TO: T10 Membership
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SUBJECT: T10/05-409r0, ADC VHF Data MOUNTED Bit Clarification

Revision 0:

- Initial proposal

General

In the course of integrating drives and libraries supporting first-generation ADI interfaces, a number of cases were found in which it made sense for the VHF data to report MOUNTED = 1 and INXTN = 1. Examples included processing of cleaning media and firmware media.

This proposal adds such a state to ADC-2.

Proposed Changes

4.2.4.1 Load states

Change Table 1:

Load state	Very high frequency data log parameter field					
	INXTN	RAA	MPRSNT	MSTD	MTHRD	MOUNTED
a) DT device initialized, no medium present	0	1	0	0	0	0
b) Early detection of medium placement by DT device	0	1	1	0	0	0
c) Acknowledgement of medium control by DT device	0	0	1	0	0	0
d) Medium seating	1	0	1	0	0	0
e) Medium seated	0	0	1	1	0	0
f) Medium threading	1	0	1	1	0	0
g) Medium threaded	0	0	1	1	1	0
h) Completing load	1	0	1	1	1	0
i) Mounting complete	1	0	1	1	1	1
~~i~~ j) Load complete (e.g., DT device ready)	0	0	1	1	1	1

Change Table 2:

Load state	Very high frequency data log parameter field					
	INXTN	RAA	MPRSNT	MSTD	MTHRD	MOUNTED
1) DT device initialized, no medium present	0	1	0	0	0	0
2) Initial medium placement into DT device	0	1	0	0	0	0
3) After the automation device pushes a medium into DT device, now seating	1	0	1	0	0	0
4) After seating, medium now threading	1	0	1	1	0	0
5) Medium threaded, completing load	1	0	1	1	1	0
6) Mounting complete	1	0	1	1	1	1
~~6~~ 7) Load complete (e.g., DT device ready)	0	0	1	1	1	1

Change the description of load state h:

Load state (h) represents any additional processing that may be done by the DT device after threading the medium, but prior to the ~~load being fully complete (e.g., allow data access)~~ medium being mounted.

Add the following paragraph after the paragraph describing new load state h:

Load state (j) represents that the medium is mounted and there may be interactions in process between the read/write element(s) of the DT device and the operational substrate of the medium. The next state depends upon the operation being performed.

Change the paragraph describing the former load state i:

Load state (i) (j) represents the completion of the load operation (e.g., the DT device being in the SCSI READY state, microcode image or cleaning medium loaded).

6.1.2.2 Very high frequency data log parameter

Change the ninth paragraph following Table 16:

A MOUNTED bit set to one indicates that the DT device is in load state (i) or (j) (see 4.2.4.1). The MOUNTED bit set to one may correspond to the RMC device server being able to respond to a TEST UNIT READY command with a status of GOOD, however when a cleaning or microcode image medium is loaded the RMC device server may respond to a TEST UNIT READY command with a CHECK CONDITON with the sense key set to NOT READY. A MOUNTED bit set to zero indicates that the DT device is not in load state (i) or (j).