Draft Minutes

T10/01-209r0

T10 SSC-2 Working Group Meeting

July 16, 2001 – Colorado Springs, Colorado

3:10 PM – 7:55 PM

An ad hoc meeting of the SSC-2 working group of NCITS Technical Committee T10 was held at Colorado Springs, Colorado on July 16, 2001, in conjunction with the plenary meeting of the ANSI/NCITS T10 Technical Committee. Attendance at this meeting is tabulated at the end of this document.

1.   Opening remarks and introductions: Dave Peterson

Facilitator Dave Peterson opened the meeting at 3:10 PM. He thanked our host company, LSI Logic, for the facilities. He led a round of introductions.

2.   Approval of the agenda: T10/01-208r0   Dave Peterson

Accepted with no changes.

3.   Approval of minutes: T10/01-168r0   Dave Peterson

Accepted with no changes.

4.   Review of Old Action Items: T10/01-208r0   Paul Suhler

4.1   All: Investigate the impact of obsoleting the use of Device Configuration mode page (10h) for changing partition. Dave Peterson will send a reminder on the T10 reflector. Working group decided to obsolete this feature.
Closed.

4.2   Dave Peterson: Add error conditions to Idle state in SSC-2 rev. 4
Closed.

4.3   Dave Peterson: Contact Veritas about eliminating queuing of Implicit model commands in Shared Storage Option of NetBackup.
Discussion:
    Some HBA drivers look at target support for queuing and use it.
    Some targets don't advertise, but do support, sometimes with a queue depth of 1.
    Behavior needs further investigation by group.
Carryover as group action item 8.2.

4.4   Dave Peterson: Add state diagram as modified into SSC-2 rev. 4.
Closed.

4.5   Dave Peterson to discuss the medium changer commands in the second table of 01-083r0
        with Erich Oetting and incorporate table in SMC-2.
        Erich agreed.
        Closed.

4.6   Dave Peterson to review 99-148 for impact on SSC-2.
        Closed.

4.7   Paul Entzel to do 01-083r1 with additional explanatory text defining under which
        operations and reservations data integrity is not ensured, or convince customer that no
        change is required.
        Text accepted.
        Table changes will be incorporated. in SSC-2 rev. 5
        SMC commands will be removed from reservations table.
        PREVENT ALLOW MEDIUM REMOVAL line also removed, as it is already in SPC-2.
        Closed

5.   Discussion items: Dave Peterson

5.1   SSC-2 will refer to SPC-3 as needed.

5.2   State diagram:
        LOCATE is needed to transition to write capable mode
        No longer require BOx = TRUE to change model.
        SPACE(16) puts in Idle state.
        FORMAT MEDIUM will leave us in Idle state.
        Change command tables: reorganize into sections with explicit, implicit, and common
        commands.
        Defer decision on A0:A0 BOT=FALSE
        Implicit tagged commands will be allowed.

5.3   IBM Comments on SSC-2 rev. 3   E-mail 6/22/2001   Dave Peterson
        1. Remove WR_APP from ERASE(16) and WRITE(16). States make it unnecessary.
        Replace PCR and SP in ERASE(16) with IMMED and LONG, respectively.
        2. Dave Peterson will design a common format for 16-byte CDBs that has
        LBA/count/etc. and transfer length fields aligned the same for all new SSC-2 commands.
        This may not follow guidelines in SPC-2.

5.4   Seagate Comments on SSC-2 rev. 3   E-mail 7/10/2001   Paul Suhler
        1. BT field will be deleted from LOCATE(16).
        2. Dave Peterson will investigate constraints on fixed block sizes.

6.   Unscheduled New Business: Dave Peterson

6.1   Proposed new TapeAlert Flag 37h   T10/01-217r0   Paul Suhler
        Accepted

6.2	Compaq Comments	E-mail 2/27/2001	Rob Elliot

Accepted

6.3	Compaq Comments	E-mail 7/10/2001	Rob Elliot

Accepted

6.4	Compaq Comments	E-mail #2 7/10/2001	Rob Elliot

Rob is investigating how to report residuals for long LBA commands. This is relevant to SPACE(16), which can specify an eight-byte count.

7.   Next meeting requirements: Dave Peterson

There may be an interim meeting or a conference call. Dave will arrange and announce on the reflector.

Six hours will be requested in the T10 plenary in September 2001.

8.   Review of new action items: Paul Suhler

8.1   Dave Peterson: Investigate ramifications of obsoleting data compression in Device Configuration mode page (10h). Send reflector message.

8.2   All: Determine what is currently done and what should be done if a target that does not support command queuing receives a tagged command.

8.3   Dave Peterson: Add 01-083r1 changes in SSC-2 rev. 5.
Make reservation table changes in SSC-2 rev. 5.

8.4   Dave Peterson: Update state diagram.

8.5   Dave Peterson: Design common format for eight-byte fields in 16-byte CDBs and do 4-byte transfer length if possible.

8.6   All: Determine how drives which do not support unloading at EOT will behave when LOAD UNLOAD has LOAD = 0 and EOT = 1.

8.7   Paul Suhler: Identify misaligned field labels cited in Seagate comment 20 and inform Dave Peterson.

8.8   Dave Peterson: Reconcile fixed block sizes.

8.9   Rob Elliot: Forward his solution to long residuals to Dave Peterson.

9.   Adjournment: Group

The meeting was adjourned at 7:55 PM.

10. Attendance

Company Represented	Last Name	First Name	E-mail
Cisco Systems	Peterson	David	{ HYPERLINK mailto:dap@cisco.com }
Compaq	Elliott	Rob	{ HYPERLINK mailto:Robert.Elliott@compaq.com }
Crossroads Systems	Tyndall	John	{ HYPERLINK mailto:jtyndall@crossroads.com }
ENDL	Weber	Ralph	{ HYPERLINK mailto:roweber@acm.org }
LSI Logic	Lohmeyer	John	{ HYPERLINK mailto:lohmeyer@t10.org }
Quantum	Entzel	Paul	{ HYPERLINK mailto:paul.entzel@quantum.com }
Quantum	Sokolov	Dan	{ HYPERLINK mailto:dan.sokolov@quantum.com }
Seagate	Houlder	Gerry	{ HYPERLINK mailto:gerry_houlder@seagate.com }
Seagate	Suhler	Paul	{ HYPERLINK mailto:paul_a_suhler@seagate.com }
Storage Technology Corp.	Oetting	Erich	{ HYPERLINK mailto:erich_oetting@stortek.com }
Tivoli Systems	Penokie	George	{ HYPERLINK mailto:gpenokie@tivoli.com }