

ENDL TEXAS

Date: 24 February 2003
 To: T10 Technical Committee
 From: Ralph O. Weber
 Subject: Remove TARGET RESET from SAM-3 and SPC-3

A recent CAP meeting discussed the possibility of removing the TARGET RESET task management function from SAM-3. This proposal details the changes required to accomplish that.

Revision History

- r0 Initial proposal
- r1 Add Target Reset to list of things made obsolete in SAM-3 in subclause 1.1. Update references to latest SAM-3 and SPC-3 revisions.

Specific Changes

All proposed changes reference SAM-3 r05 and SPC-3 r11.

Change 1 [SAM-3]: Modify the glossary entry for logical unit reset event as follows:

3.1.60 logical unit reset event: An event that triggers a logical unit reset (see 3.1.59). Logical unit reset events include processing the LOGICAL RESET task management function (see 7.6), ~~processing the TARGET RESET task management function (see 7.8),~~ and hard reset (see 6.3.2).

Change 2 [SAM-3]: Modify the list of features made obsolete in SAM-3 in 1.1 to read as follows:

The following architecture model concepts from previous versions of this standard are made obsolete by this standard:

- a) Contingent Allegiance; and
- b) The TARGET RESET task management function.

Change 3 [SAM-3]: Modify the 5.5 (Task and command lifetimes) description of how an initiator recognizes the end of a task lifetime as follows:

The application client assumes that the task exists and maintains an application client task to interact with the task from the time the Send SCSI Command SCSI transport protocol service request is invoked until it receives one of the following SCSI target device responses:

- a) A service response of TASK COMPLETE for that task;
- b) ...
- c) ...
- d) ...
- e) A service response of FUNCTION COMPLETE following an ABORT TASK SET or a CLEAR TASK SET task management function directed to the task set containing the specified task; or
- f) A service response of FUNCTION COMPLETE in response to a LOGICAL UNIT RESET task management function directed to the logical unit. ~~;~~
- g) ~~A service response of FUNCTION COMPLETE following a TARGET RESET task management function directed to a SCSI target port with access to the logical unit.~~

Change 4 [SAM-3]: In 5.7.1 (Mechanisms that cause tasks to be aborted), modify the list of initiator actions that can abort tasks from other initiators as follows:

The following actions affect the task(s) created via the SCSI initiator port that transmits the action and/or task(s) created via other SCSI initiator ports:

- a) ...
- b) ...
- c) Completion of a PERSISTENT RESERVE OUT command with a PREEMPT AND ABORT service action with a reservation key that is associated with the SCSI initiator port that created the task (see SPC-2); [or](#)
- d) Completion of a LOGICAL UNIT RESET task management function (see 7.6) directed to the logical unit.
~~;~~
~~or~~
- e) ~~Completion of a TARGET RESET task management function (see 7.8) directed to a SCSI target port with access to the logical unit.~~

Change 5 [SAM-3]: In Figure 31 (Events and event notifications for SCSI target devices), remove the box containing 'Processing a TARGET RESET task management function' and restructure the figure to remove the white space resulting from the removal.

Change 6 [SAM-3]: In 6.3.3 (Logical unit reset), modify the description of logical unit reset as follows:

A logical unit reset is:

- a) The response to a LOGICAL UNIT RESET task management request (see 7.6); [or](#)
- b) ~~One of the responses to a TARGET RESET task management function (see 7.8);~~ [or](#)
- c) A part of the response to a hard reset condition (see 6.3.2).

Change 7 [SAM-3]: In Table 31 (Task Management Functions), remove the row for TARGET RESET.

Change 8 [SAM-3]: In 7.1 (Task management functions introduction), modify the description of interactions between task management functions and access controls as follows:

The task manager response to task management requests is subject to the presence of access restrictions, as managed by ACCESS CONTROL OUT and ACCESS CONTROL IN commands (see SPC-3), as follows:

- a) ...
- b) A task management request of CLEAR TASK SET or LOGICAL UNIT RESET received from a SCSI initiator port that is denied access to the logical unit (either because it has no access rights or because it is in the pending-enrolled state) shall cause no change to the logical unit; [and](#)
- e) ~~A TARGET RESET task management request shall initiate a logical unit reset as described in 6.3.3 for all logical units to which the SCSI initiator port has access, and shall cause no change to any logical units to which the SCSI initiator port is denied access; and~~
- d) The task management function Service Response shall not be affected by the presence of access restrictions.

Change 9 [SAM-3]: Remove 7.8 (TARGET RESET) in its entirety.

Change 10 [SPC-3]: In 5.6 (Multiple target port and initiator port behavior), modify the list of initiator actions that affect tasks from other initiators as follows:

Only the following operations allow an initiator port to interact with the tasks of other initiator ports, regardless of the target port:

- a) ...
- b) ...
- c) ...
- d) ~~The TARGET RESET task management function removes all tasks for all initiator ports for all logical units accessible via the target port (see SAM-2). Persistent reservations remain unmodified;~~
- e) ...; and
- f) ...

Change 11 [SPC-3]: In 6.23 (REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command), modify the definition of the TRS bit as follows:

A TARGET RESET supported (TRS) bit of one indicates the TARGET RESET task management function (see SAM-2) is supported by the logical unit. An TRS bit of zero indicates the TARGET RESET task management function is not supported.

Note: The definition of the TRS bit cannot be made obsolete because the REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command does not appear in SPC-2.