBM/Tivoli)

Subject: SPC-3: Persistent All Registrants Fix

1 Overview

The following question was received on the T10 reflector from Ken Craig:

SPC-3 Rev. 13, Figure 3 (the PREEMPT flow chart) now shows that when a LUN has a reservation type of ALL REGISTRANTS and gets one of the PREEMPT Service Actions with a Service Action Reservation Key of 0 all of the registrations except the one that belongs to the Initiator that sent the PREEMPT are removed. However the third paragraph of Section 5.5.2.7.1.2 states that all of the LUN's registered Initiators whose reservation key was not removed get a UA with one of the ASCs described in the text below the paragraph. It seems like item a) in that text can't apply in this case since all of the registered Initiators have had their reservation removed except for the Initiator that sent the PREEMPT who never gets UA. Is there a conflict between Section 5.5.2.7.1.2 and the revised flow chart or am I interpreting this incorrectly?

2 Response

The wording you pointed out is not in conflict with figure 3 but it is weird. You are correct in that there are no registered initiators left to create a unit attention for if the key is set to zero. The wording states that any registrations that are left get the UA but there are none left so therefore there are no UAs.

That said, the wording is meaningless and could only lead to confusion so it should be removed.

3 Proposal

The following is to be removed from section 5.5.2.7.1.2 Handling for released all registrants persistent reservations in the next revision of SPC-3:

If a persistent reservation was removed or changed, the device server shall establish a unit attention for every initiator port associated with a registered I_T nexus whose reservation key was not removed except for the initiator port through which the command was issued. The additional sense code shall be set as follows:

  a) If the service action was PREEMPT or PREEMPT AND ABORT with a SERVICE ACTION RESER-VATION KEY set to zero, the additional sense code shall be set to RESERVATIONS RELEASED.
  b) If the service action was RELEASE, the additional sense code shall be set to RESERVATIONS RELEASED.