To: INCITS T10 Committee

From: Paul Entzel, Quantum

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Subject: ADT-2: update to SAM-3, SPC-3, and ADC-2

1 Revision History

Revision 0:
Posted to the T10 web site on 19 January 2005.

2 General

Per the project proposal for ADT-2, the standard needs to be modified to reference SAM-3 and SPC-3 instead of SAM-2 and SPC-2. Most of these changes are strictly editorial, and many were made during the letter ballot process for ADT. This document proposes changes to accomplish this task where the change is technical in nature.

3 Throughout

Change all references from SAM-2 to SAM-3.

Change all references from SPC-2 to SPC-3.

Change all references to ADC to ADC-2.

4 Changes to clause 3

Update the definitions that are common with SAM-3 to match the definitions in SAM-3. This affects the following definitions:
1. application client
2. auto-contingent allegiance (remove)
3. I_T_L_Q nexus
4. queue (remove)
5. task set (remove)

5 Proposed changes to clause 8

SAM-2 and ADT show the procedural call to Execute command as follows:

Service response = Execute Command (IN (I_T_L_x Nexus, CDB, [Task Attribute], [Data-In Buffer Size], [Data-Out Buffer], [Data-Out Buffer Size], [Autosense Request]), [Command Reference Number]), OUT ([Data-In Buffer], [Sense Data], Status))

SAM-3 shows the same procedural call as follows:

Service Response =Execute Command (IN (I_T_L_Q Nexus, CDB, Task Attribute, [Data-In Buffer Size], [Data-Out Buffer], [Data-Out Buffer Size], [Command Reference Number], [Task Priority]), OUT ([Data-In Buffer], [Sense Data], [Sense Data Length], Status))

There are several changes to the arguments that need to be added to ADT-2:
1. The first argument was changed from I_T_L_x Nexus to I_T_L_Q Nexus. This was done when the concept of untagged tasks was dropped from SAM-3. ADT does not support untagged tasks, so this change is editorial.
2. The Task Attribute argument is no longer optional. This change is editorial since it was already required by ADT.
3. The Autosense Request argument was removed, since SAM-3 requires autosense. ADT has always required autosense, so this change is editorial.
4. The Task Priority argument was added. At this time, ADT does not support the task priority so it should be listed as not supported.
5. The Sense Data Length argument was added. This change is technical. The tables should be updated to reflect that the sense data length is added and extracted from the SCSI Response IU.

SAM-3 added a new argument to the Send Command Complete and Command Complete Received procedural calls that also needs to be added to ADT-2.