

ENDL TEXAS

Date: 9 March 2005
 To: T10 Technical Committee
 From: Ralph O. Weber
 Subject: SPC-3 Subclause 5.2 (Mandatory Commands) Rewrite

T10/05-072r2 To the editor, SPC-3 Letter Ballot comments HP 74), IBM 46), IBM 47), and Veritas 12) suggest that SPC-3 subclause 5.2 may be a little out of date, what with no serious attention paid to its contents since the SPC-1 days.

Therefore, the rewrite shown in this proposal is recommended.

All subclause numbers in this proposal reference SPC-3 r21.

r1 incorporates minor changes requested via e-mail.

r2 incorporates changes requested by the March CAP working group

Begin text for changes/insertions to be made in response to SPC-3 Letter Ballot comments HP 74), IBM 46), IBM 47), and Veritas 12):

5.2 Important commands for ~~Commands implemented by~~ all SCSI device servers

5.2.1 ~~Summary of commands~~ Commands implemented by all SCSI device servers

This standard defines three commands that all SCSI device servers shall implement; - INQUIRY, ~~REQUEST SENSE REPORT LUNS~~, and TEST UNIT READY. These commands are used to discover a logical unit's capabilities, to ~~configure~~ discover the system configuration, and to determine whether a logical unit is ready ~~test devices,~~ and to return important information concerning errors and exception conditions.

5.2.x Commands recommended for all SCSI device servers

Support for the REQUEST SENSE command is recommended to provide compatibility with application clients designed to use previous versions of this standard or status polling features defined by command standards (see 3.1.18).

5.2.1 Using the INQUIRY command

The INQUIRY command (see 6.4) may be used by an application client to determine the configuration of ~~the a~~ logical unit. Device servers respond with information that includes their device type ~~and standard version~~ and may include the vendor's identification, model number and other information.

The Device Identification VPD page (see 7.6.4) returned in response to an INQUIRY command with the EVPD bit set to one and the PAGE CODE field set to 83h contains identifying information for the logical unit, the target port, and the SCSI target device.

It is recommended that device servers be capable of returning this information, ~~(or whatever part of it that is available)~~, upon completing power-on initialization. A device server may take longer to get certain portions of this information, especially if it retrieves the information from the medium.

5.2.2 Using the **REQUEST SENSE REPORT LUNS** command

The ~~REQUEST SENSE~~ command may be used by an application client to poll the status of some background operations and to clear interlocked unit attention conditions (see 7.4.6).

The REPORT LUNS command (see 6.21) may be used by an application client to discover the logical unit inventory (see 3.1.54) that is accessible to the I_T nexus on which the command is sent.

5.2.3 Using the **TEST UNIT READY** command

The TEST UNIT READY command (see 6.31) allows an application client to poll a logical unit until it is ready without the need to allocate space for returned data. The TEST UNIT READY command may be used to check the media status of logical units with removable media. Device servers should respond promptly to indicate the current status of the SCSI device.

NOTE 1 - Delays to achieve GOOD status from a TEST UNIT READY command may adversely affect initiator device performance.

5.2.4 Using the **REQUEST SENSE** command

The REQUEST SENSE command (see 6.26) may be used by an application client to poll the status of some background operations and to clear interlocked unit attention conditions (see 7.4.6).