

From: Chun, Charles [mailto:chun_charles@emc.com]
Sent: Tuesday, July 19, 2005 5:27 PM
To: David Peterson (Eng)
Subject: SSC-3 suggestion

Hello David,

My name is Charles Chun and I work for EMC Dantz as a software engineer on our Retrospect SMB backup application. I was informed by Kevin Butt from IBM that the T10 organization is requesting input for SMC and SSC standards documents. I would like to ask the T10 organization to clarify the Sense data that is returned for unloaded media for the Load/Unload command in SSC.

For most tape drives if we poll the tape drive using Test Unit Ready when media is loaded into the tape drive, the typical progression of Sense data is as follows:

- Not Ready with ASC,ASCQ 0x3a,0x00 Medium Not Present
- Not Ready with ASC,ASCQ 0x04,0x01 Logical Unit Is In Process Of Becoming Ready
- Unit Attention with ASC,ASCQ 0x28,0x00 Not Ready to Ready Change, Medium May Have Changed
- Good Check Condition Status

And for the Unload process, the typical progression of Sense data is as follows:

- Good Check Condition Status
- Not Ready with ASC,ASCQ 0x04,0x00 Logical Unit Not Ready, Cause Not Reported
- Not Ready with ASC,ASCQ 0x3a,0x00 Medium Not Present

Once the tape drive reports a Not Ready Sense key with ASC,ASCQ 0x3a,0x00 Medium Not Present, a Changer Move Medium command should have access to the unloaded media in the tape drive.

Unfortunately some tape drives do not report Medium Not Present Sense data upon completion of the Unload command. Instead, I have seen tape drives return Not Ready with ASC,ASCQ 0x04,0x02 Initializing Cmd. Required or Not Ready with ASC,ASCQ 0x04,0x00 Logical Unit Not Ready, Cause Not Reported. This makes it difficult to determine if the device is still in the process of unloading media or if the media is accessible for a Changer Move Medium command.

I would like to propose the modification of the Load/Unload command in SSC-3 to state that following the successful completion of an Unload command (Hold bit zero), the device return a Not Ready Sense key with Medium Not Present. In SSC-2 it states that the device return a Not Ready Sense key for all medium access commands, which I find too ambiguous. Thank you for your time and cooperation.

Best Regards,

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