

ENDL T E X A S

Date: 2 April 2000
To: T10 Technical Committee
From: Ralph O. Weber
Subject: Describing AEN in the Processor Device Model

During the development of SAM and SPC, we defined AER (Asynchronous Event Reporting) as the general capability to report asynchronous events as they happen and modeled it in SAM. Appropriate name changes (from AEN to AER) also were made at that time. The intention (as I remember it) was that AEN (Asynchronous Event Notification) would be defined as a specific implementation of AER that relies on using the host as a processor device to deliver AER data as the event happen. I also believe that there was an intention to tie AEN and AER together by appropriate text in SPC.

I've noticed that the SPC-2 processor device model does not contain any text that ties the knot between AEN and AER, neither does any other part of SPC-2. This proposal attempts to cleanup what may be the very very old action item of describing the relationship between AEN and AER.

Proposals for Specific Changes in SPC-2

Add the following definition:

3.1.x Asynchronous Event Notification: A specific implementation of asynchronous event reporting that employs the processor device model (see 6.2).

Add the following acronym:

AEN Asynchronous Event Notification (see 3.1.x)

Add the following clause heading and place all the text currently in clause 6 in the new clause:

6.1 Processor Model Overview

Add the following clause:

6.2 Asynchronous Event Notification Model

Asynchronous event notification is a specific implementation of asynchronous event reporting (see SAM-2) used by some protocols. When the AEN model is used and an initiator enables asynchronous event reports using the Control mode page (see 8.3.4), the initiator is required to become a processor device model target when asynchronous event reports are delivered.

Under AEN, delivery of an asynchronous event report occurs as follows:

- 1) The SCSI device with an event to report (a target that has been enabled to send AEN model AER reports via the Control mode page) becomes an initiator and sends a SEND command with the AER bit set (see 9.2); and
- 2) The SCSI device to which the AEN report is sent (the initiator that enabled the AEN model AER reports by sending a MODE SELECT command with appropriate settings in the Control mode page) becomes a target to receive the SEND command with AER bit set and the AER sense data delivered in the Data-In buffer.