TO: T10 Membership
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SUBJECT: T10/02-392r0, ADC Clause 4.2.1, Automation drive interface overview

Following is proposed text for clause 4.2.1, the overview section of the ADI model clause.

4.2.1 Automation drive interface overview

An Automation/Drive Interface – Commands (ADC) device server provides the means for a media changer (automation) controller to monitor and control a removable tape device. In addition to the ADC device server, the tape device will contain a SCSI Stream Command (SSC) device server, which processes tasks from application clients performing backup and restore operations. These commands are received via one or more primary interface ports, e.g., Parallel SCSI or Fibre Channel. The ADC device server will typically receive commands via an Automation/Drive Interface – Transport Protocol (ADT) port.

The automation device will typically contain a SCSI-3 Media Changer Commands (SMC) device server which controls a mechanism to move storage media among tape devices and storage locations. In the process of configuring itself and the tape devices installed in it and in the process of performing a backup or restore operation, the automation controller needs to perform one or more of the following tasks:

- Configure the tape device's operational parameters, such as SCSI Port ID, Fibre Channel Port_Name, and Autoload mode.
- Enable or disable the tape device's primary interface ports, e.g., Parallel SCSI or Fibre Channel.
- Determine the tape device's status, including the position of the removable medium and whether a medium access command is in process.
- Cause the tape device to unload or load media, even if its SSC device server is reserved by an application client.