

**Subject:** MMC-4 prevent/allow media removal definition conflicts with MMC-3 / SPC-2 / SPC-3

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Hello,

As I had some trouble to monitor user eject requests of different MMC devices implementing of the prevent/allow media removal, I had a look at the changes in MMC specification and found the following conflict:

- MMC-3:

"Table 49 - Commands for Multi-Media Logical Units" says, "Command name: PREVENT ALLOW MEDIUM REMOVAL; Op Code: 1Eh; Reference: SPC-2". SPC-2 defines bits 0 and 1 of byte 4 of the PREVENT ALLOW MEDIUM REMOVAL command as "PREVENT" field. SPC-2 says then "PREVENT values 10b and 11b are valid only when the RMB bit and the MCHNGR bit are both equal to one in the standard INQUIRY data.". SPC-3 (r07) says the same.

Note: Devices I could test here (and which have no media changer) response in standard inquiry data with RMB bit to one and MCHNGR bit to zero.

- MMC-4:

"6.18 PREVENT ALLOW MEDIUM REMOVAL Command"/"Table 329 - PREVENT ALLOW MEDIUM REMOVAL CDB" defines bits 0 and 1 (resp.) of byte 4 of the PREVENT ALLOW MEDIUM REMOVAL command as 'Prevent' and 'Persistent' (resp.). Persistent prevent state is set with both bits to 1 (as described in "Table 330 - State Selection").

Then, in "4.1.7 Removable medium", is said "While in the Persistent prevent state, the Logical Unit shall generate Events upon receipt of a User Eject request." - I understand this as if I want to receive eject request notification with Get Event/Status Notification command, I need to set the "Persistent prevent" state.

But... On a device where MCHNGR bit is zero, according to MMC-3/SPC-2, value 11b for 'PREVENT' field is invalid! And indeed, I have a few devices here that rejects my Prevent/Allow Media Removal command with check condition, Sense Key: 05h (Illegal Request), Sense Code: 24h 00h (Invalid field in CDB).

I am twice confused because in MMC-3, I can found the same note about "Persistent prevent" note in "4.1.6 Removable medium" but I not understand how I can set this "Persistent prevent" state according to MMC-3.

So, what should I do to lock the door and receive notification of user eject requests (so I can put the medium in a clean state, unlock the door, and eject)?

Best regards,

David Burg

PS: MMC-2 refers to SPC (1) for Prevent/Allow Media Removal. SPC-1 says the same as SPC-2 and SPC-3 ("Prevent values 10b and 11b are valid only when the RMB bit and the Mchngr bit are both equal to one in the standard INQUIRY data.")

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