

To: INCITS Technical Committee T10

From: Kevin Butt, IBM

Date: September 29, 2005

Document: T10/05-424r0

Subject: Minutes SSC-3 Telecon

1. Attendance

Pual Entzel - Quantum
Paul Suhler - Quantum
Michael Banthar - HP
Kevin Butt - IBM
David Peterson - McData
Greg Wheelless - Symantec

2. Discussion

The discussion used 05-351r0 as the vehicle. Notes taken are listed below as text under each heading.

This document contains the responses to 05-175 and the Working Groups discussions related to them. There is a list of the owner of the Action Item, the Priority, and the Difficulty.

Scale of A - C with A being highest and C lowest.

2.1 SSC-3

2.1.1 Mandate that commands return CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to MEDIUM NOT PRESENT after returning GOOD status to a LOAD/UNLOAD command with LOAD set to zero and HOLD set to zero (SSC-3; EMC);

<< Owner, Priority B, Difficulty A >>

We believe that the desired behavior is that there is a consistent ASC/ASCQ to report that a Move Medium command may be issued. This is really a system issue where the tape drive cannot tell the Application client what the library will do.

Discussion centered on needing ASC/ASCQ's for

- 1) Tape Ejected and not able to be sensed by the drive - Medium Not Present
- 2) Tape Ejected and the Medium can be sensed and manipulated (e.g. loaded) by the drive
- 3) Tape at the Hold Point and can be manipulated by the drive.

Discussion about clarifying the Load/Unload command.

Need to continue in WG during next meeting cycle.

2.1.2 Standardize all of the conditions/events that set sense key and additional sense code values (SMC-3, SSC-3, SPC-4?; CA);

<< Owner, Priority B, Difficulty A >>

ASC/ASCQ should represent physical states.

- 1) Every new proposal needs to specify the ASC/ASCQ related to that proposal.
- 2) Need to go through the current standard and clarify any ambiguity and come to an agreement. Accepted in principle but nobody volunteered to own the proposal.

2.1.3 Provide a standard command to return the error history (e.g. count, error codes, and time stamps) for the device, device server, and removable medium (SMC-3, SSC-3, SPC-4?; CA);

<< Owner, Priority A, Difficulty C >>

A lot of this exists in Log pages and Rod's proposal in ADC. Dell has a proposal 05-213r1. The discussion revolved around asking Dell if they would consider adding a TimeStamp field and timestamp type field to their proposal. Also, ask CA if that would cover their concerns.

AI: Kevin Butt to make request of Dell (copy Dave Peterson)

After response may need to ask CA. Will discuss later.

2.1.4 Add an interface [i.e. parameters for a key and bit mask for standardized algorithm(s)] for encryption/decryption in a stream device server (SSC-3?, SPC-4?; CA);

<< Owner: Michael Banthar, Priority A+, Difficulty A+ >>

AI: Michael Banthar is planning a proposal for November and will touch base with Roger Cummings.

2.1.5 Add a uniform method (e.g. command) to determine if the medium or the device caused an error (SSC-3, SPC-4?; CA);

<< Owner: Kevin Butt, Priority C, Difficulty A >>

TapeAlert is our intent to do this. Review TapeAlert flags for which mean media vs. hardware vs. firmware.

AI: Kevin Butt

2.1.6 Add a mode parameter to allow an application client to set the Early Warning size

(SSC-3; CA);

<< Owner: Kevin Butt, Priority A, Difficulty A >>

Implement by optional Early Early Warning.

AI: Kevin to bring in proposal to Nov WG.

2.1.7 Add a parameter to a stream device server that contains the serial number of the media changer containing the removable medium device, and add a method for an application client within the media changer to set this parameter (ADC-2, SSC-3; CA);

<< Owner, Priority A, Difficulty B >>

This sounds like a vital product page. The tunnelling command (Rod Wideman's proposal to ADC) sounds like the correct approach. Need to specify Serial Number?

AI: Paul Entzel to discuss with Rod Wideman

2.1.8 Add a method to differentiate between a stream device server acting on a virtual removable medium device and one acting on a physical removable medium device (SSC-3; CA); and

<< Owner, Priority C, Difficulty A >>

The working group appreciates this input but by a straw poll none of the participants wished to create this proposal because the working group found it too controversial. T10 is an open standards body and would provide due diligence in reviewing a proposal presented by any body that wished to present it.

AI: Kevin Butt to send response to CA.

2.1.9 A special set of commands (e.g. the host ID is included in Read/Write command) for VTL that allows multiple concurrent streams to write to a VTL Tape drive. (SSC-3; CA).

<< Owner, Priority C, Difficulty A >>

There may be better methods to get to the intended use. Can you consider existing methods such as enabling multiple logical units for each stream. If this does not answer your concern then we do not understand the concept behind the request.