

Draft Minutes  
Automation/Drive Interface (ADI) Working Group  
Ad Hoc Teleconference  
T10/03-218r0  
16 June 2003  
8:00 AM – 10:00 AM PDT

Conference Call Information:

Hosted by: IBM  
Toll Free: (888) 206-4960  
International: (719) 457-3545  
Pass code: 168674

1. Introductions: Group

Paul Suhler called the teleconference to order at 8:04 AM PDT. He thanked IBM for hosting the teleconference. A table of the attendees appears at the end of these minutes.

2. Approval of the agenda: 03-219r1 Paul Suhler

Paul Suhler discussed the order of the discussion items. He listed the current order and asked about the possibility of a 30 June 2003 teleconference. No one objected. Based on a request from Lee Jesionowski, Paul Suhler moved 03-220 to item e. Rod Wideman asked to move LIV/RHA discussion to the penultimate position in the list, and Paul Suhler agreed. Susan Gray asked to keep her discussion items in the current order.

Paul Suhler made a motion for acceptance of the modified agenda. Rod Wideman seconded the motion. The group passed the motion by acclamation.

3. Approval of previous meeting minutes: Paul Suhler

5-6 May 2003 meeting	03-171r1
19 May 2003 teleconference	03-196r1
2 June 2003 teleconference	03-206r0

Paul Suhler requested comments for the minutes of the 5-6 May 2003 meeting, 03-171r1, the 19 May 2003 teleconference, 03-196r1, and the 2 June 2003 teleconference, 03-206r0. No one provided comments.

4. Review of action items: Michael Banther

- a. Rod Wideman to produce a proposal for device server interaction section in ADC document. *Closed*
- b. Lee Jesionowski to create a proposal for method to convey Interface Status changed. *Closed*
- c. Bob Griswold to follow up with SNIA Interoperability Conformance Test Program (ICTP) Subcommittee regarding test/emulation tool. *Carryover*

- d. Library vendors to decide what reset capabilities are needed (e.g., hard reset, branch to 0, target reset) and provide feedback at next conference call in two weeks. Susan Gray to write proposal based on input. *Closed*
- e. Rod Wideman to write proposal for TA flag behavior. *Closed*
- f. Paul Entzel will write an appendix to ADT to describe an example login. *Carryover*
- g. Paul Suhler will write an appendix to ADC to describe an example of DTD primary port control. *Closed*
- h. Paul Entzel will incorporate 03-208r0 into ADT. *Carryover*
- i. Paul Entzel will write a proposal for an ASC/ASCQ from CAP. *Carryover*
- j. Susan Gray will produce a proposal for resets. *Carryover*
- k. Susan Gray will send an e-mail with a list of legacy features to consider with regards to ADC. *Closed*

#### 5. Discussion items:

- a. ADC model of TapeAlert 03-212r0 Rod Wideman

Rod Wideman walked the group through the proposal. He raised a question about the duplication of text in 4.2.6 and 6.1.3.

Michael Banther agreed to provide editorial comments via e-mail. Michael Banther complained about the text that discusses RMC device server independent of ADC or RMC-ADC interaction. Paul Suhler asked if anyone objected my Michael's comments. Paul Entzel agreed with the comments and no one disagreed.

Michael Banther also asked about the note at the bottom of table 15. Is the lack of preservation of flags across power-cycles a 'shall' or a 'may' clause? Rod Wideman stated that it's a 'shall' clause and that consequently the text must move out of the note. Paul Entzel raised concerns about the reset conditions that state 'after service resolution' implying preservation across a power-cycle. Lee Jesionowski gave support to resetting on power-cycle; do we need 'after service resolution'? Paul Suhler suggested a normative paragraph before the table that states power-cycle resets all flags. Lee Jesionowski suggested changing the 2<sup>nd</sup> column to list only the conditions other than power-cycle. Susan Gray pointed out that some cells in column 2 will be empty as a result of this change.

Paul Suhler asked if any flags will reset on unload without cartridge removal; Lee Jesionowski stated that we want all flags to stay constant until the next load. Paul Suhler then asked what constituted the 'start of the next load', a change to Media Present? Paul Entzel and Susan Gray supported Paul's point. We discussed whether start of thread is a better place to reset the flags. Rod Wideman agreed to look at this issue based on the state transition tables and propose a modification.

Lee Jesionowski brought the group back to the question of removing all references to 'after service resolution'. Rod Wideman asked, what do the drive vendors want? Paul Suhler, Paul Entzel, and Michael Banther all agreed that we want to retain 'after service resolution'. We debated whether the actions in column 2, are 'shall' actions or not. Lee Jesionowski wanted to make sure that the definition of 'after service resolution' may

include a power-cycle. Paul Entzel stated that we need to define 'after service resolution' to allow for various vendor-unique definitions.

The group moved on to a discussion of flag 19h, Dual-port Interface Error. Can this flag reset without 'service resolution'? Paul Entzel pointed out a similar problem with flag 20h, Interface. He asked whether the same logic applies to flag 39h, Automation Interface Failure; we agreed that flag 39h is okay as it stands.

Paul Entzel brought up flag 09h, Write Protect. He raised the possibility of software write protects changing while the cartridge is loaded. He also pointed out that his drive has a switch that will change the write protection of the tape while loaded. Rod Wideman agreed to add text allowing another condition for reset.

Lee Jesionowski pointed out a similar problem for flag 0Ch, Unsupported Format. Rod Wideman, Paul Entzel, and Paul Suhler brought up the same issues for flag 11h, Read Only Format.

We debated whether or not the standard should discuss how quickly the drive can change the flag values and decided, based on experience, that the standard can remain silent.

Rod Wideman summarized the changes. He asked about the best location for the text, the log page or the model section. After some discussion, we agreed to move it to the model section.

Rod Wideman made a motion for inclusion of 03-212r0 as modified into ADC. Paul Entzel seconded the motion. The group passed the motion by acclamation. Rod Wideman will revise the proposal based on the discussion and incorporate it into ADC.

b. Clean Protect 03-204r1 Michael Banther

Michael Banther described the small changes between revisions 0 and 1 of this proposal. He asked for clarification on whether the feature belongs in the standard at all, and if it does, should it appear in generation 1. All agreed that it should at least be considered for some generation. The group then debated whether it should be included in ADC generation 1. Lee Jesionowski and Rod Wideman stated that they don't oppose the concept but dislike the location of the CLEAN bit in the Load Unload command. Paul Entzel and Susan Gray stated that they like the location in Load Unload. Paul Suhler pointed out the possibility of race conditions if the bit exists in NDTD. We debated the problem generally. Generally Lee Jesionowski and Rod Wideman expressed concern about incompatibility with SSC-2. Lee Jesionowski also expressed concerns about the overloading of Load Unload with yet another control bit.

Much debate followed. We eventually agreed to disagree.

Paul Entzel wants the wording to change such that with CP on, the tape drive may not thread the tape or may thread but not clean. The standard should make no statement of the final position of the media and cartridge. Rod Wideman brought up a concern about the location of CP in the RMC LUN descriptor. Michael Banther responded that the location of CP follows the sense of the group regarding the correct location for the AMO bit. Rod agreed to work with Michael by e-mail on a resolution of this concern.

Michael Banther agreed to publish the Firmware Upgrade Protect proposal. He also agreed to revise this proposal based on the discussion. The group decided against

proposing identical changes to the Load Unload command for SSC-3 at the present time. The group will discuss this issue next at the July T10 face-to-face meeting.

- c. ADI ADC Device Server Interaction 03-217r0 Rod Wideman

Rod Wideman described the proposal. Paul Entzel suggested changes to the 2<sup>nd</sup> paragraph. Some other editorial comments followed.

- d. ADC Informative Annex: Data Transfer Device Configuration Example

03-202r0 Paul Suhler

No discussion due to lack of time.

- e. Log Parameters for DTD Primary Port Status 03-220r0 Lee Jesionowski

No discussion due to lack of time.

- f. Host Initiated Unload Susan Gray

No discussion due to lack of time.

- g. Code Update Susan Gray

No discussion due to lack of time.

- h. Cleaning Susan Gray

No discussion due to lack of time.

- i. Read/Write Diagnostics Susan Gray

No discussion due to lack of time.

- j. LIV/RHA discussion Rod Wideman

No discussion due to lack of time.

- k. Schedule for completion of ADC and ADT draft standards Paul Suhler

No discussion due to lack of time.

6. Unscheduled business:

7. Next meeting requirements: Paul Suhler

The group will hold an ad-hoc teleconference on:

- 30 June 2003 – hosted by Quantum.

The teleconference will start at 8:00 AM PDT and finish at 10:00 AM PDT.

The group will hold a meeting 7-8 July 2003 during T10 plenary week in Colorado Springs, CO. The meeting will begin on the 7<sup>th</sup> immediately after the T10 SMC-2 Working Group meeting finishes. The meeting time on the 8<sup>th</sup> will occupy the entire day, concluding at 6:00 PM MDT.

8. Review new action items: Michael Banther
- a. Rod Wideman will revise 03-212 based on discussion item a.
  - b. Rod Wideman will incorporate 03-212 as revised into ADC.
  - c. Michael Banther will revise 03-204 based on discussion item b.
  - d. Michael Banther will propose a protection feature for firmware upgrades.
9. Adjournment: Group
- Paul Suhler made a motion for adjournment. Rod Wideman seconded the motion. The group passed the motion by acclamation. Paul Suhler adjourned the group at 9:59 AM PDT.

## Attendees:

Name	Organization	E-mail
Rod Wideman	ADIC	rod.wideman@adic.com
Paul Suhler	Certance	paul.a.suhler@certance.com
Michael Banther	HP	michael_banther@hp.com
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