

Draft Minutes
Automation/Drive Interface (ADI) Working Group
Ad Hoc Teleconference
T10/04-002r0
17 November 2003
8:00 AM – 10:00 AM PDT

Conference Call Information:

Hosted by: Quantum
Toll Free: 800-668-7083
International: 719-536-6600
Pass code: 5764

1. Introductions: Group

Paul Suhler called the meeting to order at 8:09 AM PDT. He thanked Quantum for hosting the meeting. A table of the attendees appears at the end of these minutes.

2. Approval of the agenda: 04-001r0 Paul Suhler

Paul Suhler discussed the order of the discussion items. Paul Suhler added a report of the ADI connector.

Kevin Butt made a motion for acceptance of the modified agenda. Susan Gray seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

3. Approval of previous meeting minutes: Paul Suhler

3-4 November 2003 meeting 03-378r0

Paul Suhler requested comments for the minutes of the 3-4 November 2003 meeting 03-378r0. Paul Entzel brought up a problem in the minutes related to 03-380r0. Michael Banther described the changes that he has made to resolve this problem.

4. Review of action items: Michael Banther

- a. Paul Entzel will write an appendix to ADT to describe an example login. *Carryover*
- b. Kevin Butt will bring in a proposal to write the example containing figure 3 in ADT without the figure. *Carryover*
- c. Susan Gray will propose diagrams showing specific instances of the new transport protocol service requests in the form of SAM3r09 figures 26, 28, and 30. *Carryover*
- d. Kevin Butt will propose a definition of I_T Nexus Loss and the effects of an I_T Nexus Loss to ADT. *Carryover*
- e. Michael Banther will revise 03-380r0 per discussion item (a) of 03-378r0. *Closed*
- f. Paul Entzel will incorporate 03-380r1 into ADT. *Carryover*
- g. Susan Gray will revise 03-355r2 per discussion item (b) of 03-378r0. *Closed*

- h. Paul Suhler will revise 03-367r2 per discussion item (c) of 03-378r0. *Closed*
- i. Susan Gray will revise 03-369r0 per discussion item (d) of 03-378r0. *Carryover*
- j. Paul Suhler will revise 03-319r1 per discussion item (e) of 03-378r0. *Closed*
- k. Paul Entzel will prepare a proposal covering frame numbers in link service frames. *Closed*
- l. Paul Entzel will incorporate 03-391r0 into ADT. *Closed*

5. Discussion items:

- a. ADI Connector Status Paul Suhler
Paul Suhler provided a status update from SFF. They expect to conclude the process by January, 2004.
- b. ADT Fast Access Errors 03-382r0 Michael Banther
Michael Banther described the progress made: HP has agreed to ignore set reserved bits in AER Control IU's. He will revise the document based on the comments received at the November 3-4 meeting.
- c. ADT Informative Annex: Error detection and recovery action examples 03-367r3 Paul Suhler
Paul Suhler reviewed the changes in this revision. We discussed the editorial issues associated with the use of color without other indicators, i.e., how will those printing the document in black and white identify this information?
Kevin Butt raised the inclusion of the ACK Offset. Paul Suhler has not included it.
Paul Suhler asked for any other comments, and we discussed some editorial issues namely notes inside of boxes and the location of figure captions in annexes. Paul Entzel and Rod Wideman pointed out the need for text referencing each figure.
Kevin Butt applauded the inclusion of Request/Indication/Confirmation arrows. We debated the missing Response indication. We agreed that one is not appropriate for these diagrams.
Paul Suhler made a motion for incorporation of 03-367r3 as revised into ADT. Kevin Butt seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.
- d. ADT Section 4.7.1.3 03-355r3 Susan Gray
Susan Gray walked the group through the changes since the last review. She raised a question about the desired behavior when the receiver of a Port Login IU detects an error. Should the receiver treat it as a non-retryable error, hence send a NAK? Should it remain silent? Should it send a Port Login IU? Paul Entzel stated a preference for sending a NAK and letting the sender resend.
Paul Entzel asked what the receiver should do if it receives a Port Login IU with the Frame Number not equal to zero. Paul Suhler stated a preference for enforcing a check. Kevin Butt recalled the concerns from the previous discussion, receipt of an incorrect Frame Number value when using a Port Login IU as part of a recovery process to lower the baud rate on an open link. Paul Entzel pointed out that his proposal removes any

effect on the Expected Frame Number and Next Frame To Send counters by Port Login, Port Logout, Pause, and No Op IU's. Much debate followed on the best technical solution and the best method of structuring the text to present it. After much discussion with no sign of convergence, Paul Suhler suggested that we remove the error handling of Port Login IU's from this proposal and move it to a separate proposal. The group agreed that we need to cover error recovery for Port Login IU's (and Port Logout, Pause, and No Op IU's) both when in port state P1: Login and in any other port state. Susan Gray agreed to cover this ground in 03-369.

Paul Suhler made a motion for incorporation of 03-355r3 as revised into ADT. Susan Gray seconded the motion.

Michael Banther raised a concern about the text in 4.7.1.3 indicating the reporting of a retryable error for all frames whose frame number does not match the Expected Frame Number counter. Paul Entzel explored the definition(s) we have for a retryable error. He pointed out that the definition of a retryable error differs between the sender and receiver. He suggested using different terms. We agreed to change the name of 'retryable error' in the context of the receiver to 'unexpected frame number error'. Susan then returned to Michael's concern and agreed to limit the scope of this text to non-link service IU's.

Paul Suhler withdrew his motion with Susan's blessing. Susan will revise 03-355r3 based on comments received.

e. ADT Transfer Ready IU / Response IU Race Condition

03-319r2

Paul Suhler

Paul Suhler walked us through the changes since the last revision.

Paul Suhler described the problem of using SAM-3 definitions of task lifetime for encapsulated SCSI exchange lifetimes. Basically the task lifetime definitions aren't quite long enough. Paul Entzel pointed out that the proposed text covers an encapsulated SCSI command exchange lifetime but that it does not cover an encapsulated SCSI task management function exchange lifetime. Paul Suhler agreed.

Paul Suhler reviewed the changes to the Fast Access sub-clauses. Paul Entzel and Rod Wideman raised concerns about the naming of ports within the DTD and Automation Controller.

Paul Suhler made a motion for inclusion of 03-319r2 as revised into ADT. Paul Entzel seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

f. ADT

04-003r0

Paul Entzel

The group did not discuss this item due to lack of time.

g. ADT State Machine

03-369r0

Susan Gray

Susan Gray asked two questions about an e-mailed version of 03-369r0. She wants to know if she should include an N state that the machine can reside in when the port state is not P1. She also asked for everyone to check in she has the transitions correct.

Susan Gray will continue revision toward 03-369r1.

6. Unscheduled business:

a. Status of Action Items

Paul Suhler

Paul Suhler asked if anyone anticipates problems completing the open action items by the January meeting. Everyone agreed that these items will close by then.

7. Next meeting requirements: Paul Suhler

The group will hold a teleconference on 15 December 2003. ADIC will host this teleconference beginning at 8:00 AM PST and concluding at 10:00 AM PST.

The group will hold a meeting 12-13 January 2004 during T10 plenary week in Chandler, AZ. Subject to approval by T10, the meeting will begin on the 12th at 9:00 AM and conclude at 7:00 PM MST. The meeting will reconvene on the 13th at 9:00 AM and adjourn at 11:00 AM MST.

8. Review new action items: Michael Banther

- a. Michael Banther will revise 03-382r0 per discussion item (f) in 03-378r0.
- b. Paul Suhler will find a better way to indicate a receiver detectable error in 03-367r3.
- c. Paul Suhler will revise 03-367r3 per discussion item (c).
- d. Paul Entzel will incorporate 03-367r3 as revised into ADT.
- e. Susan Gray will revise 03-369r1 to include the error recovery of invalid Port Login, Port Logout, Pause, and No Op IU's when in port state P1: Login and in any other port state.
- f. Susan Gray will revise 03-355r3 per discussion item (d).
- g. Paul Suhler will revise 03-319r2 per discussion item (e).
- h. Paul Entzel will incorporate 03-319r2 as revised into ADT.

9. Adjournment: Group

Rod Wideman made a motion for adjournment. Michael Banther seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 10:10 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
Kevin Butt	IBM	kdbutt@us.ibm.com
Lee Jesionowski	IBM	ljesion@us.ibm.com
Paul Entzel	Quantum	paul.entzel@quantum.com
Susan Gray	Quantum	susan.gray@quantum.com