

Draft Minutes  
Automation/Drive Interface (ADI) Working Group  
Ad Hoc Meeting  
T10/07-206r1  
7 May 2007  
9:00 AM – 1:00 PM PDT

**1 Introductions:**

Paul Suhler called the meeting to order at 9:00 AM PDT. He thanked Microsoft for hosting the meeting. A table of the attendees appears at the end of these minutes.

**2 Approval of the agenda:**

Paul Suhler reviewed the order of the discussion items.

Kevin Butt made a motion for acceptance of the agenda as modified. Curtis Ballard seconded the motion. In the absence of objections or abstentions, the group approved the modified agenda unanimously.

**3 Approval of previous meeting minutes:**

12 March 2007 meeting [07-107r0](#)

4 April 2007 teleconference [07-171r0](#)

18 April 2007 teleconference [07-187r0](#)

Paul Suhler requested corrections for the minutes of the 12 March 2007 meeting and the 4 April 2007 and 18 April 2007 teleconferences, [07-107r0](#), [07-171r0](#), and [07-187r0](#) respectively.

Paul Suhler made a motion for acceptance of [07-107r0](#), [07-171r0](#), and [07-187r0](#). Kevin Butt seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously.

**4 Review of action items:**

- 06-001 Michael Banther will write a proposal to place all of the IU statements associated with entry into a state in the state description sub-clause and to remove such statements from the transition sub-clauses (remembering to rationalize incomplete statements). This proposal will also change the description of each state machine to clearly indicate what state it is in upon activation. He will produce this proposal for the September or November 2004 meeting. *Carryover.*
- 07-013 Rod Wideman will bring in a proposal to resolve ADC-2 letter ballot comment QTM-183. *Complete, [07-197r0](#).*
- 07-014 Michael Banther will bring in a proposal to resolve ADC-2 letter ballot comment HPQ-269. *Carryover.*

- 07-016 Michael Banther will bring in a proposal to resolve the portion of ADC-2 letter ballot comment HPQ-244 that refers to multi-ported devices that need to have separate device names per transport protocol. *Carryover.*
- 07-017 Kevin Butt will bring in a proposal to resolve ADC-2 letter ballot comment IBM-52. *Complete, [07-173r0](#).*
- 07-018 Kevin Marks will bring in a proposal to resolve ADC-2 letter ballot comments HPQ-215 and QTM-92. *Carryover.* [Kevin Marks joined the meeting briefly to discuss the resolution of this item. Kevin pointed out that there currently is no method to determine COMINIT in a standard way. Kevin Butt suggested setting the bit if capable of doing so, otherwise map it to PIC].
- 07-020 Curtis Ballard or Michael Banther will investigate bringing in a proposal to resolve ADC-2 letter ballot comment IBM-49 by the May, 2007 ADI-2 meeting. *Complete, [07-164r0](#).*
- 07-024 Paul Entzel will incorporate [07-125r0](#) as revised into ADC-2. *Complete.*
- 07-026 Paul Entzel will incorporate [07-165r0](#) as revised into ADC-2. *Complete.*
- 07-027 Michael Banther will bring in a proposal to resolve ADC-2 letter ballot comments HPQ-30, HPQ-55, and HPQ-57. *Complete, [07-174r0](#).*
- 07-028 Michael Banther will revise [07-174r0](#) per new business item 6.1 of [07-187r0](#). *Carryover.*
- 07-029 Rod Wideman will revise [07-190r0](#) per new business item 6.2 of [07-187r0](#). *Complete.*
- 07-030 Paul Entzel will incorporate [07-190r0](#) as revised into ADC-2. *Complete.*
- 07-031 Rod Wideman will revise [07-191r0](#) per new business item 6.3 of [07-187r0](#). *Complete.*
- 07-032 Paul Entzel will incorporate [07-191r0](#) as revised into ADC-2. *Complete.*
- 07-033 Paul Suhler will add ADC-2 letter ballot comment HPQ-61 to the work list for ADC-3, [06-425r4](#). *Complete.*
- 07-034 Paul Suhler will add ADC-2 letter ballot comment IBM-19 to the work list for ADC-3, [06-425r4](#). *Complete.*

## 5 Old business:

### 5.1 **ADC-2 Working List for ISV feedback (SMC/SSC/ADC/SPC) ([05-315r3](#)) [Butt]**

Kevin Butt reported that a feedback update had been provided to the ISVs, and requested that this item be deferred.

### 5.2 **Discussion of Prevent Allow Media Removal [Barton]**

Geoffrey Barton pointed out that in bridging, the bridging manager does not pass through the initiator information, such that the PREVENT ALLOW MEDIA REMOVAL command can not work properly for cases where “allow” is desired, but multiple “prevent media removals” are present (i.e., multiple I\_T nexuses hold active “prevent”). This issue is similar to bridging reservations as previously discussed in the work group. Paul Entzel discussed a desire to defer until ADC-3, due to the scope of the issue and required changes. Paul Entzel suggested an action item for ADC-3.

### **5.3 *ADC-2 Letter Ballot Comment Resolution (06-475r3) [Entzel]***

Paul Entzel led the group through ADC-2 letter ballot comment resolution. The group discussed Dell-20, ENDL-23, HPQ-82, HPQ-83, QTM-23, QTM-25, ENDL-27, HPQ-85, HPQ-87, HPQ-93, HPQ-94, and HPQ-97.

Kevin Marks later brought in a draft proposal, [07-232r0](#), to resolve action item 07-018.

Kevin Marks made a motion to incorporate [07-232r0](#) into ADC-2. Kevin Butt seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously. Paul Entzel will incorporate as part of letter ballot resolution, thus no new action item resulted.

Paul Entzel stated that as ADC-2 editor, it was his intent to resolve all letter ballot comments by the July meeting. He requested that anyone with unresolved comments (per [06-475r3](#)) consider aiding in their resolution by either submitting proposals or otherwise providing input before then.

### **5.4 *ADC-2 Device server and logical unit definitions (07-174r0) [Banther]***

Due to the absence of the author, this item was deferred.

### **5.5 *ADI: Features for ADC-2 and ADT-2 (06-060r5) [Suhler]***

This item was not discussed, due to lack of time.

### **5.6 *ADI: Features for ADC-3 and ADT-3 (06-425r4) [Suhler]***

This item was not discussed, due to lack of time.

## **6 New business:**

### **6.1 *ADI ADC-2 Letter Ballot Comment QTM-183 (07-197r0) [Wideman]***

Rod Wideman reviewed this proposal with the group. Noud Snelder asked why the transition case needed a description. Paul Entzel pointed out that there was the need to issue the unit attentions. Kevin Butt noted a concern with the ASC/ASCQ of LOGICAL UNIT COMUNICATION FAILURE. He mentioned that it was being disabled, and had not actually failed. The group discussed possible alternatives. Rod Wideman pointed out that this was an existing use from ADC, and changing may disrupt current implementations.

Kevin Butt made a motion to incorporate [07-197r0](#) into ADC-2. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously. Paul Entzel will incorporate as part of letter ballot resolution, thus no new action item resulted.

### **6.2 *ADC-2 Response to LB Comment IBM-52 (07-173r0) [Butt]***

Kevin Butt reviewed this proposal with the group. Paul Entzel pointed out that since it is the ADC device server, there are no local or remote device servers that apply. Paul Entzel questioned the meaning of a “snapshot” of a service buffer (i.e., was it in nonvolatile memory?). He thought that if the lifecycle of the snapshot were defined, the need for an unread flag could be removed. Discussion ensued regarding the unread flag being an implementation mechanism, and not specified or reported. Curtis Ballard raised a concern about requiring a snapshot be created for a service buffer. Kevin pointed out the problem of

an event altering a service buffer after a retrieval process began. The goal is that the initial READ BUFFER request freezes the contents of the service buffer, such that those contents can be retrieved to match the size of the buffer that was reported. The group discussed the various lifecycle issues for which the proposal is attempting to address (e.g., what happens if a buffer is only partially retrieved, retrieved multiple times, never retrieved).

Discussion continued regarding various editorial improvements. Ultimately, the discussion circled back to focus on the lifecycle of the snapshot, and whether the proposal would allow device servers to support the concept of preserving the snapshots. Paul Entzel suggested that Kevin revise the proposal per the feedback of the group, and bring it back. The summary issues are the need for the unread flag, whether the "shall" statements can be supported (i.e., some device servers may not be able to support full snapshots) such that snapshots can be fully preserved per the specified lifecycle. Paul Entzel tossed out use of a Write Buffer command as a means for vendor-specific event to clear a snapshot.

Kevin agreed to revise the proposal based on the feedback.

### **6.3 Resolve ADC-2 letter ballot comment IBM-49 ([07-164r0](#)) [Ballard]**

Curtis Ballard provided some context for the proposal, which was based on the desire to provide encryption support for drives. Kevin Butt pointed out that changing the meaning of a vendor specific bit is not consistent with usage in standards (i.e., others have already implemented behavior for the VS bit). Curtis clarified that the VS bit, while renamed, still only specifies vendor specific behavior, but the rest of the proposal provides a recommended usage.

Rod Wideman requested that a detailed discussion of the proposal be deferred to a subsequent meeting. Curtis requested the opportunity to provide an overview, at a minimum, to aid in understanding the proposal during later detailed discussion.

Paul Entzel asked if it would be possible to address this proposal as part of ADC-3, with the notion that an ADC-3 project could be instigated at the July meeting, to allow a more complete review of the material being introduced (as opposed to limited review as part of letter ballot comment resolution). It was pointed out that, if needed, special meetings could be held to focus on this topic. Kevin Butt added that he would prefer a more thorough review process if possible. Curtis stated that he agreed with the concerns, and would want to consider those at a subsequent meeting (i.e., when, and what mechanism would be best).

Curtis then provided an overview of the proposal, highlighting concepts that are introduced. Several questions and comments were raised as feedback for Curtis to consider.

## **7 Next meeting requirements:**

Subject to approval by the May 2007 T10 Plenary, the group will hold teleconferences on May 30<sup>th</sup> and June 20<sup>th</sup> beginning at 8:00 AM PDT and concluding at 10:00 AM PDT. Quantum will host the teleconference on May 30<sup>th</sup>. HP will host the teleconference on June 20<sup>th</sup>.

Subject to approval by the May 2007 T10 Plenary, the group will hold a meeting on 9 July 2007 during T10 plenary week in Colorado Springs, Colorado beginning at 9:00 AM MDT and concluding at 1:00 PM MDT.

## **8 Review new action items:**

07-035 Paul Suhler to add item to 06-425 for addressing PREVENT ALLOW MEDIA REMOVAL command issues in bridged environments.

07-036 Paul Entzel will write a proposal to resolve letter ballot comment HPQ-87.

07-037 Kevin Butt will revise [07-173r0](#) per New Business item 6.2.

## 9 Adjournment:

Rod Wideman made a motion for adjournment. Curtis Ballard seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 1:10 PM PDT.

Attendees:

Name	Status	Organization
Mr. Noud Snelder	V	BDT
Mr. Curtis Ballard	V	Hewlett Packard Co.
Mr. Kevin Butt	A	IBM
Mr. Robert Payne	P	Iomega
Mr. Geoffrey Barton	V	Overland Storage
Mr. Paul Entzel	P	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Rod Wideman	V	Quantum Corp.

Status Key: P - Principal  
 A,A# - Alternate  
 AV - Advisory Member  
 L - Liaison  
 V - Visitor