Date: 26 January 2006
To: T10 Technical Committee
From: Ralph Weber
Subject: How do SAS self-configuring expanders self configure?

Referenced Document

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

Problem Statement

I have been told repeatedly that SAS-1.1 (and by inference SAS-2) defines how self-configuring expanders are required to perform their self configuration function. I have never tripped over the requirements so I conducted an exhaustive search for the string 'self conf'. The results of the search appear in this document.

Now that the search is concluded, I am still in the dark regarding where the requirements are stated for how self-configuring expanders perform the function. Responses to this document that show where the requirements appear are solicited.

Summary of Search Results

Note: Each of the text descriptions below is also a hot link to the SAS-2 text found. If both this pdf file and the sas2r02.pdf are in the same directory the hot links will work.

The following six instances of matches on 'self conf' have been found.

- Expanders that do not have configurable route tables are self-configuring expanders.

- In self-configuring expanders, the BPP originates a BROADCAST (CHANGE) when the configuration changes.

- Management application clients are located in … every self-configuring expander device.

- Existing expander route tables should be checked when … a self-configuring expander device is discovered in the SAS domain.

- Expander devices shall transmit BROADCAST (CHANGE) for the following reasons … after a self-configuring expander device has completed configuration and has changed its CONFIGURING bit from one to zero in the SMP REPORT GENERAL function (see 10.4.3.3).

- Definition of the SMP REPORT GENERAL CONFIGURING bit (two matches)