Draft Minutes
Automation/Drive Interface (ADI) Working Group
Ad Hoc Meeting
T10/05-255r0
11 July 2005
9:00 AM – 1:00 PM MDT
Colorado Springs, CO

1 Introductions:

Paul Suhler called the meeting to order at 9:04 MDT. He thanked LSI and John Lohmeyer for hosting the meeting. A table of the attendees appears at the end of these minutes.

Paul Suhler noted that John Lohmeyer can validate non-valet parking tickets.

Paul Suhler noted that David Hawks has resigned from editing ADC-2 due to changing his employer. Paul Entzel has agreed to pick up this responsibility.

2 Approval of the agenda:

Paul Suhler reviewed the order of the discussion items.

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

3 Comments on previous meeting minutes:

2 May 2005 meeting 05-176r0

Paul Suhler requested corrections for the minutes of the 7 March 2005 meeting, 05-176r0.

Rod Wideman made a motion for acceptance of the minutes as written. Paul Entzel seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

4 Review of action items:

a. 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*

b. Kevin Butt will write a proposal against SPC-3 to add automation type MAM attributes (reference ADC letter ballot 04-197r1, comment IBM Roberts - 2). *Carryover*

c. Paul Suhler will write a proposal based on discussion item (c) of 04-385r0. *Carryover*

d. Paul Suhler will add to 04-263r4 a line for the detection of WORM media by a library. *Closed*, 04-263r5.

e. Susan Gray will investigate Automation mediated R/W diagnostics (reference item 4 in 04-263r5). *Carryover*

f. Paul Entzel will investigate Density Override in the RMC LU descriptor (reference item 16 in 04-263r5). *Carryover*

g. Rod Wideman will bring in a proposal for reporting of medium types in ADC-2 (reference item 26 in 04-263r5). *Closed*, investigated with the conclusion that the standard already covers this issue.

h. Michael Banther will bring in a proposal to standardize the HP vendor-specific connector for ADT-2. *Carryover*

i. Paul Entzel will incorporate 05-124r0 into ADT-2. *Carryover*

j. David Hawks will incorporate 05-115r0 into ADC-2. *Closed*

k. Michael Banther will revise 05-129r0 per discussion item 5.4 of 05-176r0. *Closed*, 05-129r1.

l. Rod Wideman will revise 05-155r0 per discussion item 5.5 of 05-176r0. *Closed*, 05-155r1.

m. Rod Wideman will revise 05-158r0 per discussion item 5.6 of 05-176r0. *Closed*, 05-158r1.

n. Paul Entzel will revise 05-120r0 per discussion item 5.7 of 05-176r0. *Closed*, 05-120r1.

o. David Hawks will incorporate 05-120r0 as revised into ADC-2. *Closed*

5 Discussion items:

5.1 ADI ADC-2 Target Device Serial Number subpage (05-155r1) [Wideman]

Rod Wideman walked the group through the revised proposal. He explained that this proposal allows a library to maintain serial number persistence across DT device replacement so that applications that use the T10 identifier that incorporates the serial number for device serialization will not see a change. He's added the Manufacturer-assigned Serial Number VPD page to make the manufacturer's serial number available to the automation device.

Rod Wideman received numerous comments. Kevin Butt noted that the proposed MANUFACTURER SERIAL NUMBER VPD parameter currently restricted such that it 'shall not be used as part of the T10 vendor ID based identification descriptor.' Kevin pointed out that prior to the automation altering the new mode parameter, the T10 vendor ID based identification descriptor does use the value of the MANUFACTURER SERIAL NUMBER VPD parameter.

Michael Banther asked why the new VPD page did not include two parameters, one for the serial number assigned by the manufacturer and one for the serial number reported in the Serial Number VPD page.

Paul Entzel reminded the group that the existing SPC-3 text for the Serial Number VPD page states that the parameter reports the serial number of either the device or the logical unit. He also asked whether changing the new mode parameter alters the serial number as reported in VPD page 80 of the ADC logical unit as well as the RMC logical unit. Rod Wideman pointed out that proposed mode parameter alters the 'SCSI target device product serial number of the DT device.' Hence he intends the parameter to alter the serial number value reported through every logical unit provided the logical unit reports the target device serial number.

The group moved on to a discussion of what serial number the mode parameter modifies. Rod Wideman suggested enumerating the serial numbers reported through the various logical units rather than the serial number of the DT device. We generally agreed that the mode parameter affects the serial number reported by the RMC logical unit and the ADC logical unit but that it does not affect the serial number reported by the SMC logical unit.

Paul Entzel, Rod Wideman, and Kevin Butt agreed that the current restriction on the MANUFACTURER SERIAL NUMBER VPD parameter is not necessary as the mode parameter text already provides the same restriction.

Kevin Butt raised the concern that an application other than one written by the DT device manufacturer for maintenance purposes may make use of the MANUFACTURER SERIAL NUMBER VPD parameter and that they may expect serial number persistence across DT device replacement. Paul Suhler asked if we should include a model clause to explain the use of the various serial numbers and world-wide names. Paul Entzel noted that any model clause could be decoupled from this proposal.

Paul Entzel noted that Rod Wideman has sometimes used the phrase 'manufactures default' and sometime use the phrase 'manufacturer-assigned.' He requested consistent usage and Rod agreed. Paul also noted an incorrect use of 'automation device' that should be 'application client.' Rod agreed to this change also.

Rod Wideman will revise the proposal based on comments received.

5.2 ADI ADC-2 DT Device Log Information log page (05-158r1) [Wideman]

Rod Wideman introduced the revised proposal and pointed out the changes from the previous revision.

Paul Entzel pointed out that the LBIN bit should have the value on one since the parameter contains a mixture of ASCII and binary values. We debated the correct values of the log control bits and reached consensus. Michael Banther suggested replacing the ASCII bit with the CODE SET field from SPC-3. Rod Wideman agreed to this change.

Noud Snelder questioned the use of READ BUFFER to retrieve the length of the service buffer. Rod Wideman and Kevin Butt described the expected usage model.

Rod Wideman made a motion to incorporate 05-158r1 as revised into ADC-2. Halvard Eriksen seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

5.3 ADC-2: Fix SET MEDIUM ATTRIBUTES attribute structure (05-234r0) [Entzel]

Paul Entzel explained that his previous proposal for the SET MEDIUM ATTRIBUTE command defined an attribute format that locates a two byte field on an odd byte boundary. This proposal moves the field to an even byte boundary.

Kevin Butt made a motion to incorporate 05-234r0 into ADC-2. Rod Wideman seconded the motion.

Paul Suhler asked if we wanted to revise this proposal to use the SPC-3 code set definition with much laughter as a response. In the absence of objections or abstentions, the group passed the motion unanimously.

5.4 ADC-2 NOTIFY DTD UA Creation Denied (05-129r1) [Banther]

Michael Banther explained the changes since the last revision.

Kevin Butt pointed out that the phrase ‘any initiator’ allows two interpretations. One interpretation, that the device server forwarded the unit attention of some initiators but not to others, is exactly the objection to the original proposal. Paul Entzel raised the additional concern of the behavior defined with zero initiators logged-in.

After a substantial period of discussion that saw many suggested re-wordings come and go, Rod Wideman and Kevin Butt suggested changed text which Paul Entzel captured in the proposal PDF file. However no one in the group felt that these changes really resolved the ambiguity.

Michael Banther made a motion to table this agenda item until completion of Unscheduled Business item 6.2. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

Returning to this discussion, Rod Wideman suggested that the description should contain the phrase, ‘none of the known I_T nexuses.’ After some further work the group settled on some acceptable text.

Michael Banther made a motion to incorporate 05-129r1 as revised into ADC-2. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

6 Unscheduled business:

6.1 ADC-2 Control effect of task management requests over primary interface (05-261r0) [Entzel]

Paul Entzel explained the problem he’s trying to fix. At least one implementer of ADC has interpreted the function of the ENABLE bit in the logical unit descriptors in a way that a TARGET RESET task management function received on the primary port cleared ADC mode parameters even when the ADC logical unit was not enabled.

After the short discussion, Paul agreed to bring this proposal back in September for further consideration.

6.2 ADC-2 Clarification of data offsets (no document) [Eriksen]

Halvard Eriksen and Paul Entzel explained the question. The current definition of the BUFFER OFFSET field in the SCSI Transfer Ready IU does not state whether the value is relative to the transfer or to the command. Paul Entzel stated that he wants to find out if we all agree that a problem exists and, if so, who will propose a solution. No one in the group thought that a problem does not exist. Halvard agreed to bring in a proposal to resolve the problem.

6.3 ADI: Features for ADC-2 and ADT-2 (04-263r5) [Suhler]

Paul Suhler walked the group through the list of unresolved and unassigned work items for ADI-2. A few changes items were struck off as superseded by events. A few more received owners. Paul will revise the document to show these changes.

7 Next meeting requirements:

Subject to approval by the T10 Plenary, the group will hold a meeting 12 September 2005 during T10 plenary week in Vancouver, British Columbia beginning at 9:00 AM and concluding at 1:00 PM.

8 Review new action items:

a. Rod Wideman will revise 05-155r1 per discussion item 5.1.

b. Rod Wideman will revise 05-158r1 per discussion item 5.2.

c. Paul Entzel will incorporate 05-158r1 as revised into ADC-2.

d. Paul Entzel will incorporate 05-234r0 into ADC-2.

e. Halvard Eriksen will bring in a proposal to resolve the problem described in Unscheduled Business item 6.2.

f. Michael Banther will revise 05-129r1 per discussion item 5.4

g. Paul Entzel will incorporate 05-129r1 as revised into ADC-2.

h. Michael Banther will bring in a proposal to allow negotiation of additional link parameters.

i. Paul Suhler will revise 04-263r5 per unscheduled business item 6.3.

9 Adjournment:

Kevin Butt made a motion for adjournment. Rod Wideman seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 1:06 PM MDT.

Attendees:

Name	Status	Organization
Mr. Rod Wideman	V	ADIC
Mr. Noud Snelder	V	BDT
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Kevin Butt	A	IBM Corp.
Mr. Paul Entzel	P	Quantum Corp.
Ms. Deborah Laurion	V	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Halvard Eriksen	AV	Tandberg Data ASA

Status Key:

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