Date: 15 February 2006
To: T10 Technical Committee
From: Tim Symons
Subject: 06-097r0 Discovery – configuring bit

Referenced Document
SAS-2 revision 2 (http://www.t10.org/ftp/t10/drafts/sas2/sas2r02.pdf)

Overview

During discussions about SAS zoning there have been questions about what does a management application client do in either an HBA or another self-configuring device when a REPORT GENERAL response with the CONFIGURING bit set to one is received.

This proposal is for additional definition in the discover process of the SAS-2 specification to ensure that this case is clearly defined.

[Start: Suggested addition to existing text (included in black), new additional text shown in red]

4.7.1. Discover process overview

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If the expander device's CONFIGURABLE ROUTE TABLE bit is set to one in the SMP REPORT GENERAL function response, the management application client shall configure its expander route table as described in 4.7.3 and 4.7.4.

If the expander device's CONFIGURING bit is set to one in the SMP REPORT GENERAL function response, the management application client shall do one of the following:

a) ignore the self-configuring expander device until a BROADCAST (CHANGE) notification is received from the self-configuring expander device.
b) discover all end devices attached directly to the self-configuring expander, and ignore phys that have an expander device attached to them until a BROADCAST (CHANGE) notification is received from the self-configuring expander device; or
c) ignore the CONFIGURING bit and discover all end devices attached to the port and discover device as described in 4.7.3 and 4.74. The discovery of end devices shall be repeated when the self-configuring expander device sends the BROADCAST (CHANGE) that indicates the completion of self-configuration.

When a management application client receives a BROADCAST (CHANGE) notification from a self configuring expander device, a REPORT GENERAL request shall be issued on the port. If the REPORT GENERAL response has the CONFIGURING bit set to zero then it shall configure its zone route table as described in 4.7.3 and 4.74.

If a SAS device is attached, the discover process is not required to obtain any more information about the SAS device. Additional discovery software may access that SAS device, however:

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[End: Suggested addition to existing text shown in red]