

To: T10 Technical Committee
From: Rob Elliott, Compaq Computer Corporation (Robert.Elliott@compaq.com)
Date: 7 March 2001
Subject: SAM-2 AER enable and disable requirement for protocols

Revision History

Revision 0: first revision

Revision 1: 1 February 2001 fixed SPC-2 reference, removed SBP-2 reference

Revision 2: 7 March 2001 changed "affecting" to "managing" as requested by the CAP meeting

Related Documents

sam2r15 – SCSI Architecture Model-2 revision 15

spc2r18 – SCSI Primary Commands-2 revision 18

Overview

From discussion on the IETF IPS mailing list with Santosh Rao at HP...

SAM-2 Section 5.7.4 states that:

Asynchronous Event Reporting is used by a logical unit to signal another device that an asynchronous event has occurred. The mechanism automatically returns sense data associated with the event. *Each SCSI protocol specification shall describe a mechanism for Asynchronous Event Reporting, including a procedure whereby an SCSI device can selectively enable or disable asynchronous event reports from being sent to it by a specific target.* (In this clause, references to Asynchronous Event Reporting assume that the device to be notified has enabled asynchronous event reports from the target.) Support for asynchronous event reporting is a logical unit option.

NOTE 9 An SCSI device which can produce asynchronous event reports at initialization time should provide means to defeat these reports. This can be done with a switch or jumper wire. Devices which implement saved parameters may alternatively save the asynchronous event reporting permissions either on a per SCSI device basis or as a system wide option.

Parameters affecting the use of asynchronous event reporting are contained in the control mode page (see the SPC-2 standard).

...

The first portion of the italicized sentence is correct:

Each SCSI Protocol shall describe a mechanism for Asynchronous Event Reporting...

For example, SRP and iSCSI each define AER information units. SPI and FCP have the initiator and target swap roles and use the SEND command to send AER information.

The second portion does not seem correct:

Each SCSI Protocol shall ...[include] a procedure whereby a SCSI device can selectively enable or disable asynchronous event reports from being sent to it by a specific target.

The Control mode page in SPC-2 includes several "AER permission bits" that enable or disable AER for various causes. This is not part of a "SCSI protocol" standard and is already referenced in the sentence after note 9. Was any other meaning intended?

Suggested Changes

1. Remove the second portion of the questionable sentence:

Each SCSI Protocol shall describe a mechanism for Asynchronous Event Reporting, ~~including a procedure whereby a SCSI device can selectively enable or disable asynchronous event reports from being sent to it by a specific target.~~

2. Change a word in this sentence:

Parameters ~~affecting~~ managing the use of asynchronous event reporting are contained in the control mode page (see the SPC-2 standard).