

TO: T10 Membership
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DATE: 4 May 2009
SUBJECT: T10/08-301r3, ADC-3: I_T Nexus Loss Effect on Bridged Commands

1 Revisions

- 0 Initial revision (21 July 2008)
- 1 Changes from 16 March 2009 working group meeting (16 March 2009)

Unless otherwise indicated additions are shown in blue, deletions in ~~red strikethrough~~, and comments in green.

- 2 Change recommended by e-mail from IBM (21 July 2008)

Changed “may” to “shall” in first sentence of added text.

2 General

During the development of the iADT protocol (T10/07-469 ff) a concern was expressed that an I_T nexus loss on the ADI port a bridged command would cause a failure of the command being processed by the local SMC device server. Such a command failure need not occur, and the ADI bridging manager could in principle re-establish communication with the remote SMC device server and re-try the failed command.

This proposal adds text to ADC-3 to indicate that the behavior described above is allowed.

3 Change to clause 4

A note is added to the end of subclause 4.3.4 as shown below.

4.3.4 Bridging manager operation

ADI bridging is enabled and disabled via the SMC Logical Unit descriptor of the ADC Device Server Configuration mode page implemented by the ADC device server (see 6.2.2.3.3). The descriptor specifies the logical unit number of the corresponding remote SMC device server.

If the bridging manager receives a response from the remote SMC device server with a CHECK CONDITION status with the sense key set to UNIT ATTENTION, then the bridging manager shall discard the response and reissue the command. All other responses with a status of CHECK CONDITION, including those with a sense key of NOT READY, shall be returned to the local SMC device server.

After issuing a command to the remote SMC device server, the bridging manager shall not issue another command to the remote SMC device server until the previous command completes or is aborted.

If an I_T nexus loss is reported by an ADI port to the bridging manager during the processing of a command issued to the remote SMC device server, and reissuing the failed command to the remote SMC device server a vendor specific number of times fails to establish an I_T nexus, then the bridging manager shall report a CHECK CONDITION status with the sense key set to ABORTED COMMAND and the additional sense code set to LOGICAL UNIT COMMUNICATION FAILURE to the local SMC device server.