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To: **T10 Technical: Committee**
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Subject: SAM-4, SPC-4: making the basic task management model obsolete

Introduction

The reasons for the basic task management model have been overtaken by time and events. Making this model be obsolete would simplify the SCSI standards. This proposal details the changes required in the SCSI standards to make the basic task management model obsolete.

Change #1, SAM-4r05

3.1.7 basic task management model: The task management model in which only one task attribute (see 8.6) is supported and the task management features that the application client may select are limited. See 8.3.3.

Change #2, SAM-4r05

3.1.38 full task management model: The task management model in which the SIMPLE task attribute (see 8.6.1) is supported and all task management features may be selected by the application client. See 8.3.2.

Change #3, SAM-4r05

7.5 CLEAR TASK SET, Description:

This function shall be supported by lLogical units shall support this functionsupporting the full task management model (see 8.3.2) and may be supported by logical unit supporting the basic task management model (see 8.3.3).

Change #4, SAM-4r05

8.3 Task management models

8.3.1 Task management model management features

The standard INQUIRY data CmdQue bit and BQue bit (see SPC-3) indicate support for the full task management model or basic task management model described in 8.3.

The Control mode page (see SPC-3) contains fields that specify particular task set management behaviors described in this clause.

8.3.2 Full task management model

The ~~full~~ task management model requires the following task set management behaviors:

a) The SIMPLE task attribute (see 8.6.1) shall be supported;
b) Task attributes other than SIMPLE may be supported;
c) The QUEUE ALGORITHM MODIFIER field in the Control mode page (see SPC-3) shall control the processing sequence of tasks having the SIMPLE task attribute;
d) The QERR field in the Control mode page (see SPC-3) shall control aborting of tasks when a CHECK CONDITION status is returned for any task; and
e) The CLEAR TASK SET task management function (see 7.5) shall be supported.

~~**8.3.3 Basic task management model**~~

~~The basic task management model requires the following task set management behaviors:~~

~~a) The SCSI transport protocol and task manager support only:~~
  ~~A) The SIMPLE task attribute (see 8.6.1); or~~
  ~~B) The ORDERED task attribute (see 8.6.3);~~
~~b) If the SIMPLE task attribute is supported, the task manager may reorder the actual processing sequence of tasks in any manner. Any data integrity exposures related to task sequence order shall be explicitly handled by the application client;~~
~~c) All tasks in the task set shall be aborted when a CHECK CONDITION status is returned for any task (i.e., they shall be handled as if the QERR field in the Control mode page (see SPC-3) is set to 01b);~~
~~d) If the Control mode page is supported, the QUEUE ALGORITHM MODIFIER field shall be set to 1h and the QERR field shall be set to 01b and they shall not be changeable; and~~
~~e) The CLEAR TASK SET task management function (see 7.5) may be supported.~~

Change #5, SAM-4r05

8.6.1 [Task attributes] Overview

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SCSI transport protocols shall ~~either:~~

a) ~~P~~provide the capability to specify a unique task attribute for each task~~; or~~
b) ~~Ignore the application client assigned task attribute and require use of the basic task management model (see 8.3.3)~~.

Change #6, SPC-4r04

6.4.2 Standard INQUIRY data

Table 81 – Standard INQUIRY data format: ~~BQUE~~Obsolete

Change #7, SPC-4r04

6.4.2 Standard INQUIRY data

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~~The BQUE bit combines with the CMDQUE bit to indicate whether the logical unit supports the full task management model or the basic task management model as described in table 86.~~

Change #8, SPC-4r04

6.4.2 Standard INQUIRY data

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The CMDQUE bit shall be set to one~~and BQUE bit~~ indicat~~ing~~e ~~whether~~ that the logical unit supports the ~~full~~ task management model (see SAM-3) ~~or the basic task management model (see SAM-3) as described in table 86~~.

~~**Table 86 – BQUE and CMDQUE bits definition**~~ [and delete the table]

Change #9, SPC-4r04

7.6.4 Extended INQUIRY Data VPD page

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~~A~~The simple supported (SIMPSUP) bit shall be set to one indicat~~ing~~es that the SIMPLE task attribute (see SAM-3) is supported by the logical unit. ~~Logical units that support the full task management model (see SAM-3) shall set the simpsup bit to one. A simpsup bit set to zero indicates that the SIMPLE task attribute is not supported. If the simpsup bit is set to zero, application clients should not specify the SIMPLE task attribute as an Execute Command procedure call argument.~~